

Elevator & Escalator Parts and Accessories
Version 7



ACCESS IS ALWAYS AROUND



Access Elevator & Escalator Supply

POWERED BY



1-800-266-8654 | www.aesupply.com

Family Matters

Elevate your business with our family of companies. ACCESS, and Quality Elevator companies offer exceptional service and product support that will grow your business.



Expertise and service set **ACCESS** apart. We are the service leader for distributing elevator and electrical components. In addition to our California warehouse, we also have a warehouse in Illinois that will supply you with the part you need, when you need it.

ACCESS
Elevator & Escalator Supply

800-266-8654
www.aesupply.com



Manufacturer and distributor of standard and custom-build elevator and escalator parts and accessories. Provide personalized service, quick delivery and high-quality products, with same-day shipping on most items.

Quality Elevator
Products, Inc.

800-222-3688
www.qualityelev.com



Expertise and Service Set Us Apart

800-266-8654
510-658-8654
Fax 510-652-5043

sales@aesupply.com
www.aesupply.com

Addresses

1302 65th Street
Emeryville, CA 94608

4301 S. Valley View Blvd.
Las Vegas, NV 89103

7760 Merrimac Ave.
Niles, IL 60714

Hours

6:00 A.M. – 4:30 P.M. Pacific time

Payment Terms

Net due in 30 days with approved credit

Shipping Terms

All orders are shipped FOB Point of Shipment
Orders in by 4:00 P.M. Pacific time (6:00 P.M. Eastern time) are
shipped the same day.

Visit www.aesupply.com for a complete listing of new products,
special offers and downloadable documents such as detailed
product spec sheets, troubleshooting guides and request forms.



cegard/Mini-MOD

Technical data

FEATURES

- ▶ Power supply voltage of 20 ... 265 VAC or 20 ... 375 VDC
- ▶ Relay output for easy integration into existing systems
- ▶ Wide range of 0 ... 5 m
- ▶ Ideal for retrofitting using different optimized door mounting kits
- ▶ Status LED integrated into edge
- ▶ IP65 (Standard) and IP67 (waterproof) versions available
- ▶ Edge can be front or side mounted – mounting holes are compatible with the MiniMax and cegard/Max light curtains



OPTICAL

Operating range	0 ... 5 m
No. of optical elements	32
No. of beams	32 elements 154 beams
Max. ambient light	100,000 Lux

MECHANICAL

Dimensions (w × h × l)	12 × 16 × max. 2,000 mm
Housing material	Natural or black anodized aluminum
Enclosure rating	
- Opto edges	IP65 / (IP67)
- Control unit	IP54
Temperature range	-20°C ... +60°C

ELECTRICAL

Supply voltage U_{sp}	20 ... 265 VAC / 20 ... 375 VDC
Max. current consumption	80 mA at 24 VDC 45 mA at 240 VAC
Relay output	Max. 250 VAC / 5 A Max. 125 VDC / 0,5 A Max. 30 VDC / 5 A Min. 5 VDC / 10 mA
Typ. response time with 32 elements	130 ms

CONNECTION CABLE

Emitter	
Cable length	5 m
Diameter	Ø 3,5 mm
Material	PVC, black
Connection	M8, 4-pin
Plug color	White
Receiver	
Cable length	5 m
Diameter	Ø 3,5 mm
Material	PVC, black
Connection	M8, 4-pin
Plug color	Blue

GENERAL

EMC emission	EN 12015:2014
EMC immunity	EN 12016:2013
Vibration	IEC 60068-2-6:2007
Shock	IEC 60068-2-27:2008
Cable durability	IEC 60227-2:2003
RoHS	2011/65/EU
Certificates	CE, UKCA, CSA




CEDES AG is certified according to ISO 9001:2015.

CEDES AG reserves the right to modify or change technical data without prior notice.



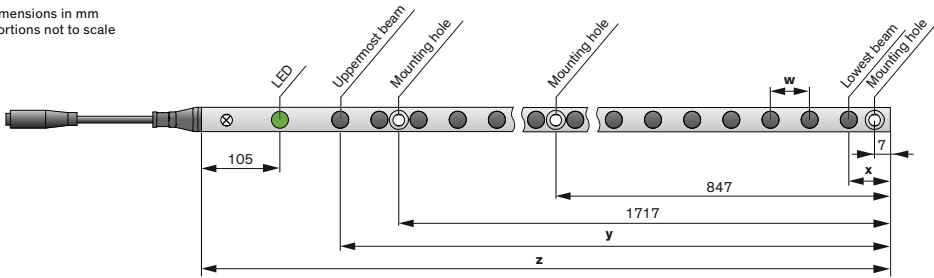
ACCESS ELEVATOR & ESCALATOR SUPPLY

 (800) 266-8654

 1302 65th Street
Emeryville, CA 94608 | 4301 S Valley View Blvd.
Las Vegas, NV 89103

Dimensions edges

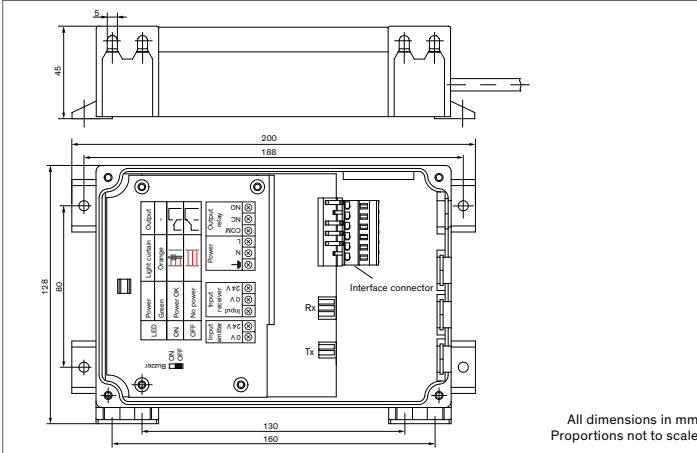
All dimensions in mm
Proportions not to scale



32 elements

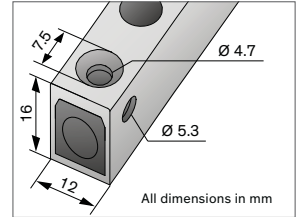
w	57.4
x	20
y	1800
z	2000

Dimensions control unit



All dimensions in mm
Proportions not to scale

Detailed view



Applications



Dynamic mounting



Static mounting



SAFESCREEN™

Formula Systems "Safescreen" Door Protection features a patented 47 diagonal beam array that has the backward capability of using a direct connection or our Universal power supply.



30mm wide x 20mm
Safescreen is adjustable to different door heights.



Ease of Installation



Designed to address the requirements of the North American market.



Most reliable unit backed with a 10 year warranty.

- Capable of wiring directly into suitable door controllers or Formula Systems universal interface
- Flexible adjustable cable for all weather conditions.
- Response Time: 100 ms

- IP 56 rate: Water Resistant
- Light Immunity 100,000 lux
- Universal Power Supply



ACCESS ELEVATOR & ESCALATOR SUPPLY



(800) 266-8654



1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103

1015 0723



VISION PLUS

FROM FORMULA SYSTEMS

OUR MOST INTUITIVE SOLUTION FOR ELEVATOR DOOR SAFETY.

Vision Plus has been developed as our most intuitive system for concise door control and paramount safety.

By combining 2D & 3D technology in less physical parts, the Vision Plus also excels in ease of installation which means a hassle free and cost effective solution for elevator installations and refurbishments.

BENEFITS

- Combined 2D & 3D technologies in each edge reduces false 3D triggers.
- Intuitive technology significantly improves detection ability.
- Reduces risk of accidents, caused by no/mis-detections.

CONFORMS TO ASME A17.1-2019/B44-19

UNIVERSAL MOUNTING FOR CENTER OR SIDE DOOR OPENINGS

COMPLETE DOOR MOUNTED SOLUTION - NO ADDITIONAL DETECTION UNITS

SYSTEM IS NOT LIMITED BY DOOR WIDTH



2D



3D



SELF TEST



DISTANCE



ACCESS ELEVATOR & ESCALATOR SUPPLY



(800) 266-8654



1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103



1016 0723



HYDRAULIC ELEVATOR SUBMERSIBLE POWER UNITS & ACCESSORIES

POWER UNIT COMPONENTS

MOTORS

- Imperial Motors • SB Motori
- 200VAC, 230VAC, 460VAC, 575VAC, 1 or 3 Phase 60Hz
- 80 Starts/Hr. • 15-70HP

PUMPS

- Allweiler • IMO • Seim
- 400PSI Max. • 250GPM Max.

VALVES

- Maxton • EECO • Blain
- 120-4440VAC • 12-120VDC

Oil Lines

- 1.5"-3" NPT or Victaulic
- Directed to right, left, front, back, or up



STANDARD TANK SIZES

TANK	HP	GPM	Oil Line Size/GPM	Oil Gal. Permanent / Transferable	Tank Dimensions	Tank Footprint
SK-32	10-20	50-60	1.5" / 70	35 / 38	32"W x 18"D x 36"H	36"W x 18"D
	10-30	77-96	2.0" / 134			
SK-36	25-40	104-106	2.5" / 206	38 / 60	36"W x 18"D x 42"H	40"W x 18"D
	25-40	121-123				
SK-48	30-60	162-200	3.0" / 270	76 / 122	48"W x 23"D x 48"H	52"W x 23"D
	40-60	217-213				
SK-60	≤70	≤250	3.0" / 270	159 / 215	60"W x 32"D x 50"H	64"W x 32"D
SK-72	≤70	≤250	3.0" / 270	202 / 258	72"W x 36"D x 58"H	76"W x 36"D

POWER UNITS CUSTOMIZATION

- Valve inside the tank
- Control valve NPT or grooved
- Down speed regulated valve
- Shut off valve
- Rupture valve
- Muffler external
- Muffler in tank
- Isolation coupling
- Oil pressure switch
- Oil heater in tank
- Oil cooler external
- Oil chiller external
- Oil level sight gauge
- Oil level switch
- Oil pressure gauge
- Oil return scavenger pump
- Oil breather filter
- Additional electrical enclosure
- Phase monitors and motor starters, wired or unwired
- Unistruts for controller mounting
- Dual pump/motor power units
- Dual tanks power units
- Custom oil line length, threaded or grooved
- Custom size tanks

1006 0524

ACCESS ELEVATOR & ESCALATOR SUPPLY



(800) 266-8654



1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103

www.aesupply.com | sales@aesupply.com

ACCESS IS ALWAYS AROUND



POWER UNIT WORKSHEET AND QUOTE FORM



Name: _____ Quote/PO: _____

Email: _____ Phone: _____

Company: _____ Date: _____

Address: _____

PROJECT DATA

Car Capacity _____

Car Speed FPM _____

Car Weight _____

Car Travel _____

Car Class Passenger Freight

Piston Diameter _____

Valve Location Above Tank In Tank

No Load PSI _____

Valve Hand Right Left

Full Load PSI _____

Valve Outlet Threaded Victaulic

Oil Flow GPM _____

Valve Down Regulated

Oil Line Size _____

Valve Coil Voltage _____

Power Unit Submersible Dry

Motor HP _____

Muffler Required Threaded Victaulic

Power Supply _____

Muffler Outside Tank In tank

PROJECT OPTIONS

Oil Cooler

Low Pressure Switch

Shut off Valve Qty _____

Tank Heater (Installed)

Starter With Cabinet

Rupture Valve

Oil Return (Scavenger) Pump

Oil Level Sight Gauge

Isolation Coupling Qty _____

Oil Pressure Gauge

Low Oil Switch

Additional options available, please inquire.

NOTES

1007 1023

**ACCESS ELEVATOR &
ESCALATOR SUPPLY**



(800) 266-8654



1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103



SCAVENGER PUMPS

Innovative solutions to keep your elevator pit clean and safe

CYLINDER HEAD SCAVENGER PUMPS

Constructed of ribbed, reinforced polyethylene 2-gallon capacity tank, with 16 gauge welded steel cover and submersible pump. Internal float switch automatically turns pump on and off. Recommended plastic tubing 1/2"OD, Model P02SP008 (not included).

- 10-12 ft. of head (discharge distance)
- 30 mesh filter (595 micron)
- 1/12HP, 3.5A, 115VAC, 1 phase, thermally protected motor
- 15"W x 10"D x 6"H tank size

MODEL SC/B

Scavenger pump.

- With reinforced external mounting brackets to mount off cylinder head bolts.



SC/B-FR

MODEL SC/B-2

Scavenger pump.

- Without mounting brackets

MODEL SC/B-2FR

Scavenger pump.

- With external flood switch
- Without mounting brackets

MODEL SC/BFR

Scavenger pump.

- With external flood switch
- With mounting brackets



SC/B

MODEL SC/B-FR

External flood control switch.

- Shuts off pump if pit begins to fill with water

HEAVY DUTY SCAVENGER PUMP

Ribbed, reinforced polyethylene container will not corrode. The clear 1/4" lexan top allows visibility of the inner workings of the unit. Internal float switch automatically turns pump on and off. External float switch shuts off pump if pit begins to fill with water.

- UL approved motor and cord
- 100 ft. of head (discharge distance)
- 100 ft. plastic tubing with fittings
- Includes flood control reset
- 100 mesh filter (149 micron)
- 15"W x 10"D x 8"H tank size

MODEL OSC/B

Scavenger pump.

- 45GPH @ 100PSI, 39GPH @ 200PSI pump
- 1/4HP, 2.8A, 115VAC, 1 phase, thermally protected motor



MODEL OSC/B-1/3

Scavenger pump.

- 101GPH @ 200PSI, 97GPH @ 250PSI pump
- 1/3HP, 5A, 115VAC, 1 phase, thermally protected motor



REPLACEMENT PARTS

Model 15SP004	Stainless steel float & rod
Model P02SP010R	Copper tubing, 3/8"ID, 50' roll
Model P02SP008	Plastic tubing, 1/2"OD, 3/8"ID, 100' roll
Model P02SP227	Copper tubing connector
Model P01SP001	Plastic tubing connector
Model 21SP004	Motor, 1/4HP, 1 phase, 115VAC
Model 21SP011	Motor, 1/3HP, 1 phase, 115VAC

1008 1023

ACCESS ELEVATOR & ESCALATOR SUPPLY



(800) 266-8654



1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103

www.aesupply.com | sales@aesupply.com

ACCESS IS ALWAYS AROUND

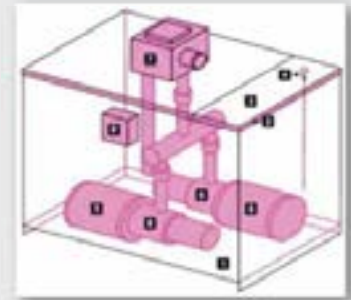
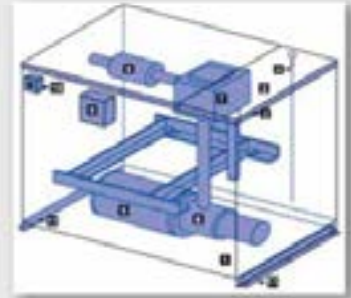
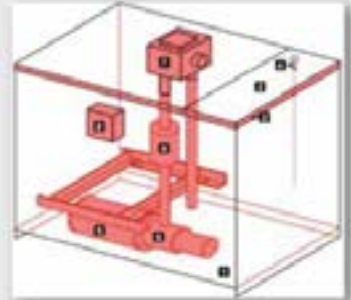


HYDRAULIC ELEVATOR SUBMERSIBLE POWER UNITS & ACCESSORIES

ENGINEERED FOR MAXIMUM PERFORMANCE

Experience the convenience of low noise operation and easy maintenance accessibility with Access Elevator & Escalator Parts' hydraulic elevator submersible power units.

- CSA Approved valve & motor
- Top mounted valve for ease of adjustment
- Pumps range from 32-270 GPM
- Motors range from 10 HP to 70 HP
- Positive displacement screw pump
- Direct coupled pump and motor submerged in oil
- Low noise operation with anti-vibrations mounts
- Valve pressure gauge quick connector H1-63
- Adjustable oil thermostat 85-230 °F
- Seismic brackets
- Customized to meet nearly any special project



EXAMPLES

- A- VALVE OUTSIDE, JACK TO RIGHT, MUFFLER INSIDE
- B- VALVE & MUFFLER INSIDE, JACK TO LEFT, SEISMIC BRACKETS, OIL THERMOSTAT
- C- VALVE OUTSIDE, JACK TO RIGHT, DUAL PUMP/MOTOR

- 1- POWER UNIT TANK -2- TANK COVER WITH 5/8" DOWNWARD LIP -3- ACCESS COVER
- 4- OIL DIPSTICK -5- SUBMERSIBLE MOTOR -6- SUBMERSIBLE PUMP -7- VALVE
- 8- ELECTRICAL BOX -9- MUFFLER -10- OIL THERMOSTAT -11- SEISMIC BRACKETS

Access has a large inventory of components, which generally allows power unit fabrication within 3-5 days. Our power units are designed and manufactured to conform to ASME A17.1. Nationwide shipping available.

1005 1023

ACCESS ELEVATOR & ESCALATOR SUPPLY



(800) 266-8654

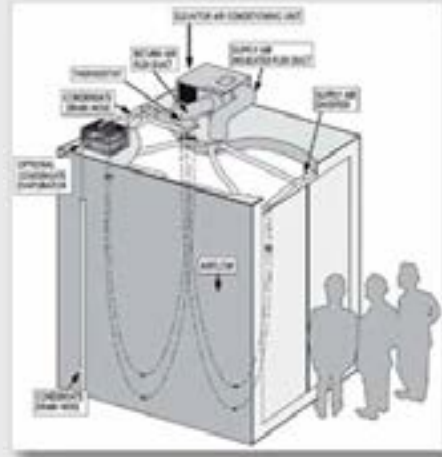
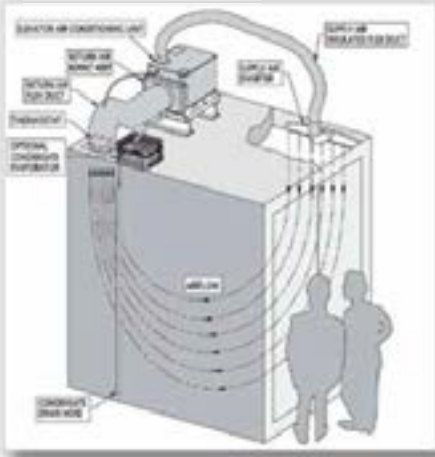


1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103



ELEVATOR AIR CONDITIONER WITH ELECTRIC HEATER



ELEVATOR AIR CONDITIONER/HEATER FEATURES

- Unit mounts on top of the elevator
- Self-contained package
- Thermostat mounted in return air duct
- 4-pin plugs, 15' armored cable for remote thermostat hookup
- Fan can be set to operate continuously
- Leak proof, factory sealed, lightweight rotary compressor
- Narrow, virtually invisible, black finish air diverters
- Shock absorbing, compressor mounts
- Noise reduction, unit mounts
- Long lasting, vibration resistance copper tubing
- Gas-flux brazed joints on the tubing to resist corrosion
- Soft start compressor circuit
- Galvanized steel construction of the outer cabinet
- Heavy-duty, corrosion-resistant, galvanized drain pan
- Evaporator freeze-up protection
- Screw type circuit board terminals simply field wiring
- Washable filter drops into return air bonnet
- High and low pressure switches to protect against fan failure or refrigerant loss. (Unit-B only)
- Normally open contact for remote monitoring of unit shutdown or power outages. (Unit-B only)

OPTIONAL CONDENSATE EVAPORATOR

Includes drain pan filter to screen particles out of evaporator, overflow drain tube.

Model AC6531-3251

Condensate evaporator recommended for Unit-A. 2,000W with a capacity of 6 pounds of water per hour. Requires separate 120VAC 20A circuit, 14"L x 12"W x 8"H, weight 15Lb.

Model AC6533-3251

Condensate evaporator recommended for Unit-B. 3,000W with a capacity of 9 pounds of water per hour. Requires separate 120VAC 20A circuit, 21"L x 13"W x 7"H, weight 20Lb.

ELEVATOR AIR CONDITIONER/HEATER COMPLETE SET

Unit-A: Model AC6531B692A

Primarily used on elevator cabs that open onto air-conditioned space or lobbies and small cabs that cannot accommodate bigger Unit-B.

Cool/Heat 7,100/5,600BTUH, short bonnet.

Unit-B: Model AC6533392A

Designed for large cabs or installations with glass cabs and/or glass hoistways or cabs that open onto unconditioned space or lobbies.

Cool/Heat 14,000/5,600BTUH.

Elevator AC/Heater Specifications	Unit-A	Unit-B
Electrical Rating	115VAC, 60Hz, 1 Phase	
Cooling Capacity BTUH	7,100	14,000
Heating Capacity BTUH	5,600	5,600
Air Delivery CFM	150	450
Locked Rotor Cooling Amps.*	34	67
Approximate Cooling Full-Load Amps.*	9.8	16.1
Approximate Heating Full-Load Amps.*	15.4	15.7
Running Watts Cooling **	990	1,537
Running Watts Cooling ***	1,150	1,909
Running Watts Heating	22-1/8"	39"
Length	22-1/8"	39"
Width	18-1/8"	23"
Height	19-1/8"	18-1/8"
Weight	75 Lb	180 Lb

Tested under the following conditions:

* Air conditioner only. Does not include condensate evaporator.

** Cooling A.R.I. Standard Conditions 80°F. DB/67°F. WB Indoor, 95°F. DB Outdoor at 115VAC.

*** Cooling A.R.I. Standard Conditions 95°F. DB/71°F. WB Indoor, 115°F. DB Outdoor at 103.5VAC.

ACCESS ELEVATOR & ESCALATOR SUPPLY



(800) 266-8654

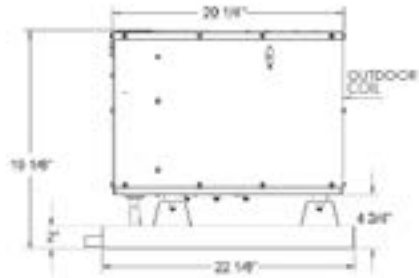
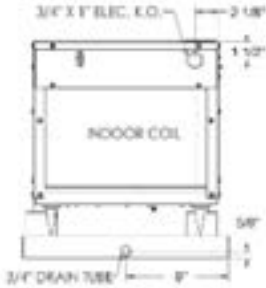
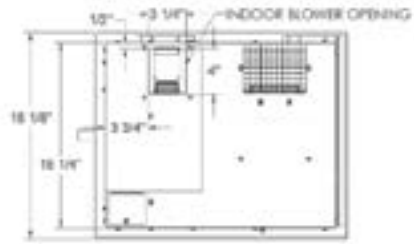


1302 65th Street
Emeryville, CA 94608

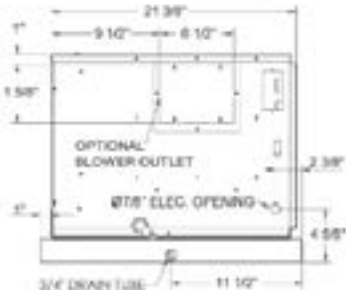
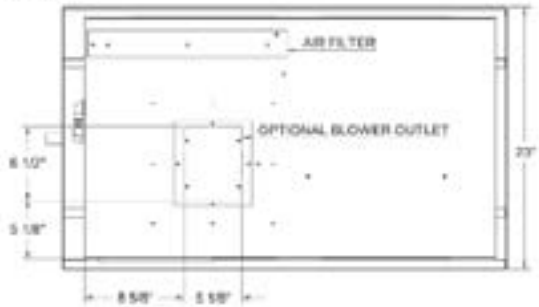
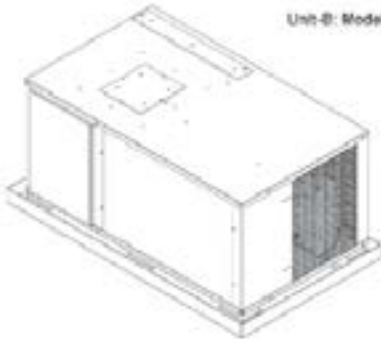
4301 S Valley View Blvd.
Las Vegas, NV 89103



Unit-A: Model AC65318492A



Unit-B: Model AC6533292A



1011023

ACCESS ELEVATOR & ESCALATOR SUPPLY



(800) 266-8654



1302 65th Street
Emeryville, CA 94608 | 4301 S Valley View Blvd.
Las Vegas, NV 89103

LIQUID PRESSURE GAUGE, VALVE TEST KIT

Oil filled and dry pressure gauges for setting up hydraulic relief valves.



CUSTOM LPG GUAGES

Model LPG

Options:

- Oil filled pressure gauges
- Scale max. psi: 600, 1000, 3000, 5000
- Dry gauge with peak pressure pointer, "P" option
- 1/8" or 1/4" quick connects
- 1/8" and 1/4" quick connects
- Flexible hose

FLEXIBLE HOSE

Model LPGH

- 36" flexible hose with fittings, 2500 psi

VALVE TEST KIT

All the "essentials" for valve set-up and testing in one convenient, foam cushioned, carrying plastic case.

Model VTK

- Pressure gauge 600 psi or 1000 psi
- Hose with fittings, 36"
- Fittings for 1/8" and 1/4" connections
- Allen wrenches 3/16" and 1/8" for valve adjustments
- Padded case, size 18" x 15-1/2" x 5"



VTK



ACCESS ELEVATOR &
ESCALATOR SUPPLY

(800) 266-8654

1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103

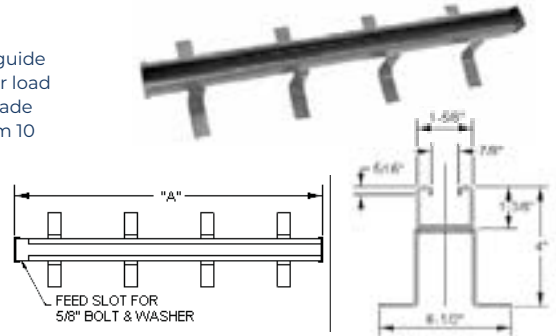


ELEVATOR GUIDE RAIL INSERTS & ACCESSORIES

ELEVATOR GUIDE RAIL INSERTS

Elevator Guide Rail Inserts designed for maximum strength and guide rail installation ease. Independent test results have proven a shear load of 2,100 lb. and pull out load in excess of 5,000 lb. All inserts are made from 12 Ga. rolled steel, with welded legs and end caps, made from 10 Ga. steel. Additional sizes and designs are available.

- Grey enamel finish
- Insert washers are included (2 per unit)
- 5/8" washers shipped unless otherwise requested
- Insert closure strips Model ICS recommended, not included
- Complete test results available upon request
- Special sizes and designs A, B, C, D can be custom ordered



MASONRY WALL INSERTS

Model	Size	Legs	Dim. "A"
GI12	12"	2	12"
GI18	18"	3	18"
GI24	24"	4	24"
GI30	30"	5	30"
GI36	36"	6	36"
GI48	48"	8	48"
GI60	60"	10	60"



RAIL INSERT CLOSURE STRIPS

Model	Length
ICS-12	12"
ICS-18	18"
ICS-24	24"
ICS-30	30"
ICS-36	36"
ICS-48	48"
ICS 60	60"



Elevator Guide Rail Insert Closure Strips, or snap-in covers, keep construction debris out. Exceptionally useful during inserts installation in masonry wall. Dark grey color, PVC, 1-3/8" wide, 1/16" thick.

RAIL INSERT WASHERS



Elevator Guide Rail Insert washers:
 Model W01RI012 for use with 1/2" bolts
 Model W01RI011 for use with 5/8" bolts

1009 1023

ACCESS ELEVATOR & ESCALATOR SUPPLY

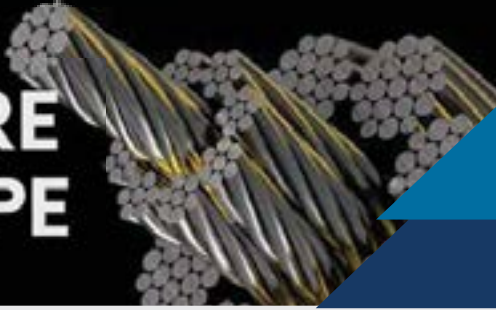
(800) 266-8654

1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103



WIRE ROPE



Manufactured by:
Wire Rope Works Messilot LTD

Manufactured to the following standards:
BS302.BS, ISO3408, DIN3051, RR-W-410
and MIL-W-83420. All sizes available

**ACCREDITED FOR ISO9002
SINCE 1994**

IN STOCK:



8x19 Filler
Fiber Core

Traction Steel Elevator Ropes		
8 x 19 Seale Fiber Core		
Diameter Inches	Nominal Strength, pounds	Approx.Wt. / Ft.Lbs
3/8	8200	0.23
7/16	11000	0.31
1/2	14500	0.40
9/16	18500	0.51
5/8	23000	0.63



8x21 Filler
Fiber Core

Iron Governor Ropes		
8 x 19 x 3/8" x Fiber Core 8 x 25 x 1/2" x Filler Wire		
Diameter Inches	Nominal Strength, pounds	Approx.Wt. / Ft.Lbs
3/8	4200	0.20
1/2	7200	0.36



8x25 Filler
Fiber Core

Extra High Strength Elevator Ropes		
8 x 21 Seale Fiber Core		
Diameter Inches	Nominal Strength, pounds	Approx.Wt. / Ft.Lbs
1/2	17500	0.36
5/8	27200	0.57

"Master Form" (Langslay)		
8 x 19 Seale Fiber Core		
Diameter Inches	Nominal Strength, pounds	Approx.Wt. / Ft.Lbs
1/2	16000	0.39
5/8	25400	0.62

Also in stock	
10MM X 8 X 19	1/8" X 8 X 19
11MM X 8 X 19	1/4" X 8 X 19
13MM X 8 X 19	8 X 19 X 5/8" ID PVC coated to 0.820" OD

1010 1023

**ACCESS ELEVATOR &
ESCALATOR SUPPLY**



(800) 266-8654



1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103

www.aesupply.com | sales@aesupply.com

ACCESS IS ALWAYS AROUND



EMERGENCY LIGHTS

Designed for use in:
New construction
Modernization
Direct replacement for existing units

Meeting both lighting and alarm codes ANSI A17.1, these systems contain maintenance-free nickel cadmium batteries, and solid state circuitry with accessory terminals for use with 6VDC alarm bell.

MODEL EMLK, UNIVERSAL LED KIT



- Replaces Monitor, Adams, PTL, GAL, EPCO, Innovation, Nylube, Mathis and many others
- 6 high efficiency white LEDs
- 120/220VAC power circuit
- 6/12VDC alarm bell (optional) can be wired into terminal strip
- 12V 1.2AH lead-acid battery included

MODEL ELSL-2



- Remote trimline model
- Car top mount power supply with alarm bell
- 18 gauge galvanized steel box
- External test switch
- Remote light source 7" x 1-7/8" x 1" (can be mounted in car above operating panel or ceiling)
- CSA approved

MODEL ELPB-1



- Mounts inside car operating panel
- Power pack, light source, and rectangular lens included
- For OEM and replacement use
- CSA approved

MODEL ELSL-ACBG



- Remote trimline model
- Similar to model ELSL-2 with ground fault circuit interrupter



MODEL ELPB-2

- Mounts to back of cover plate, 3" dia. round lens
- For OEM, and replacement use



MODEL ELWS-2

- Wall surface mount
- Brushed stainless steel finish, 5-1/2" x 8-1/2" x 1-3/4"
- Alarm bell (optional) can be wired into terminal strip
- CSA approved



MODEL ELCM-1

- Ceiling mount
- Self-contained unit
- White acrylic lens
- Alarm bell (optional) can be wired into terminal strip
- 6-5/16" x 5-1/4" x 1-13/16"

MODEL ELWS-2B

- Same as ELWS-2 with a bronze electroplated finish

1012 1023

ACCESS ELEVATOR & ESCALATOR SUPPLY



(800) 266-8654



1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103



EMERGENCY LIGHTS REPLACEMENT PARTS

**MODEL
EP-10063300 W/
EP-10000301**



MODEL EP-695-6



MODEL EP-EFP1120B



MODEL BATBR23A



Model	Replacement for Model	Description
15EL002	ELPB-1	Power pack - includes circuit board and battery
15EL003	ELCM-1	Power pack - includes circuit board and battery
15EL004	ELWS-2	Power pack - includes circuit board and battery
15EL005	ELSL-2	Without bell
15EL006	ELSL-2	Without lens
15EL007	ELSL-2	Lens w/ leads
15EL008	ELPB-1	Lens & bracket
A02EL001	ELWS-2	Lens only
A02EL005	ELPB-1	Lens only
21EL001B		Circuit board only ELSL 2
21EL005		NICAD battery - 5 to 6 year life span (approx.)
71LB0035	502	Replacement lamp
BATBR23A		3-volt battery with Epson Plug and 5" leads, for T.I., G.E. and Maida Micro-Processor back-ups. Minimum 5-year shelf life.

"EPCO" Emergency Lighting Products.	
Model	Description
EP-10063300	Dual lamp, ceiling mounted, emergency light fixture
EP-10000301	6 volt power pack
EP-695-6	6 volt "GEL" battery
EP-NP24-12B	24 volt "GEL" battery, for "Flexi-Light"
EP-EFP1120B	Circuit Board for "Flexi-Light"
EP-EFP1120C	Charger for "Flexi-Light"
EP-EFP1120P	Power Pack for "Flexi-Light"
EP-EFP1120K	Choke for "Flexi-Light"
NOTE: Complete "Flexi-Light" consists of 1 each, Charger, Power Pack and Choke.	



BATTERIES

Model EP626	6 Volt	3 Amp HR	5-1/4"L x 2-5/16"H x 1-5/16"D
Model EP-670-6	6 Volt	7 Amp HR	5-7/8"L x 3-5/8"H x 1-5/16"D
Model PS-682-W2	6 Volt	8 Amp HR with leads	
Model EP-695-6	6 Volt	9.5 Amp HR	
Model 21EL005	4.8 Volt	NICAD stick with leads	
Model EP-1212	12 Volt	12 Amp HR	
Model DR-12V7AH	12 Volt	7 Amp HR	5-1/8"L x 3-5/8"H x 2-1/2"D
Model B-718AAC1	12 Volt	9.5 Amp HR	
Model EP-1212	12 Volt	12 Amp HR	

**ACCESS ELEVATOR &
ESCALATOR SUPPLY**

(800) 266-8654

1302 65th Street
Emeryville, CA 94608 | 4301 S Valley View Blvd.
Las Vegas, NV 89103

www.aesupply.com | sales@aesupply.com

ACCESS IS ALWAYS AROUND

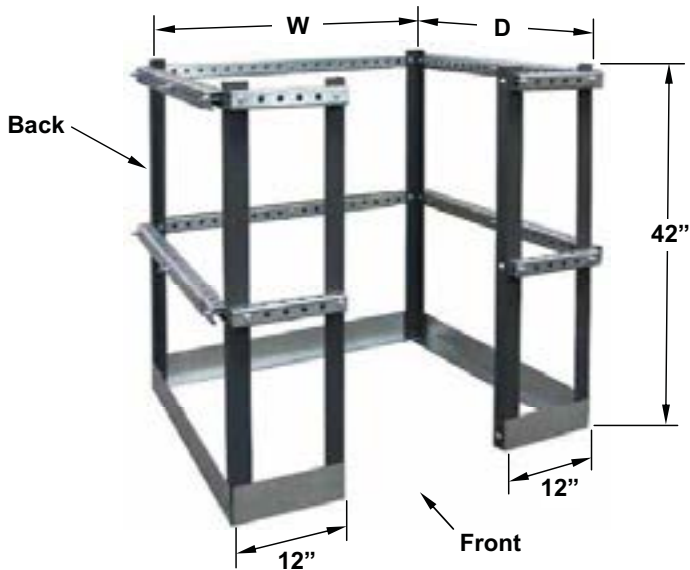
TOP OF CAR HANDRAIL



STAY SAFE WITH ACCESS

Features:

- Designed to comply with ASME A17.1a-2004
- Quick and easy installation
- Made from 1-7/8" and 1-5/8" square 12 Ga. galvanized telescoping channels
- Channel holes 9/16" Dia, punched in regular 1-7/8" intervals
- L-shaped 4"x2" galvanized toe guard and intermediate channels included
- Weight 3.6 lb. per linear foot



Model TOCH-72

60"W x 60"D x 42"H with Front opening shown

Custom Order Information:

- Only Front Opening
- Front and Back Opening
- Handrail depth (D") _____
- Handrail width (W") _____

1003 1023

ACCESS ELEVATOR & ESCALATOR SUPPLY



(800) 266-8654



1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103

PLUGGED-IN AND HARDWIRED ELEVATOR TANK OIL HEATERS

MAGNET MOUNTED TANK OIL HEATER

Plug and Go installation. Attaches magnetically outside tank. Thermostatically protected. Magnetic tank heater is ideal solution for residential and small commercial units or as a temporary heater for unusually cold weather conditions.

Model TH120M

- Mounts outside tank with built in magnetic mounts
- 10 foot plug-in power cord included
- Thermostatically protected, 250°F, factory pre-set
- CSA certified
- 200W, 120VAC, 60Hz
- 4-3/8"L x 2-1/2"W x 3"H (including handle)



TH120M



THO

PERMANENTLY MOUNTED TANK OIL HEATERS

Permanently mounts inside tank. Rigid or flexible conduits. Stainless steel main heater sheath and enclosure. Thermostatically protected, factory pre-set for 100°F. Power 275W 120VAC, 60Hz. CSA certified.

Note:

For custom made heaters advise "A" dimension, do not to exceed 48" for rigid, or 40" for flexible conduits. See worksheet below, for installation requirements.

Rigid Conduit Oil Heaters

- 48" x 1/2" rigid steel conduit
- 1/2" conduit clamp included
- Internal thermostat 100°F, factory pre-set
- CSA certified
- 275W 120VAC, 60Hz

Model TH120P - Rigid Conduit Plug-In Oil Heater with Switch

- Plug-in 3-prong power cord, 15' long
- Switch On/Off, red handle, 1NO, 20A 120/277VAC
- RACO 1-Gang standard box with cover



TH120P



TH120

Model TH120 - Rigid Conduit Hardwired Oil Heater

- Hard wiring required
- RACO 1-Gang standard box

Flexible Conduit Oil Heaters

- 40" x 1/2" flexible conduit
- Internal thermostat 100°F, factory pre-set
- CSA certified
- 275W 120VAC, 60Hz

Model TH120FP - Flexible Conduit Plug-In Oil Heater with Switch

- Plug-in 3-prong power cord, 15' long
- Switch On/Off, red handle, 1NO, 20A 120/277VAC
- RACO 1-Gang standard box with cover



TH120FP

Model TH120F - Flexible Conduit Hardwired Oil Heater

- Hard wiring required



TH120F

On/Off Oil Heater Switch

Recommended for Modes TH120 and TH120F for Winter/Summer On/Off operation.

Model THO

- Switch On/Off, red handle, 1NO, 20A 120/277VAC
- RACO 1-Gang standard box with cover
- UL listed components

**ACCESS ELEVATOR &
ESCALATOR SUPPLY**



(800) 266-8654



1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103

ACCESS IS ALWAYS AROUND

www.aesupply.com | sales@aesupply.com

PLUGGED-IN AND HARDWIRED ELEVATOR TANK OIL HEATERS

COMPARE PARTS

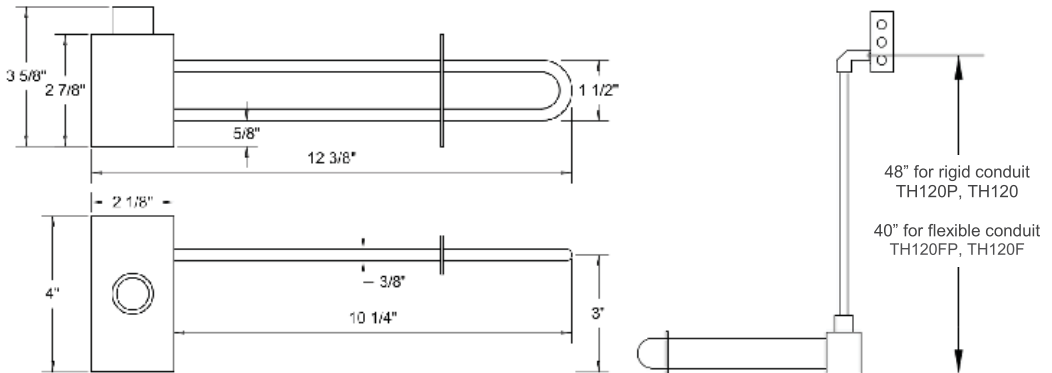
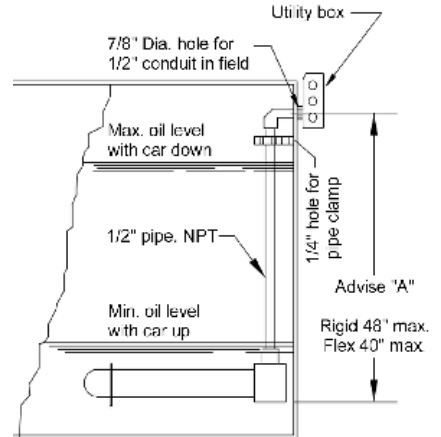
Model	Description	Design Features	Installation	Connection	"A" Dimension	Power	Thermostat
TH120M	Oil heater	Magnetic mounts	Outside tank	Plug-in, 10' cord	N/A	120VAC 200W	250°F
TH120P	Oil heater	Rigid conduit	Inside tank	Plug-in, 15' cord	48" max.	120VAC 275W	100°F
TH120	Oil heater	Rigid conduit	Inside tank	Hardwired	48" max.	120VAC 275W	100°F
TH120FP	Oil heater	Flexible conduit	Inside tank	Plug-in, 15' cord	40" max.	120VAC 275W	100°F
TH120F	Oil heater	Flexible conduit	Inside tank	Hardwired	40" max.	120VAC 275W	100°F
THO	Heater switch	Recommended for Model TH120 or Model TH120F tank oil heaters for Winter/Summer On/Off operation.					

Tank Heater Recommended Installation Worksheet

Note:

For custom made heaters advise "A" dimension, do not to exceed 48" for rigid, or 40" for flexible conduits.

1. Locate heater if possible at bottom of tank, or with 4" or more below minimum oil level.
2. Make all knockouts and holes above high oil mark in tank.
3. Mount standard switch and cover **Model THO** in utility box if required for summer - winter operation.
Switch included with **Model TH120P** and **Model TH120FP**.





RETRACTABLE PIT LADDER WORKSHEET AND QUOTE FORM

Name: _____	Reference #: _____
E-mail: _____	Phone: _____
Company: _____	Date: _____
Address: _____	

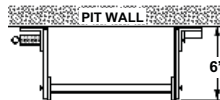
DATA

A Overall ladder length	_____
B Pit depth	_____
C Ladder width (9-3/4" minimum per Code)	_____
D Extra brackets distance (if required)	_____
E Bottom brackets distance, 16" typical	_____
F Quantity of rungs	_____
G Lock pin location Left/Right side	_____
H Safety switch location Left/Right side	_____
Quantity of ladders	_____

Note: To optimize price we recommend to order pin (G) and switch (H) on opposite sides of the ladder, avoid extra brackets (D), or change distance (E) unless necessary. Ladders are custom made and non-returnable. Please recheck before submitting.

NOTES

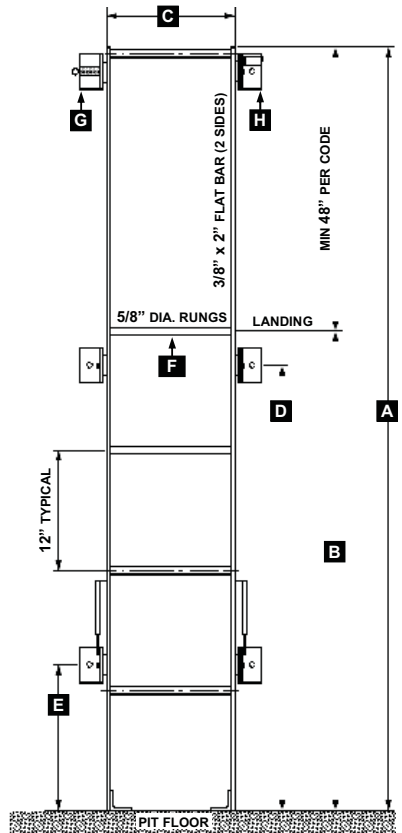
TOP VIEW - LADDER UNFOLDED



TOP VIEW - LADDER FOLDED



FRONT VIEW - LADDER UNFOLDED



Please fill out this form and email it to sales@aesupply.com.

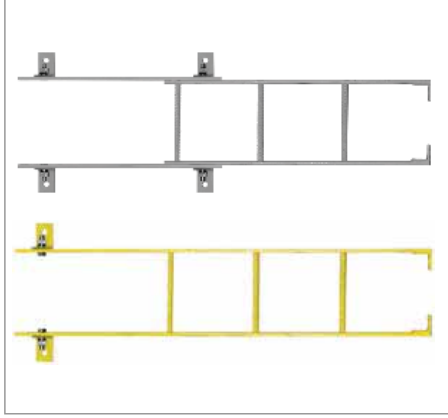
ACCESS ELEVATOR & ESCALATOR SUPPLY

(800) 266-8654

1302 65th Street
Emeryville, CA 94608 | 4301 S Valley View Blvd.
Las Vegas, NV 89103

PIT LADDERS – CUSTOM AND STANDARD

All pit ladders built from solid steel. Rebar rungs, 5/8" diameter, inserted into 3/8" x 2" sides and welded. Ladders painted with gray primer. Yellow industrial enamel finish is available at an additional charge. Standard ladders – in stock. Custom ladders – available for quick shipment!



Custom Pit Ladders

- Wall brackets bolted to sides
- Floor brackets welded to ladder sides
- Made as one or multiple section ladder
- Sectional ladder comes with additional brackets
- Up to 30' long; worksheet required

Standard One Piece Pit Ladders

- Wall brackets bolted to ladder sides
- Floor brackets welded to ladder sides

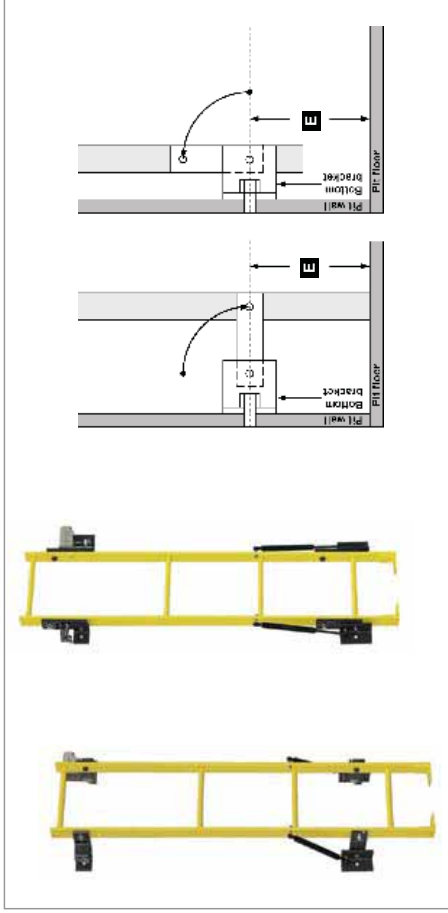
Model PL8

Model PL8-8 • 16"W x 8'L

Standard Collapsible Pit Ladders

- Folds in half for shipping
- Floor brackets welded to ladder inner sides
- Center brackets at point of pivot provide rigidity when installed

Model PL8C-8 • 16"W x 8'L



Custom Retractable Pit Ladders

- Extend forward (down) to allow access to pit
- Retract (up) to lock ladder in place to allow elevator to run
- Safety switch, left or right, prevents elevator operation when ladder down
- Top pin lock, left or right, secures ladder position
- Gas spring assist to retract the ladder
- Made as one or multiple section ladder
- Sectional ladder comes with additional brackets
- Up to 18' long; worksheet required

Installation:

1. Measure the distance **E** between center of pivot and bottom of the ladder. Standard distance is 16", but for custom ladders, it can vary. **2.** Mark centers of mounting holes on the pit wall at distance **E** from the pit floor, for two bottom ladder brackets. **3.** Fasten bottom brackets to the pit wall. Ladder stays on the floor. **4.** Pull back retaining pin at the ladder top to release the bracket. Mark positions for remaining brackets and fasten in place.



**ACCESS ELEVATOR &
ESCALATOR SUPPLY**



(800) 266-8654



1302 65th Street
Emeryville, CA 94608

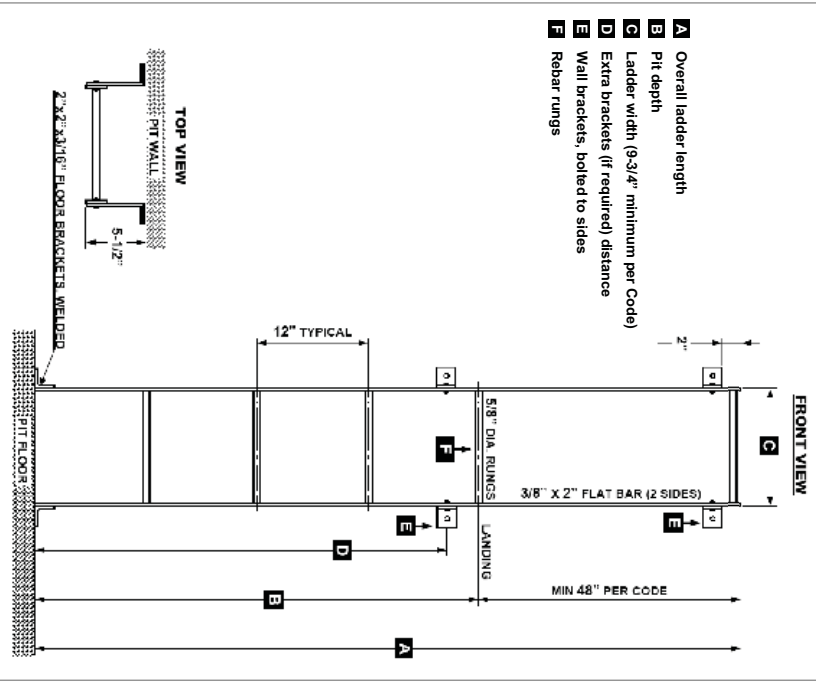
4301 S Valley View Blvd.
Las Vegas, NV 89103

www.aesupply.com | sales@aesupply.com

ACCESS IS ALWAYS AROUND

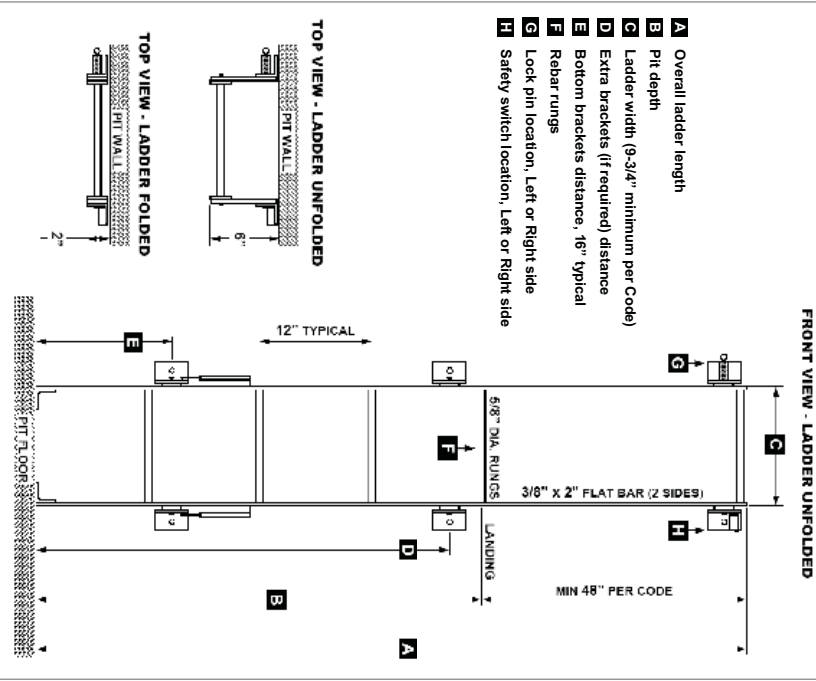
Pit Ladder

- A** Overall ladder length
- B** Pit depth
- C** Ladder width (9-3/4" minimum per Code)
- D** Extra brackets (if required) distance
- E** Wall brackets, bolted to sides
- F** Rebar rungs



Retractable Pit Ladder

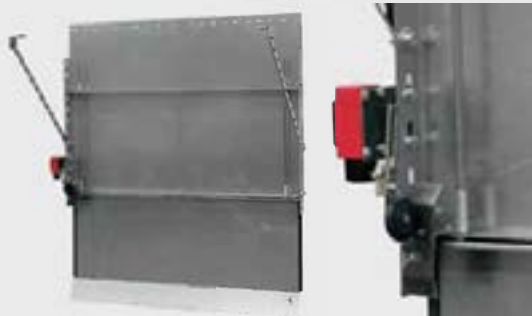
- A** Overall ladder length
- B** Pit depth
- C** Ladder width (9-3/4" minimum per Code)
- D** Extra brackets (if required) distance
- E** Bottom brackets distance, 16" typical
- F** Rebar rungs
- G** Lock pin location, Left or Right side
- H** Safety switch location, Left or Right side



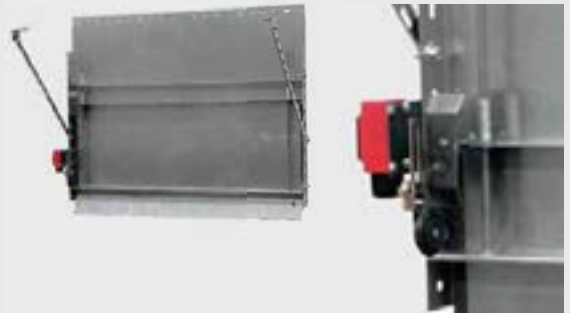


ELEVATOR CAB RETRACTABLE TOE GUARDS

FULL EXTENSION:



FULL RETRACTION:



FEATURES:

- 16 Gauge galvanized steel
- 42" Wide
- 48" High, full extension
- 14-1/2" High, full retraction
- Adjustable safety switch
- Other sizes available

1004 1023

**ACCESS ELEVATOR &
ESCALATOR SUPPLY**



(800) 266-8654



1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103

www.aesupply.com | sales@aesupply.com

ACCESS IS ALWAYS AROUND



DOOR LOCK MONITORING



DGMON400-F (FRONT)



DGMON400-R (FRONT/REAR)



DGMON400-S (WALK-THROUGH)



OUR PRODUCT PORTFOLIO

ESI manufactures a full line of microprocessor based elevator controller solutions.

We serve both Commercial and Residential industry with our reliable Traction and Hydraulic controller solutions manufactured with premium elevator components. Every solution we offer is fully inspected and tested to ensure seamless installation and reliable operation.

DOOR LOCK MONITORING MANUFACTURED BY ESI

AES offers a UL certified door lock monitoring solution that works well with almost all types of controllers made by different manufacturers. Our solution comes with installation schematics and technical instructions to allow seamless integration with your client's existing controller.

With more than 7,500 successful installations of door lock monitoring solutions in New York, we are confident **we are ready to meet your door lock monitoring requirements for all states.**

HOW IT WORKS

- Monitors for short circuits across door locks and car gate switches
- Monitors door position
- Prevents the car from running when failure modes are detected

**ALL THREE MODELS ARE READILY AVAILABLE AND IN STOCK!
ORDER NOW AND SAVE TIME, RESOURCES AND MONEY.**

Email us at sales@aesupply.com OR Call us: (800) 266-8654

**The units work with 230/120VAC. For other signal voltages, please call the factory.*

**Depending on the configuration the actual product may be different from the image shown.*

1014 1023

**ACCESS ELEVATOR &
ESCALATOR SUPPLY**



(800) 266-8654



1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103

www.aesupply.com | sales@aesupply.com

ACCESS IS ALWAYS AROUND



Stock Controller: Approval & Drawing Release

This document must be filled out and verified by Access Elevator Supply before installation of a stock controller. If the controller is installed prior to approval, the customer will assume all liability and the warranty will be void.

Job Information			
Job Name: _____		Stock Job #: _____	
Job Address: _____			
Street		City	
State		Zip	
Market: Government Education Health Care Hospitality Corporate Residential			
Contact Information		Installation Contact	
Company: _____		Company (if different): _____	
Primary Contact: _____		Install Mechanic: _____	
Phone #: _____		Phone #: _____	
Email: _____		Email: _____	
Shipping Information for Approval & Drawings			
Shipping Address: _____		Shipment Note(s): _____	
General Information for Approval & Drawings			
Car Label: _____		Motor Volts: _____	
Main Line (VAC/60Hz/3PH): _____		HP: _____ FLA: _____	
Contract Speed (FPM): _____		Motor Leads: _____ Valve: _____	
Capacity (Lbs): _____		*Alpha Elevator Control provides output for 120 VAC valve coils*	
Fixture Information for Approval & Drawings - ALL FIXTURES MUST BE 24 VDC			
Car Call Security Not Required		Hall Call Security Not Required	
COP floor buttons as code entry		Provide hall call security per floor	
Card reader/Key switches via dry contacts		Input: dry contacts in hall machine room	
Input: car station (default) machine room		Provide hall call security override input	
Override security when on Independent Service or Attendant Service		* If security is selected all openings will be secured except for the designated (main fire floor) opening.*	
Provide a Car Call Security Override Input		Lobby Panel - MUST BE 24 VDC Not Required	
Input: car station (default) machine room		Door open at recall level lamp In use lamp	
Door Open button disabled on secured landings		On independent service lamp In service lamp	
Door Information for Approval & Drawings			
Door Operator Model: _____		Door Hold Button	
		Yes No (default)	
Landings/Openings		Optional Features to Include on Drawings	
	Floor Labels	Floor Height	Floor Openings
			CarL
			F R
M/A	Overhead >		
	10		
	9		
	8		
	7		
	6		
	5		
	4		
	3		
	2		
	1		
	Pit >		
M - Main Fire Floor		All Walk-Through All Front Opening Number of Openings: _____	
A - Alt. Fire Floor			
Operations & I/O		Remote (2nd) fire key switch & lamp High pressure overload sensor Car-to-lobby key switch Dual jack resync Oil viscosity (cold oil) Flood sensor In-car inspection Low pressure	
Emergency Power			
E-power lamp output provided by Alpha		Interface to emergency power is required E.P. contact from generator is: Normally open Normally closed Power pre-transfer contact from generator is: Normally open (default) Normally closed Not present	
Interface to emergency power is required			
E.P. contact from generator is:			
Power pre-transfer contact from generator is:			
Normally open (default) Normally closed		Notes: _____ _____	
Not present			

1023 0424

Welcome

Welcome to the newest and most comprehensive *ACCESS Elevator & Electric Supply* (AES) catalog.

AES was founded in 1988 with a primary focus on motor control products. Over the years our product lines have expanded to include most major brands of motor control along with related products such as relays, fuses, and other replacement parts used for elevator maintenance, repair and modernization. Now, an entire line of escalator parts has been added.

Expertise and Service Set Us Apart

Our sales people are not just order takers. The person you speak to on the phone has experience in the application and assembly of the electrical products we supply. Our product specialists can help you with the more technical aspects of everything we offer.

In 2013 we joined a family of elevator companies becoming a sister company to Quality Elevator Products. This has increased our footprint in the elevator industry, increasing our buying power of elevator components.

We are Solutions Based

While that is an often-used phrase, you will find we actually walk that walk, whether it is application assistance or locating a hard-to-find part for you.

We ship nationwide, including Canada and Puerto Rico via your choice of UPS, FedEx or LTL carrier from three warehouse locations, CA, NV and IL. For orders received by 4:00 pm PST, we guarantee cost and time effective, same day shipment on all standard orders.

We look forward to working with soon!

ACCESS Elevator & Electric Team

We Now Have a Full Line of Escalator Parts & Accessories!

TAKE A LOOK!



**ACCESS ELEVATOR &
ESCALATOR SUPPLY**



(800) 266-8654



1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103

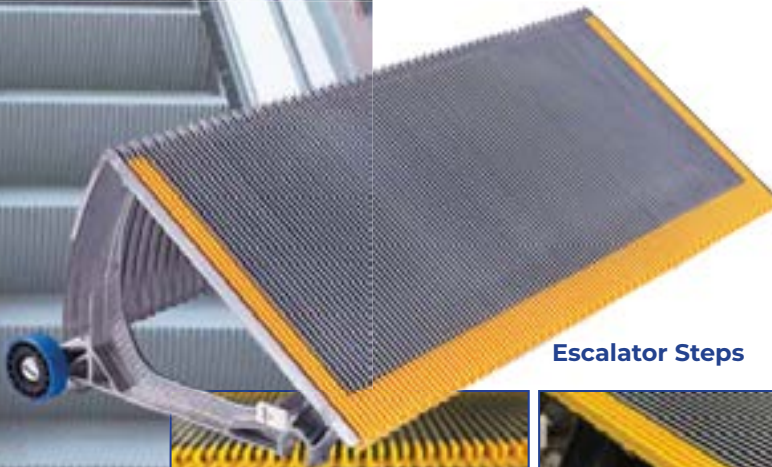
www.aesupply.com | sales@aesupply.com

ACCESS IS ALWAYS AROUND

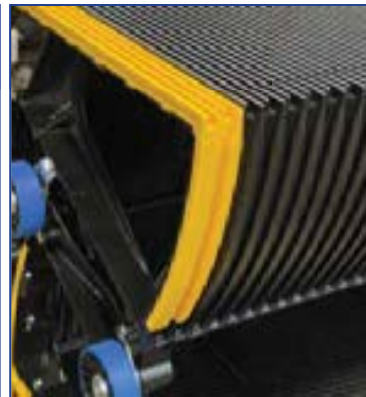


We now supply:

- **STEPS, STEP CHAINS & BELTS**
- **COMB SEGMENTS**
- **NEWEL ROLLERS & CHAINS**
- **HANDRAIL DRIVE PARTS & CHAINS**
- **PLASTIC DEMARCATIONS**
- **ROLLERS**
- **BRAKE SOLENOIDS**
- **ESCALATOR HANDRAILS**



Escalator Steps



Escalator Step Chain



Newel Chains



Handrail Drive Chains



Rollers



Comb Segments



Refurbishment Program



Plastic Demarcations



Handrail Drivers



And much more! Contact us today to see how we can help you.



Contact us today for all your Escalator Needs!

**ACCESS ELEVATOR &
ESCALATOR SUPPLY**



(800) 266-8654



1302 65th Street
Emeryville, CA 94608

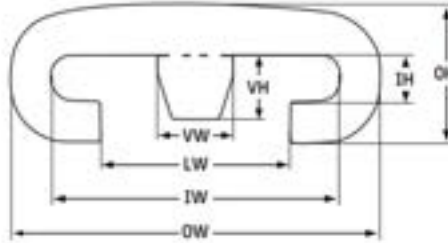
4301 S Valley View Blvd.
Las Vegas, NV 89103

ACCESS IS ALWAYS AROUND

www.aesupply.com | sales@aesupply.com

ESCALATOR & MOVING WALK HANDRAIL PRODUCT RANGE

OW: Outer Width
 OH: Outer Height
 IW: Inner Width
 IH: Inner Height
 LW: Lip Width
 VW: Vee Width
 VH: Vee Height



Nominal Dimensions (mm, +/- 0.5mm)

Part #	OW	OH	IW	IH	LW	VW	VH	Equipment
PF7928F	79	28	64	10	39	N/A	N/A	KONE (Slim Line) TKE (Slim Line) O&K (Slim Line)
PF7928V	79	28	63	10	38	18	13	O&K (Slim Line / V Profile)
PF8028F	80	28	63	11	40	N/A	N/A	Westinghouse (Low-Profile) Schindler (9300)
PF8232F	82	32	63	12	40	N/A	N/A	Hitachi Goldstar Fujitec
PF8234F	82	34	60	12	34	N/A	N/A	Schindler (SWE)
PF8236F	82	36	63	16	40	N/A	NA	Otis Westinghouse (Legacy) CNIM Hitachi (Legacy)
PF8836F	88	36	68	16	40	N/A	N/A	Montgomery O&K (Standard)
PF8836V	88	36	68	16	41	19	18	Montgomery (V Profile) O&K (Standard / V Profile)



**ACCESS ELEVATOR &
ESCALATOR SUPPLY**



(800) 266-8654



1302 65th Street

Emeryville, CA 94608

4301 S Valley View Blvd.

Las Vegas, NV 89103

1022 0424



Have You Seen What's Lighting Up Modern Escalators?

Access Elevator Supply Under - Step Demarcation Light



Available in 24v and 115v

Extended Life – Depending on conditions, our LED demarcation light can provide up to 50,000 hours of continuous service without significant dimming. We give a **Lifetime Warranty** on every unit. That results in **Greater Safety** for your passengers and **Lower Liability** for you.

Inexpensive – As far as we are aware, our MES970 is the most economical LED demarcation available.

Lower Power Consumption – Our MES970 demarcation light is a **GREEN** product (no pun intended). It consumes 1 watt of power, compared to the approximately 35w consumed by a typical fluorescent unit. The unit can pay for itself in energy savings in a year or two.

Water Resistant – The MES970 demarcation light is poured in epoxy, making it almost impossible for water to get into it.

Practicality – Unlike fluorescent units which light up the entire machine area, the MES970 emits bright points of green light directed toward the passenger's eyes, signaling him or her that he/she is approaching a danger point. The overall light output of our LED demarcation light is less than that of a fluorescent unit, but it is only directed where it is needed, and is much brighter at the LEDs than at any point on a fluorescent tube (see data sheet).

Does it meet the code? Yes, it does! If your inspector is questioning whether or not LED demarcation lights meet the code for elevators/escalators, please contact us for more information.



1018 1023

ACCESS ELEVATOR & ESCALATOR SUPPLY



(800) 266-8654



1302 65th Street
Emeryville, CA 94608

4301 S Valley View Blvd.
Las Vegas, NV 89103

www.aesupply.com | sales@aesupply.com

ACCESS IS ALWAYS AROUND



ESCALATOR STEP CHAINS SUPPLIED BY ACCESS



AFTER SALES CHAINS

Step chains supplied by Access are manufactured to the highest standards. We work hand in hand with the leading plastic roller manufacturers to ensure the longest lifetime of the chains possible.

Hardness, surface treatment, and further quality relevant manufacturing steps as well as breaking load certificates can be provided upon request.

WE SUPPLY TO:

- TRANSIT AUTHORITIES
- AIRPORTS
- OEM AND END USERS
- SHOPPING MALLS

ACCESS ELEVATOR & ESCALATOR SUPPLY



(800) 266-8654



sales@aesupply.com



1302 65th Street | 4301 S Valley View Blvd.
Emeryville, CA 94608 | Las Vegas, NV 89103



1017 1023



POWERED BY



Contents

ACCESSORIES 1

- ADA Phones 1
- Janus Panachrome 3D 3
- Janus Elevator Light Curtains 5
- Quality Elevator Products 8
 - Pit Ladders 15
- Alarm Bells 18
- Capacitors 18
- Certificate Frames 18
- Diamond Spatulas 18
- Emergency Stop Pull Switches 18
- Enclosures 19
- Flexible Abrasives 19
- Gongs 19
- Replacement Keys 19
- Fire Service Key Switch 20
- Omron Switches 20
- Multi Bit Security Drivers 20
- Innovation Pushbuttons 21
- Stainless Steel "Snake Eyes" Spanner 21
- Security Screws
- Resistors: Porcelain Tube 22
- Wire and Terminal Connectors 22
- Spirator Closing Reels 22
- Toggle Switches 23
- Service Kit 23
- Wiring Organization Tool 23
- Work Lights 24
- Pump Rupture Valves 24

PIT PRODUCTS 25

- Maxton Valves 25
- Flexible Drip Ring 26
- Gorman Packing Seals 27

MICROSWITCHES 29

TRANSFORMERS 30

SIGNAGE 31

ELEVATOR LAMPS 35

- Common Lamp Bases with Dimensions 38

FUSES 39

- GFuse Combo, GFuse Combo XL 39
- Small Dimension Fast Acting Glass/ Ceramic Fuses 40
 - Type ABC 40
 - Type AGC 40
 - Type AGX 41

- Small Dimension Time-Delay Glass Fuses 41
 - Type MDA 41
 - Type MDL 42
- Midget Fast-Acting Fuses 43
 - Type MOL 43
 - Type MCL 43
- Midget Time-Delay Fuses 44
 - Type MEN 44
 - Type MEQ 45
- Class CC Fuses 46
 - Type HCLR 46
 - Type HCTR 46
 - Type EDCC 47
- One-Time Fuses 48
 - Type KON 48
 - Type KOS 48
- Dual-Element Time-Delay Fuses, Class RK5 49
 - Type ECNR 49
 - Type ECSR 50
- High Speed Semi-Conductor Protection Fuses 51
 - Type E25S 51
 - Type E50S 51
 - Cooper Bussman 52
 - Type E70S 52
- Fuse Holders 53
 - Ferraz Shawmut 53
 - Bussman 53

DOOR PARTS 54

- Tri-Tronics 54
- Door-open/Door-close Relays 58
 - Mitsubishi 58
 - Sprecher+Schuh 58
 - Struthers-Dunn 59
- Door Rollers 59
- Adjustable Nylon Door Gibs, 60
- Roller Bearing Gibs and Rail Gibs
- Waupaca Elevator Company Interlocks 60

GAL 63

- MOVFR Door Operators 63
- MOVFR II Door Operators 66
- Accessories 68

Contents

RELAYS 74

IDEC.....	74
RH Series – Compact Power Relays.....	75
RJ Series.....	77
RR Series – Power Relays.....	78
RU Series – Universal Relays.....	80
RY Series – Miniature Relays.....	81
Relay and Timer Sockets, DIN Rail.....	82
Power Supplies.....	83
Power Supplies and Smart Relays.....	84

SUPPLEMENTARY PROTECTORS 85

Sprecher+Schuh

SWITCHES AND PILOT DEVICES 92

IDEC

RELAYS 95

Aromat DS Miniature Relays.....	95
Aromat/Omron Control Relays.....	95
Line Electric.....	95
Misc. Relays.....	96
Omron Relays.....	96
Relay Logic IBM Replacement Relays.....	96
Siemens 3TX Series – Heavy Duty Power Relays.....	97
Struthers-Dunn.....	97
Tyco Electronics.....	97
Tyco/Schrack A17 Safety Relay.....	97

LIMIT SWITCHES 99

TIMERS AND FLASHERS 100

Artisan.....	100
IDEC.....	101
RTE Series.....	101
GT3A Series.....	103
GT3F Series – True OFF Delay.....	104
GT5Y Series – ON Delay.....	104
Sprecher+Schuh.....	105
Square D Pneumatic.....	105

POWER MONITORS 106

Time-Mark 3-Phase

STARTERS AND CONTACTORS 108

ABB/Asea Brown Boveri.....	108
AC IEC Contactors.....	108
Mechanical Interlocks.....	109
Aux Contacts.....	109

Allen-Bradley 110

Bulletin 100-C IEC Contactors and Starters.....	110
Replacement Contact Kits for 100-C and 100-D Contactors.....	111
100-B Replacement Contactors and Parts.....	111
500 Line NEMA Starters and Contact Kits.....	112
Series K Contact Kits.....	112
Series A Contact Kits.....	112

Fuji..... 113

GE..... 114

C2000 IEC Contactors and Starters.....	114
Aux Contacts.....	114
Replacement Coils.....	115
Replacement Starter-mounted Overload Relays for CL00, CL01, CL02, CL25, CL04 and CL45.....	115
Replacement Starter-mounted Overload Relays for CL06, CL07, CL08, CL09 and CL10.....	115
300 Line NEMA Starters.....	116
NEMA Reversing/Wye-Delta Contactors.....	116
NEMA Reversing/Wye-Delta Starters.....	116
Mechanical Interlocks.....	117
Replacement T-bars.....	117
Replacement Coils.....	117
Aux Contacts.....	118
Replacement Starter-mounted Overload Relays – 3 Phase.....	118
Replacement Panel-mounted Overload Relays – 3 Phase.....	119

Mitsubishi 120

MS-T Series.....	120
Overload Relays.....	122
Accessories.....	122
Wye-Delta (Reversing) Contactors.....	123
S-N Series.....	123
Contactors and Starters.....	123
Wye-Delta (Reversing) Contactors.....	124
Wye-Delta (Reversing) Starters.....	124
Overload Relays for S-N Series Starters.....	125
Aux Contacts.....	125
Replacement Coils.....	126
Mechanical Interlocks.....	126

Siemens/Furnas 127

NEMA Starters and Contactors.....	127
Aux Contacts.....	128
Mechanical Interlocks.....	128
ESP200 Electronic 3 Phase Overload Relays.....	128
Replacement Contact Kits.....	128

Siemens SIRIUS IEC	129	Siemens/Nordic	158
Contactors and Starters	129	Soft-Start Hydraulic Elevator Application Guide	159
Wye-Delta Contactors and Starters	130	Elevator Starter Dimensions	161
Aux Contacts	131	Soft Starter Electrical Specifications	161
Overload Relays	132	Crossover Siemens Soft Starters	161
Mechanical Interlocks, Reversing Links and Wye Jumpers	132	Accessories	161
Surge Suppressors	133	TKE Cross Reference	162
Replacement Coils for 3RT Contactors	133	Replacement Logic Board	162
Siemens/Furnas Class 42/16 DP Replacement Parts	134	Enclosures	162
Sprecher+Schuh	135	Sprecher + Schuh	163
IEC Contactors	135	PCEC Hydraulic Elevator Soft Starters	163
IEC Starters	136	PCEC Controller Panel: 120V Control Voltage	165
IEC Reversing/Wye-Delta Contactors	137	PCEC Controller Panel: 208–230V	165
IEC Reversing/Wye-Delta Starters	138	Control Voltage	
Overload Relays for CA6 and CA7	139	Accessories	165
Contactors and Starters		Dimensions	166
Overload Relay Panel Mount Adapters	139	Motor FLA Adjustments	166
Aux Contacts for CA7 Devices	139	Wiring Diagrams: DELTA Connection Diagrams,	167
Industrial Control Relays	140	Power and Motor Wiring	168
Timers	140	Line Connection Diagrams, Power and	168
Miniature Industrial Control Relays	140	Motor Wiring	
Series CA8 Contactors and CAT8 Starters	141	PCS Controllers	169
Miniature Contactors Series CA8	142	Modes of Operation	171
Pluggable Surge Suppressor Modules	142	Open Type – Line Connected Controllers	172
Auxiliary Contact Reliability	142		
Auxiliary Contacts	142	PUMPS AND MOTORS	174
Miniature Starters Series CA8	142	Allweiler ALLift® Submersible Screw Pumps	174
Miniature Contactors – AC and DC Coil, Series CA8	142	Imperial Electric	177
Series CDP2 Definite Purpose Contactors	145	AC Dry Hydraulic Motors	177
1 and 2 Pole	147	AC Submersible Hydraulic Motors	179
3 Pole	148	Accessories	180
4 Pole	149	IMO® Dry Mounted Pumps	181
Telemechanique/Schneider	150		
Contactors	150	DC CONTACTORS	182
Accessories	150	ABB/Asea Brown Boveri Type EHDB	182
		Mitsubishi Type DU	184
		Siemens/Furnas Overload Relays for	184
		DC Contactors, Single Pole Thermal	
SOFT STARTERS	153	OVERLOAD RELAYS – PANEL MOUNT ..	185
Innovations	153	Mitsubishi TH-N, TH-T	186
SIRIUS Innovations Modular System	153	Siemens	186
3RT2 Contactors	154	ESP200 Electronic 3 Phase	186
Aux Contacts	155	Single Pole	187
Overload Relays	156	Sprecher+Schuh CEP7 Electronic 3 Phase	187
Protection Equipment	156		
Soft Starters	157		
Power Supply	157		
Replacement Part Numbers	157		

Contents

CONTACT KITS..... 188

ABB/Asea Brown Boveri	189
Type EG	189
Type EH	189
Type EHDB DC Drive Contactors	189
Allen-Bradley	190
Series A	190
Series K	190
500 Line	190
IEC 100 Line, A & B	190
IEC 100-C and 100-D Line	191
Aromat Green Power	191
Cutler-Hammer	191
Series B1	191
Freedom Series	192
Furnas	192
Vertical Lift Contactors/Starters	192
Innova 45° Series Contactors/Starters	192
Innova Plus Series Contactors/Starters	193
IEC Class Contactors/Starters	193
Old Style Definite Purpose Contactors/Starters	193
Centurion 2000 Definite Purpose	193
Contactors/Starters	
GE	194
CR100/200/300 Line	194
CL C-2000 IEC	195
CR7 Spectra 700 IEC	196
Misc Contacts	196
Limitamp Medium Voltage 5KV	197
ITE-Gould/Telemecanique	197
Joslyn Clark/Sylvania	197
Type CY	197
Type SDP	197
Mitsubishi	198
Series S-D and S-K	198
Series S-N	198
Series DU DC Contactors	198
S+S/Sprecher+Schuh	199
CA1 Contactors/Starters	199
CA3 Contactors/Starters	199
CA7 Contactors/Starters	199
Siemens	200
3TB Series	200
3TF World Series	200
3RT SIRIUS	201

Square D	202
Old Style Contactors and Starters	202
Class 8502/8702/8536/8736 Contactors	202
and Starters	
Struthers-Dunn Dover #14 and #15 Relays	202
Telemecanique LC1 Series	203
Westinghouse Electric Advantage Series	203
Dover	204

OEM 205

Replacement Boards	205
Dover	206
Door Parts and Equipment	206
Car Signal Replacement Parts	206
Pushbutton Caps	206
Car Signal Components	206
Replacement Lamps and Bulbs	206
IBM Relays	207
#14 #15 Contactors	207
#14 #15 Parts	208
DPDT 10-amp Plug-in Relays	209
Coils	209
Microswitches	209
Otis	210
Rollers	210
Parts	210
Replacement Parts	207
MCE	212
Replacement Parts for MCE Controllers	212
Universal Logic Board	213
ABB Type EHDB DC Drive Contactors	213
Mitsubishi Type DU DC Contactors	213
GE C2000 Contactors	214
Siemens SIRIUS 3RT Contactors	214
Elevator Controls	215
Replacement Parts for Controllers	215
Tyco/Schrack A17 Safety Relay	215
PRD Relays	215
Mitsubishi DC Contactor	215
Replacement Logic Board	215
72G Series Soft Starters	215
PCEC Series Soft Starters	215
Cutler-Hammer Freedom IEC Series Starters	216
and Reversing Starters	
Aux Contacts	216
Replacement Contact Kits	217
Smarrtrise	218
Replacement Parts for Smarrtrise Controllers	218

ADA Emergency Telephones

The EMS emergency telephone system provides trapped passengers with an easy, hands-free connection to emergency help. Janus EMS emergency telephones are a forerunner in the industry. All major elevator companies have come to trust our elevator emergency telephone systems to provide code-compliant service in North America.

The entire Janus EMS emergency telephone range is CSA certified and FCC approved.

KEY FEATURES

- Complies with the requirements of the Americans with Disabilities Act (ADA)
- FCC registered and CSA listed
- Phone line powered
- On-board keypad
- Built-in four-number dialer
- Easy installation and programming
- Fully programmable voice chip
- Surface mount, flush mount, and other mounting options available
- Available in stainless steel or muntz

TECHNOLOGY MILESTONES

Call Director: allows up to eight telephones to share a telephone line

Telephone line monitoring: audio and visual signal in the event of telephone line failure (ASME/844 2009 and 2010)

Point-to-point intercom: cost-effective communication without telephone line



PBX



PSM



PSL



PSS



PNB



PNB-R



MG3



LMX



LMA

Specifications

Part #	Description	Mounting Configuration	Dimensions (inches, w x h x d)	Weight (lbs)
PBX	Blue phone, box style	Surface mount	4.90 x 8.93 x 2.09	.5
PBX-M	Powder-coated black metal phone, box style	Surface mount	4.62 x 8.57 x 2.06	3
PSM	Stainless steel phone, box style	Surface mount	5.06 x 9.5 x 13.75	3.5
PSL	Flush mount stainless steel phone, large	Flush mount	10 x 13.25 x 2.125	4.5
PSS	Flush-mount stainless steel phone, small	Flush mount	6.5 x 10.5 x 2.125	3.5
PNB	COP mount phone, 1-LED	Behind COP	4.5 x 7.02 x 1.45	.5
PNB-2	COP mount phone, 2-LED	Behind COP	4.5 x 7.02 x 1.45	.5
PNB-R	Rath replacement	Behind COP	3.98w x 3.7H	.5
MG3	Otis replacement	Behind COP	1.75w x 3.74H	3 oz

Specifications continued

Part #	Power	Loop Current Range	REN	Dialing	Frequency Response	Operating Temp	Relative Humidity
PBX	Telephone line powered 45 – 50VDC typical	25 – 60mA (25mA typical)	0.28	DTMF	550 – 3400Hz, +/- 3db	-40 to 185° F -40 to 85° C	Up to 95% (non-condensing)
PBX-M							
PSM							
HDP							
PSL							
PSS							
PNB							
PNB-2	PNB-R optional power supply	20 – 55mA	0.38				
PNB-R	24V @ min 250mA						
G3	MG3 power supply						
MG3	2VDC min 100mA	10 – 55mA	0.79			0 to 50° C	

EMS Options and Accessories

Part #	Description
RLOC 2.8	Auxillary output relay option
ARB	Auxillary input for annunciator unit
PLM 2.8	Phone line monitoring option
ACCKIT-PNB	Accessory kit for PNB phones
ACCKIT-HFP	Accessory kit for all surface and flush mounted phones
RMG3	Auxillary output relay option for G3
PLMG3	Phone line monitoring option for G3
ACCKIT-G3	Accessory kit for G3
ACCKIT-MG3	Accessory kit for MG3

Janus Panachrome 3D

The Panachrome door edge system is the revolutionary new elevator safety detection system offering maximum passenger protection. The traditional infrared light curtain is coupled with colored indicators that operate on door movement, or that can be manually triggered with the door open/close circuit. The detectors illuminate green if the doors are opening, flash red as they start to close, and stay red as the doors move together. The combined system is an effective solution for sites where extra caution is required on an elevator.

KEY FEATURES

- Complies with the American Disabilities Act
- Coverage exceeds minimum requirements of 1" to 70.9"
- Colored red/green indicators highlight door movement
- Infrared detection delivered as 154 beam light curtain
- 13 foot pluggable cable
- 18 foot range
- Choice of 3/8" and 1-5/8" profiles
- High resistance to water and dust
- Simplified installation
- Suitable for center-opening and side-opening doors

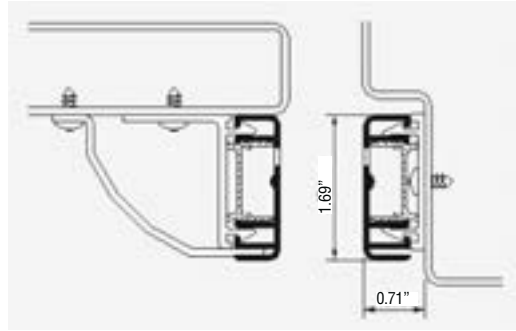
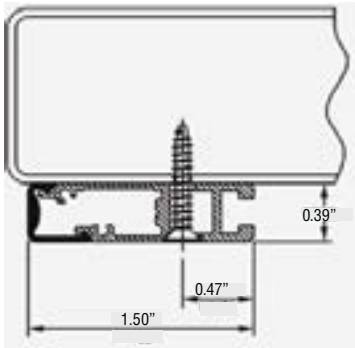


C2510 or C3510 000 Panachrome Green, 1 up 1 down

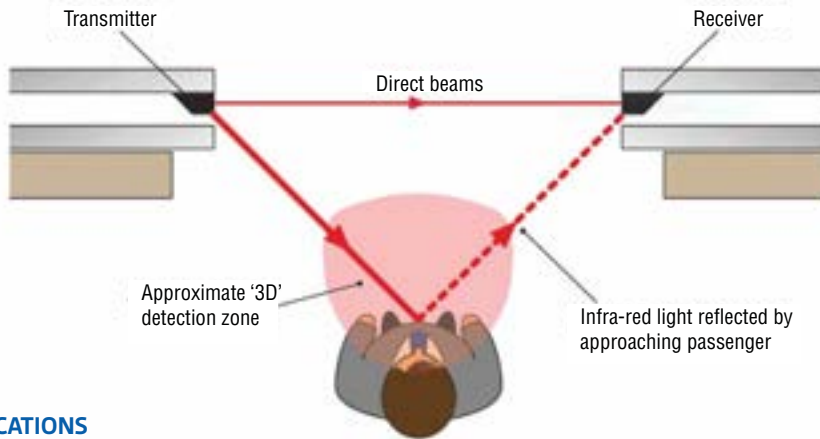


C2510 or C3510 000 Panachrome, red 2

DETECTOR PROFILES



3D OPERATION



SPECIFICATIONS

- 154 beams
- 120–240VAC power input. 18–25VDC
- Door operator relay 240VAC, 24VDC at 5A
- 72.0" level of highest beam
- 0.75" level of lowest beam

Janus Pana40 Plus 2D/3D Elevator Light Curtains

The Pana40 Plus safety detection system offers maximum passenger protection. The traditional 2D infrared light curtain is also available in 3D detection to offer additional protection in the landing zone.

Any object causing interruption of the direct beams or reflections within the 3D detection zone will trigger the system and re-open the elevator doors.

The 77X or 3D detectors can be used with all 3D versions of the Pana40Plus controller. These controllers are available in 40 or 194 beam pattern versions and for various supply voltages (AC or DC).

The system can be configured for different operating modes to suit particular installation needs. For example the '3D Timeout' mode is ideal for hospitals because the doors will only start to close if the 3D detection zone is clear and the timer has expired.

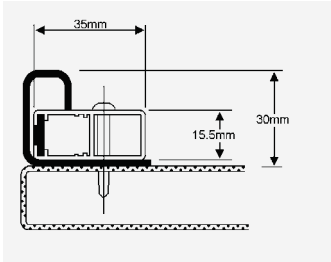
The 3D detector range is equal to approximately half the door separation. As the doors close the 3D detection zone moves inward giving increasingly sensitive protection to the door aperture.



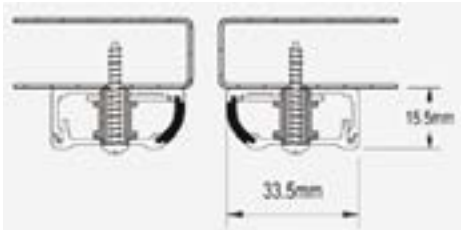
Pana40 Plus 740

KEY FEATURES

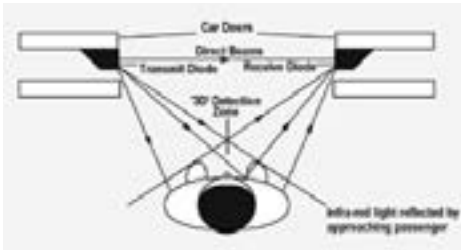
- Vandal-resistant fixtures designed for fast installation
- 40 parallel or 194 criss-cross beams offer protection up to a height of 1.8m
- Suitable for centre-opening and side-opening doors
- Surface mount diodes for improved performance and quality
- Custom-designed lens optimizes beam profile
- Self-drilling screw for fast, easy fixing
- 2D light immunity to over 100,000 lux



741 000 profile



771 000 profile



DETECTOR PROFILES

The Pana40 Plus detector range is suitable for both side-opening and centre-opening doors and has a wide range of profiles to suit most installations. The detectors are supplied with appropriate fixing kits for up to five types of installation. They are designed for fast installation with no alignment problems.

The mechanical design of the profiles ensures simple installation methods, with high impact strength and ingress protection against dust and water.

The custom-designed lens used on this range optimises the beam profile and can be used with either the Pana40 Plus or Pana194 controllers to generate a 40 beam or 194 beam pattern respectively. The beams offer protection to 1.8m height to fully comply with legislation. The diagnostic LED assists service engineers in reducing call-out times.

3D FEATURES

- 3D 'zone' gives extended protection into the landing (see below)
- Selectable modes of 3D operation to suit various installation sites
- 3D greatly reduces the chances of passenger injury by the landing door
- 3D reduces damage to landing doors from trolleys and hospital beds
- Advanced 3D diagnostic self-check for engineers

PROFILES AVAILABLE

9 mm Profile (Ultra Slim)

- Suitable for virtually all lifts
- 2D or 3D Profiles (3D is 10mm)
- 40 beams/194 beams options

16 mm profile (Slim Line)

- Suitable for centre-opening doors with a narrow running clearance
- 2D or 3D profiles
- 40 beams/194 beams options

43 mm profile (Standard)

- Suitable for wider sill arrangements
- Pre-drilled holes
- 2D or 3D profiles
- 40 beams/194 beams options

40 mm profile (Slam Post)

- Only available in 2D version 2m and 2.1 m
- 40 beams/194 beams options

ACCESSORIES

- Static Fixing Kit 616 800-010: Necessary for installing a set of 9mm and 15mm profile detectors in a fixed position at either end of the lift car sill. See P40 Plus Detector installation guide.
- Sightguards: Designed to fit neatly over the Pana40 Plus range detectors and are available to suit elevators with different clearances.

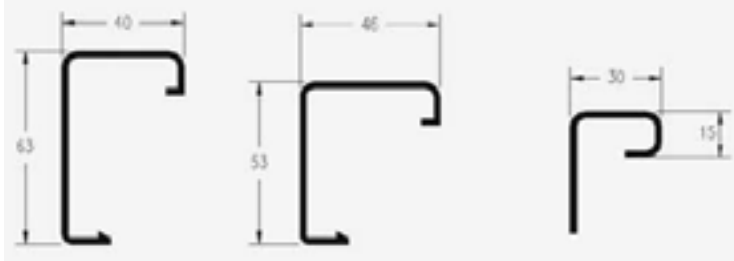
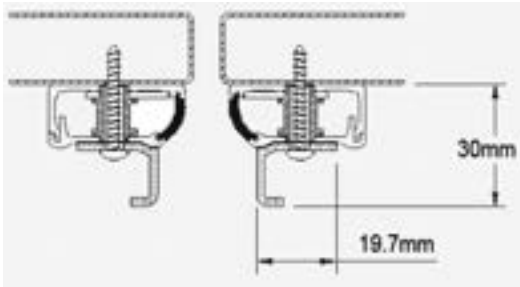


Fig1 ØØ7 035 40mm

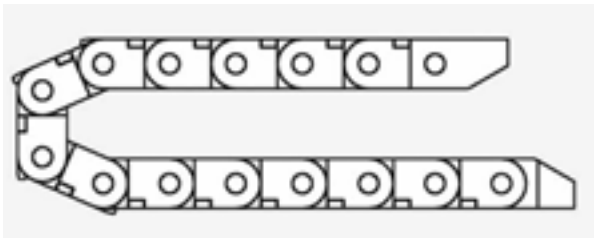
Fig2 ØØ7 045 46mm

Fig3 ØØ7 065 30mm

- FingerGuards: PVC FingerGuards are available to fill the 30mm gap found on some door types.



- IGUS Chains: A snap-open energy chain which is placed around the extension cable to protect the detector cables from clamping when installed in a dynamic installation.



Accessories Quality Elevator Products



Accessories: Quality Elevator Products

Part #	Description	Optional
18ASF-2	Flame retardant wire. Primarily used for door interlock connections. Red with a white stripe	
18ASF-2R	Flame retardant wire. Primarily used for door interlock connections. Solid red	
21EL005	4.8v NiCad battery. 5 to 6 year life span	
DHT	Hand tachometer in shock-resistant case <ul style="list-style-type: none"> • Tolerance $\pm 0.5\%$ of max. scale value • 16–20,000 RPM, 5–6,000 FPM 	
ELPB-1	Emergency light. Mounts inside car operating panel, power pack, light source and rectangular lens included	
ELSL-2	Car top mount power supply with alarm bell <ul style="list-style-type: none"> • CSA approved • External test switch • 18 gauge galvanized steel box • Remote light source 7" x 1-7/8" x 1" • Incandescent or optional LED lamps • Input 120V 50/60Hz 	Light can be mounted in car above operating panel or ceiling Model ELSL-2: 3.75"H x 5.25"W x 6.31"L box Model ELSL-2-SB: 1.75"H x 5.25"W x 6.31"L box
ELWS-2	Emergency light. CSA approved, 5-1/2" x 8-1/2"	Can be wired into terminal strip
EP-1312	12V battery, 1.3AH	
FP8-ST	Fish plate. For 8# rail, seismic (dims: 12"L x 4"W x 1-3/4" thick)	
HMCLAMP-2	Insulated pipe clamp 2". Designed to hang off unistrut	
HMCLAMP-3	Insulated pipe clamp 3". Designed to hang off unistrut	
HMCLAMP-25	Insulated pipe clamp 2.5". Designed to hang off unistrut	



18ASF-2
Flame Retardant Wire



18ASF-2R
Flame Retardant Wire



21EL005
4.8v NiCad Battery



DHT
Hand Tachometer



ELPB-1
Emergency Light



ELSL-2
Car Top Power Supply



ELWS-2
Emergency Light



EP-1322
12V Battery



HMCLAMP-2, HMCLAMP-25
Insulated Pipe Clamps

Part #	Description	Optional
LGP (2259)	Lamp guard. Plastic, yellow. Lamp 200W max.	
LG-NC	Lamp guard. Non-conductive PVC coated metal	
LPG	Liquid pressure gauges <ul style="list-style-type: none"> • Scale max. psi: 600, 1000, 3000 and 5000 • 1/8" or 1/4" quick connects • 1/8" or 1/4" quick connects • Gauge peak pressure pointer, "P" option 	• Flexible hose
LPG-QC	Quick connect assembly for liquid pressure gauge, 1/8" on gauge to 1/4" on valve	
LS1	Limit switch. 1N/O, 1N/C contacts	
LS1-L	Limit switch. 1N/O, 1N/C contact, left	
O3N2	Otis 3 section. Solid shaft, solid handle	
O3N2F	Otis 3-section key. Hollow shaft, flexible handle	
OSC/B	Scavenger pump <p>Ribbed, reinforced polyethylene container. The clear 1/4" lexan top allows visibility of the inner workings of the unit. Internal float switch automatically turns pump on and off. External float switch shuts off pump if pit begins to fill with water.</p> <p>Standard features:</p> <ul style="list-style-type: none"> • UL approved motor and cord • 100 ft. of head (discharge distance) • 100 ft. plastic tubing with fittings • 45GPH @ 100PSI, 39GPH @ 200PSI pump • 1/4HP, 2.8A, 115VAC, 1 phase, thermally protected motor 	<ul style="list-style-type: none"> • 1/3 HP motor and 1.7 GPM pump • Pit flood warning alarm

continued



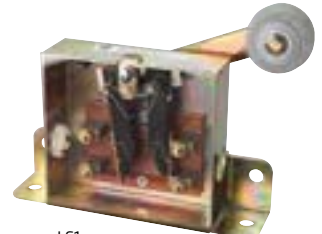
O3N2
Otis 3 Section



O3N2F
Otis 3-Section Key



LS1-L
Limit Switch, 1N/O, 1N/C Contact, CS



LS1
Limit Switch, 1N/O, 1N/C Contacts, CS



LPG
Liquid Pressure Gauges



2259
Lamp Guard



LG-NC
Lamp Guard



OSC/B
Heavy-duty Scavenger Pump

Accessories Quality Elevator Products

Accessories: Quality Elevator Products

Part #	Description	Optional
P02LG001/003/006	1/8" quick connect for LPG	
PS2	Pit switch. 2-5/8"w x 4-7/16" x 1-1/2"d, rated 20A for 120 – 277V AC only	
PS3	Pit switch. C.S.A., w/cast aluminum cover	
PS4	Pit stop-run	
PS-40083	<p>Pendant inspection stations (temporary inspection / run stations)</p> <ul style="list-style-type: none"> • "Up / Down" (1N/O, 1N/O) buttons with mechanical interlock, 3A 250VAC • "Common" (2N/O) button, 3A 250VAC • "Stop / Run" (2N/O) 2-position selector switch, 3A 250VAC • Shrouded knock-out hole for optional pilot light or button • Enclosure dimensions 9.8" x 3.5" x 2.3" (typical) <p>Impact resistant bright yellow pendant enclosure is double insulated, chemically resistant and rated NEMA 1, 3, 4, 4X and 12. Dual stainless steel hanger rings for easy attachment to strain relief cable. Prewired with 15 ft. bright yellow cable. UL / CUL approved.</p>	* Longer lengths available
PWLG	Work light, pit. W/G F/I CSA	



PS2
Pit Switch



PS3
Pit Switch



PS4
Pit Stop-Run



PS-40083
Temporary Pendant Station



PWLG
Work Light

Part #	Description	
TCIG-A-24	Car top inspection stations (ASME A17.1) Designed to meet ASME A17.1 Elevator Safety Code Requirements. CSA approved. <ul style="list-style-type: none"> • "Up" button (2N/O, 2N/C) • "Down" button (2N/O, 2N/C) • "Run/Stop" switch (1N/O) • "Light On/Off" switch (1N/O) • 6 mounting holes, 0.3" dia. 	<ul style="list-style-type: none"> • "Enable / Safe" button (1N/O, 1N/C) • "Normal Operate / Inspection" switch (2N/O, 2N/C) • Ceramic incandescent light bulb socket • 3-prong duplex electrical GFCI outlet • Box size: 12"L x 4.1"H x 6"D, 6.6"H (typical) <p>Contact arrangement can be modified upon request. Permanently attached work light w/GFCI, lamp and strain relief available. Stations could be prewired according to customer specifications with multi-cable and optional flexible metal conduit.</p>
TCIG-A24P	Car top inspection station. Meets ASME A17.1 Elev Safety Code Fire Service 24 – 48VDC (Buzzer & Jewel), 6VAC top mounted alarm bell Size: 12"L x 4.1"H x 4"D	
TCIG-A24HL	Car top inspection station w/hand lamp Fire Service 24 – 48VDC (Buzzer & Jewel), 6VAC top mounted alarm bell <ul style="list-style-type: none"> • "Up" button (2NO/2NC w/guard) • "Down" button (2NO/2NC w/guard) • "Run/Stop" switch (1NO w/guard) • "Light On/Off" switch, 1NO 	<ul style="list-style-type: none"> • "Enable/Safe" button (1NO/1NC) • "Normal Operate / Inspection" switch (2NO/2NC w/guards) • Grounded duplex GFCI electrical outlet, ceramic light bulb socket • Size: 12"L x 4.1"H x 4"D
TCIG-A24-HLP	Inspection station w/hand lamp, push/pull, 48VDC	
TCIG-A24-WG	Cartop inspection station (ASME A17.1) Meets ASME A17.1 Elev Safety Code. Approved for use in Canada. Fire Service 24 – 48VDC (Buzzer & Jewel), 6VAC top mounted alarm bell <ul style="list-style-type: none"> • "Up" button (2NO/2NC w/guard) • "Down" button (2NO/2NC w/guard) • "Run/Stop" switch (1NO w/guard) • "Light On/Off" switch (1NO) 	<ul style="list-style-type: none"> • "Enable/Safe" button (1NO/1NC) • "Normal Operate / Inspection" switch (2NO/2NC w/guards) • Grounded duplex GFCI electrical outlet, ceramic light bulb socket • Size: 12"L x 4.1"H x 4"D

continued

Accessories

Part #	Description
21IS003	Light switch On/Off (1NO)
41IS001	Guard for (Toggle) switch
41IS002	Guard for (Run Enable) switch
41IS003	Guard for (Up and Down) switch
41PS001	Guard for (Stop) switch
71LB0009	28 PSB, 28V T-2 telephone slide
21IS008	Push button switch, double pole for cartop inspection



TCIG-A-24
Car Top Inspection Stations



TCIG-A24HL
Car Top Inspection Station



TCIG-A24P
Car Top Inspection Station



TCIG-A-24 WG
Car Top Inspection Station

Accessories Quality Elevator Products

Part #	Description
TSF1C	Square fan. Two speed, CFM: 345-300, voltage: 115VAC, 50 – 60 Hz, cage dimensions: 12" x 12" x 4-1/4"H, cage opening: 10" x 10"
TSFE1421	Round fan. Two speed, CFM:325, voltage: 115VAC, 50 – 60 Hz, cage dimensions: 12" dia. x 4-1/2"H, cage opening: 12" dia.
WRG-2000	Wire rope wear gauge SAE, red Manufactured to ASME A17.1-1996 1001.2(C)(29)(C) specifications of 2011. T3 aluminum, anodized, with numerals acid etched on • 3/8", 1/2", 9/16" and 5/8" wire rope diameter • Anodized red finish
WRGM	Wire rope wear gauge metric, blue Manufactured to ASME A17.1-1996 1001.2(C)(29)(C) specifications of 2011. T3 aluminum, anodized, with numerals acid etched on • 8mm, 10mm, 11mm, and 13mm wire rope diameter • Anodized blue finish
VTK	Valve test kit. Includes 1,000 PSI gauge, hose, quick connects for both 1/8" and 1/4" ports and Allen wrenches for both sizes, all in a heavy duty plastic case
DPG	Door pressure gauge. Used for checking hoist cable tension and V-belt tension. For push forces up 35 lbs.
CD4B-3111N	Omron limit switch lever. Nylon roller, 0.69" diameter DPST, 1NO/1NC
CD4B-3113N	Adjustable lever. Rubber roller, 1.97" diameter DPST, 1NO, 1NC
CD4B-3A13N	Omron limit switch. Adjustable lever, rubber roller, 1.97" diameter DPST, 2NC
DW19	EECO LS1B limit switch. Specifically for use in the elevator hatchway as zoning, normal and final limits. One set of NO and NC closed contacts
DW19-D	EECO LS1B limit switch double contact switch
DW7	EECO MV-4C magnetic switch 1NO contact
DW7D	EECO MV-4C magnetic switch 2NO contact
RCS	Set of two top and bottom clamps. Repack hydraulic elevators or recable traction elevators with our Quality Rail Clamps.* By using two complete sets to hang counterweights and car, you can re-cable cars at midpoint of hoist-way. For use on 8, 12, and 15 lb. rails. *Load distribution should be equal on all four clamps. <i>Independent Testing Laboratory Rail Clamp Test Results.</i> Complete copy available upon request.
RCB	Bottom clamp. Anchor bolt torque, ft-lb 50/20,200 load/lb** or 70ft-lb 39,000 load/lb** maximum load, lb**
RCT	Top clamp. Anchor bolt torque, ft-lb 50/20,600 load/lb** or 70ft-lb 36,800 load/lb** maximum load, lb**



TSF1C
Square Fan



TSFE1421
Round Fan



WRG-2000
Wire Rope Wear Gauge



WRGM
Wire Rope Wear Gauge



RCS
Set of two top and bottom clamps



RCB-RCT
Top and bottom clamps

Part #	Description
BUCR-THERM1	Adjustable thermostat. 85°F – 195°F with terminal box
OLTG	Oil level temperature gauge
OLG100	Magnet. 3" w x 4" H, mount in tank as directed to check for oil leaks. Black letters on white background
RL8	8 lb rail leach. This "de-oiler" is mounted just below the guide shoe's most downward point of travel. Eliminates oil pools and fire hazards. Excess oil for reuse is stored in a can (by others) mounted directly below.
RL15	15 lb rail leach
RL30	30 lb rail leach
RM815	Rail oilers w/wick and copper tubing. A controlled flow of oil moves slowly and easily down the rail, oiling and cleaning continuously. For 8, 12 and 15 lb. guide rails
RM2230	For 22.5 and 30 lb. guide rails
GSM815	Guide shoe mounted oilers. Set of two (oiler only, shoe not included)
GRC-2006	Governor rope clamp. Designed to be used during the five-year test of the Governor Pull-Out and the Pull-Through. (See A17.2-2004 part 2, Item 2.13.2 (b)(5)). The two plates attach back to back using two vice grips to the governor rope. The plates are made of 6061 T-6 aluminum, clear anodized. Shackle is included. Vice grips can also be provided.
SJG12	Soft jaws. Safety tool to prevent accidental damage to wire ropes.

- One size for 3/8" thru 1/2" rope.
- Made from 6061-T6 aluminum, hard anodized black.
- Use when performing governor test or shortening hoist ropes. Can also be used for seizing governor rope ends to prevent loss of rope lay.
- Use with "Vice Grip" brand locking pliers, models 10CR and 10WR.

continued



BUCR-THERM1
Adjustable thermostat



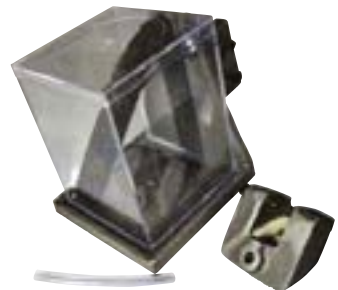
OLTG
Oil level temperature gauge



OLG100
Magnet



RM2230
For 22.5 and 30 lb. guide rails



RM815
Rail oilers w/wick and copper tubing



VF-20, VF-25Q
Fittings



VF-15
Fitting



VR215
Reducer

Part #	Description
VF-15	Fitting. Victaulic 1.5"
VF-25Q	Fitting. Victaulic 2.5"
VF-2Q	Fitting. Victaulic 2"
VF-3	Fitting. Victaulic 3"
VFT-2	Fitting. Victaulic 2" T fitting
VFA-2	Threaded adapter. 2" Vic female
VFA-2.5	Threaded adaptor. 2.5" Vic female
VFG-15	Gasket. Victaulic 1-1/2"
VFG-2	Gasket. Victaulic 2"
VFG-2Q	Gasket. Victaulic 2" for QuickVic couplings
VFG-25	Gasket. Victaulic 2-1/2"
VFG-25Q	Gasket. Victaulic 2.5" for QuickVic couplings
VFG-3	Gasket. Victaulic 3"
VFG-E1-1/2"	Gasket. Victaulic 1.5" for water
VFG-E 2"	Gasket. Victaulic 2" for water
VFG-E 2-1/2"	Gasket. Victaulic 2.5" for water
VFG-E 3"	Gasket. Victaulic 3" for water
VFG-3Q	Gasket. Victaulic 3" for QuickVic couplings
VR215	Reducer. Victaulic 2" to 1.5"
VR252	Reducer. Victaulic 2.5" to 2"
VR32	Reducer. Victaulic 3" to 2"
VR325	Reducer. Victaulic 3" to 2.5"
VRC215	2" to 1-1/2" Vic fittings threaded
VRC252	Victaulic coupling reducer 2" to 1-1/2"
VRC32	Victaulic coupling reducer 3" to 1"
V90EL-1.5	Elbow. Victaulic 1-1/2"
V90EL-2	Elbow. Victaulic 2"
V90EL-2.5	Elbow. Victaulic 2-1/2"
V90EL-3	Elbow. Victaulic 3"
SOV-1.5	Shut off valve. Victaulic 1-1/2"
SOV-2V	Shut off valve. Victaulic 2"
SOV-25V	Shut off valve. Victaulic 2-1/2"
SOV-3V	Shut off valve. Victaulic 3"

Note: Other sizes and styles can be ordered.

Pit Ladders

ONE PIECE PIT LADDERS

- Sides 3/8" x 2" flat bar
- 5/8" rungs
- Top brackets bolted in place

Model PL8 16"w x 8'L
 Model PL8-8 12.75"w x 8'L



COLLAPSIBLE PIT LADDER

- Folds in half for shipping
- Center brackets at point of pivot provide rigidity when installed

Model PL8C-8 16"w x 8'L



CUSTOM PIT LADDER

Worksheet required. See page 9.

Model PL8S Up to 9' long
 Model PL8L Up to 11' long
 Model PL8XL Up to 13' long

RETRACTABLE PIT LADDER

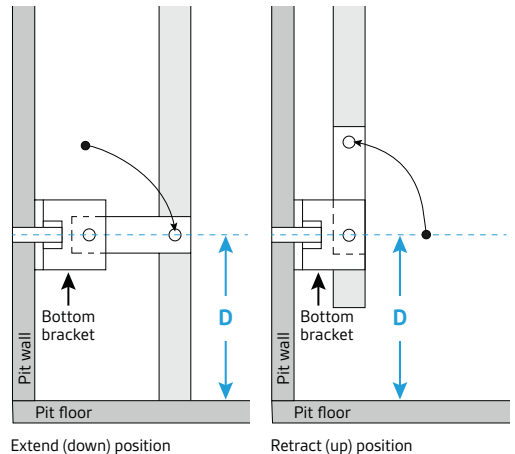
- Extend forward (down) to allow access to pit
- Retract (up) to lock ladder in place to allow elevator to run
- Top pin lock secures ladder position
- Gas spring assist to retract the ladder
- Contact switch provided to electrically position ladder in retracted position, and prevents elevator operation when ladder is down

Model PL8-RT

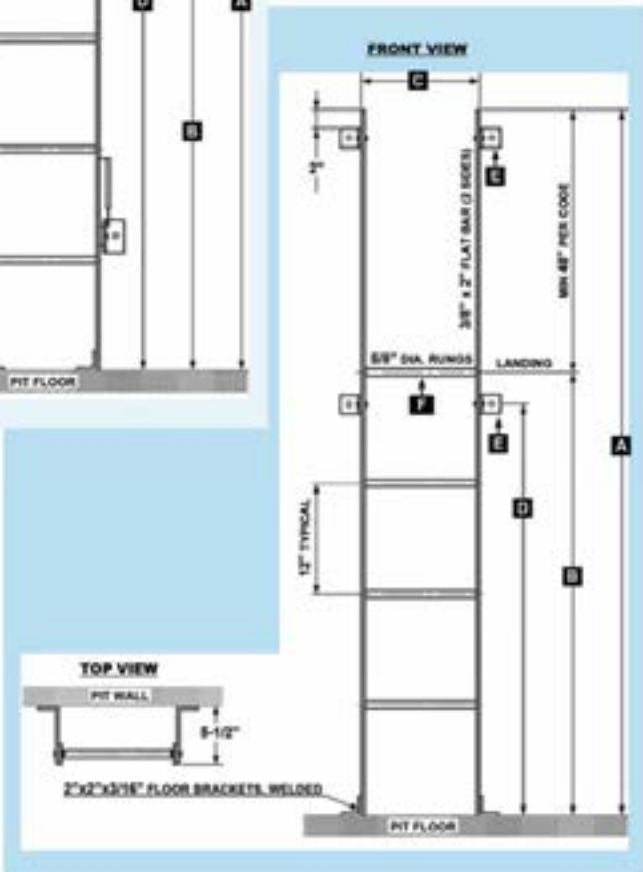
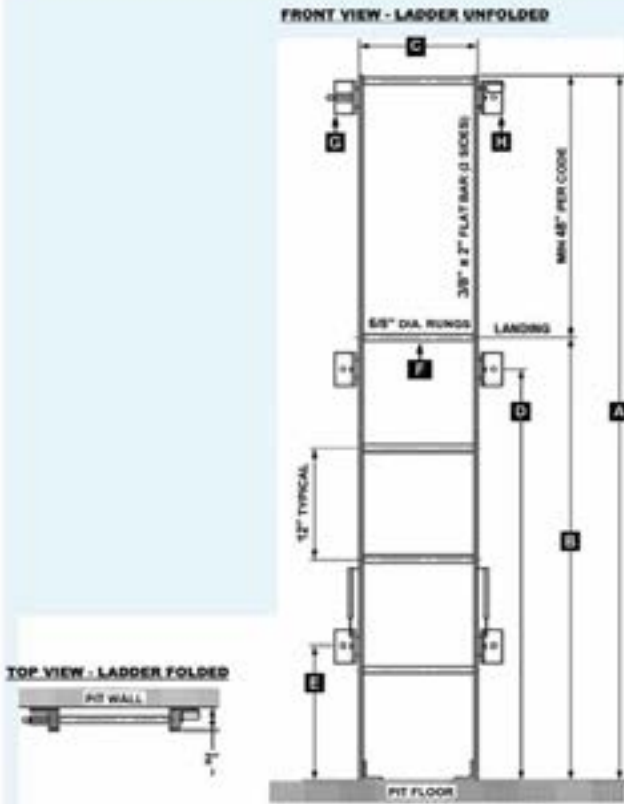
To order, provide ladder width and overall length.

Installation instructions

1. Measure the distance D between center of pivot and bottom of the ladder. Standard distance is 16", but for some custom ladders, it can be different.
2. Mark centers of mounting holes on the pit wall at distance D from the pit floor, for two bottom ladder brackets.
3. Fasten bottom brackets to the pit wall. Ladder stays on the floor.
4. Pull back retaining pin at the ladder top to release the bracket. Mark positions for remaining brackets and fasten to the pit wall.



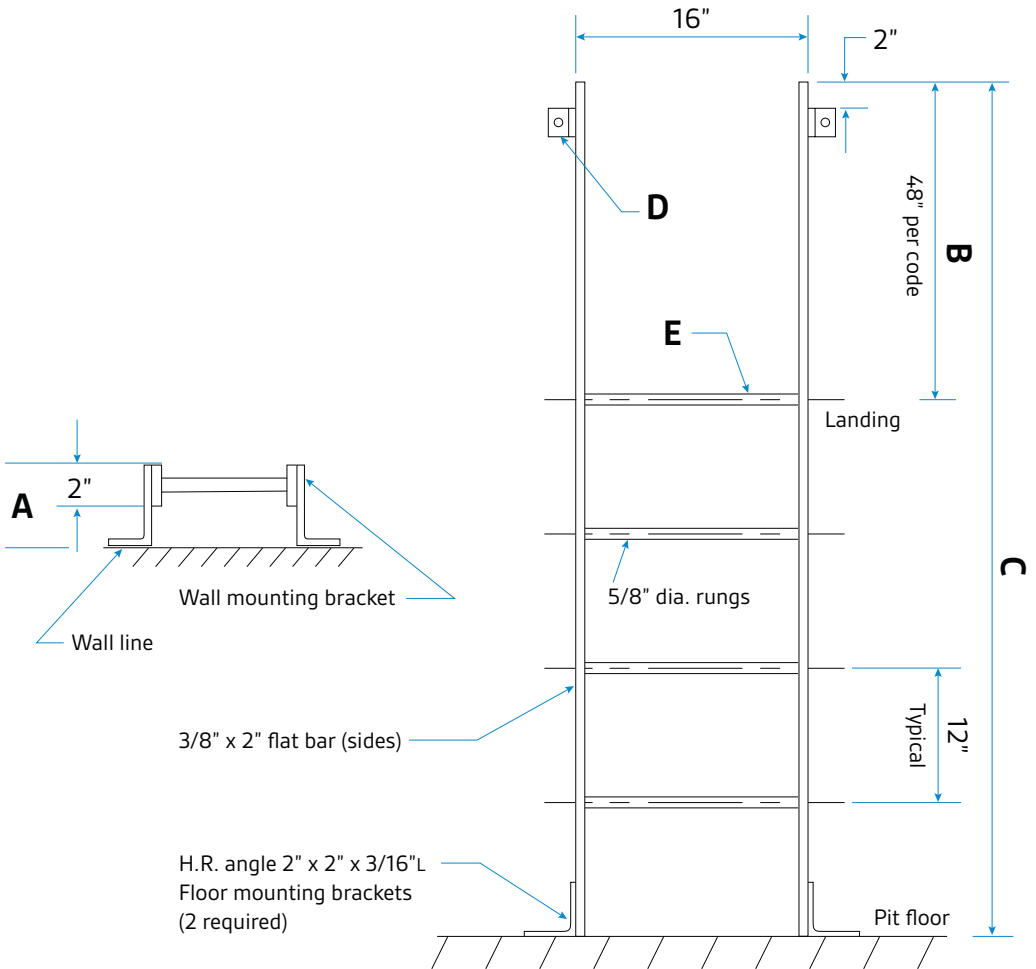
PIT LADDERS continued



Custom ladder worksheet

Master copy – please photo copy

- A. Distance from wall to face of ladder _____
- B. Distance from landing to top of ladder _____
- C. Overall ladder length required _____
- D. Quantity of wall mounting brackets _____
- E. Quantity of rungs _____



Other Accessories

ALARM BELLS



AB120 Alarm Bell, 120VAC
.07 amp, 92 db



AB12 Alarm Bell, 12VDC



AB6 Alarm Bell, 6VDC
for use with emergency lights only

CAPACITORS



TVA1510
TVA1510-E3 Electrolytic Capacitor, TVA Series,
30 µF, 250 V, 15.875 mm, Axial Leaded

CERTIFICATE FRAMES



Part #	Size	Finish
CF46	4" x 6"	S/S #4
CF48	4" x 8"	S/S #4
CF69	6" x 9"	S/S #4
CF810	8" x 10"	S/S #4

Also available in other sizes.
Mirror Stainless, and Brushed and Mirrored Bronze
finishes are also available.

DIAMOND SPATULAS



4000 Diamond Spatula
5-1/2" long with a 1/4" x 7/8"
face. Coarse grit



4001 Diamond Spatula
5-1/2" long with a 1/4" x 7/8"
face. Medium grit



4002 Diamond Spatula
5-1/2" long with a 1/4" x 7/8"
face. Fine grit



4003 Set of 3 Diamond Spatulas
5-1/2" long with a 1/4" x 7/8" face.
One each Coarse, Med and Fine grit

EMERGENCY STOP PULL SWITCHES



BEP Emergency Stop Pull Switch
1" diameter halo, 0.875" diameter spindle

Part #	Spindle, Dia/Color	Halo, Outside Dimen/Color	Description
BEP	0.875"/red	1.0" Round/black	2NC, 1NO Push/Stop Pull/Run
CEP	0.875"/red 1.375"	Round/black	
EP	0.875"/red 1.25"	Square/black	

ENCLOSURES

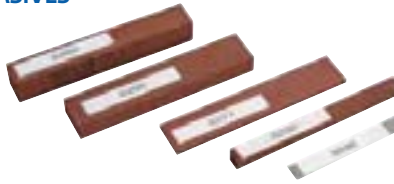


11MS003
Enclosure
18"H x 18"W x 8"D



11MS005
Enclosure
24"H x 24"W x 8"D

FLEXIBLE ABRASIVES



Rubrite Flexible Abrasives, Unmounted
6260 3/4" w x 3/4" L x 5"
6256 1/2" x 1" x 5"
6271 1/8" x 1" x 5"
6250 3/8" x 3/8" x 5"
6262 1" x 1" x 5"



Plastone Flexible File
3002 180-fine : 1/4" w x 4-3/4" L x .040"
6043 80-coarse : 1/2" x 4-3/4" x .080"
6044 120-medium : 1/2" x 4-3/4" x .080"
6046 240-extra fine: 1/2" x 4-3/4" x .080"

GONGS



BG40W Gong, Single Stroke
Must be wired in series with a 40 watt incandescent hall light



TG-120V 2 Stroke Gong
48 - 120V AC or DC, 4" x 2.5" x 1"
Velcro mounting



9871925 Dover Gong, Single Stroke
48VDC, with bracket

REPLACEMENT KEYS

Part #	Description
EPCO #1	EPCO Key for EPCO #1 locks
EPCO #2	EPCO Key for EPCO #2 locks
EPCO #27	EPCO Key for all EPCO locks
EPCO #BFD-1	EPCO Key for EPCO BFD locks
IN-EX513	Innovation Key for momentary 2nd and 3rd positions
IN-EX514	Innovation Key for "ON/OFF" and access
IN-EX515	Innovation Key for "FIRE SERVICE"
IN-FEOK1	Fire Service Key



IN-EX513



IN-EX514



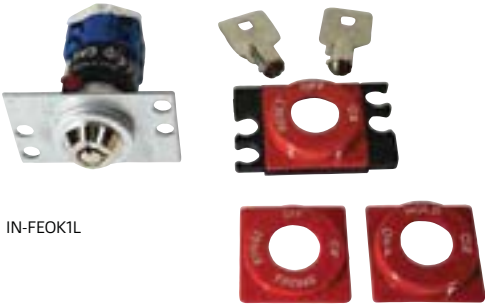
IN-EX515



IN-FEOK1

Other Accessories

FIRE SERVICE KEY SWITCH



IN-FEOK1L

Part #	Description
IN-FEOK1L	Phase 1
IN-FEOK1LL	Phase 2

OMRON SWITCHES



CD4DSK1

CD4DSK5

CD4NS-3CF

Part #	Description
CD4DSK1	Hatch actuating key, horizontal arm
CD4DSK5	Hatch switch actuators adjustable horizontal or vertical
CD4NS-3CF	Emergency hatch interlock switch, tongue operated

MULTI BIT SECURITY DRIVERS



211R2C36RD Multi Bit Security Driver

Comes with:

- Torx T10, T15, T20, T25 tamperproof bits
- #6, #8, #10, #12 spanner bits
- #0, #1, #2, #3 Phillips bits
- #4 and #6 straight blade bits



SD15N1SS Stainless Steel Multi Bit Driver

Comes with:

- Torx T10, T15, T20, T25 non-tamperproof bits
- #R0, #R1, #R2, #R3 square drive bits
- #0, #1, #2, #3 Phillips bits
- #4 and #6 straight blade bits



151ELEV-BL-WH

Blue handle with white cap and collar and white imprint with elevator bit load



Innovation

PUSHBUTTONS

Part #	Description
APB1NO1NC	Illuminated inland button 1NO/1NC contacts
APB12NO	Illuminated inland button 2NO contacts
APBN1NO1NC	Non-illuminated inland button 1NO/1NC contacts assembly only
APBN2NO	Non-illuminated inland button 2NO contacts assembly only



See innovation pushbuttons for part number.



APB1WR-1



APB1WR-2



APB1WR-3



APBNWYR-AL



APBHOLDER



BUTLBS-AR



BUTNBS-AR



APBNWRR-ES

STAINLESS STEEL "SNAKE EYES" SPANNER SECURITY SCREWS

Part #	Description
SS632-1/2	6-32 x 1/2 inch
SS632-1	6-32 x 1 inch
SS632-1 1/4	6-32 x 1 1/4 inch
SS632-1 1/2	6-32 x 1 1/2 inch
SS832-1/2	8-32 x 1/2 inch
SS832-1	8-32 x 1 inch
SS1032-1/2	10-32 X 1/2 inch
SS1032-1	10-32 x 1 inch
SS1032-1 1/2	10-32 x 1 1/2 inch



Other Accessories

RESISTORS: PORCELAIN TUBE WIRE-WOUND ADJUSTABLE



Part #	Watts	Ohms	Length	Outside Diameter
D100K250	100	250	6-1/2"	1-1/8"
D100K300	100	300	6-1/2"	3/4"
D175K25	175	25	8-1/2"	1-1/8"
D175K150	175	150	8-1/2"	1-1/8"
D175K250	175	250	8-1/2"	1-1/8"
D225K5R0	225	5	10-1/2"	1-1/8"
D225K10R	225	10	10-1/2"	1-1/8"
D225K15R	225	15	10-1/2"	1-1/8"

Part #	Watts	Ohms	Length	Outside Diameter
D225K25R	225	25	10-1/2"	1-1/8"
D225K50R	225	50	10-1/2"	1-1/8"
D225K100	225	100	10-1/2"	1-1/8"
D225K150	225	150	10-1/2"	1-1/8"
D225K250	225	250	10-1/2"	1-1/8"
D225K500	225	500	10-1/2"	1-1/8"
D225K1K0E	225	1000	10-1/2"	1-1/8"
D225K1K5E	225	1500	10-1/2"	1-1/8"

WIRE AND TERMINAL CONNECTORS



Part #	Description
58514	22-16 AWG #8 stud vinyl insulated butted seam fork terminal
58539	22-16 AWG #6 stud nylon insulated grip ring terminal
58553	22-16 AWG #10 stud nylon insulated double crimp fork terminal
58556	16-14 AWG #8 stud nylon insulated double crimp fork terminal
58557	16-14 AWG #8 stud nylon insulated double crimp fork terminal
58569	16-14 AWG blue nylon fully insulated quick connect-double crimp male disconnect
58574	22-16 AWG red nylon fully insulated quick connect-double crimp female disconnect
60036	16-14 AWG #8 stud vinyl insulated butted seam funnel entry ring terminal
60037	16-14 AWG #10 stud vinyl insulated butted seam funnel entry ring terminal
60069	22-18 AWG nylon insulated seamless butt splice connector
60070	16-14 AWG vinyl insulated butted seam brass butt splice connector
0704854	22-16 AWG #8 stud nylon insulated double crimp ring terminal

SPIRATOR CLOSING REELS



ML-4402
Universal Spirator Closing Reel,
5", with cable



MLB
Square stud mounting bracket

TOGGLE SWITCHES

- TS-DPST-C: Toggle Switch
DPST 2 position, off-on, spring return to "off"
- TS-DPDT-M: Toggle Switch
DPDT 3 position, center off, momentary
- TS-DPDT Epco Toggle Switch
DPDT 2 position maintained, off-on rated 20A @ 120VAC



SERVICE KIT

- SRV-KIT-XL
Relays, lamps, fuses, contact cleaners, flash light, orange sticks, signage, screw driver
- Kit can be customized per amperage, voltage and wattage



WIRING ORGANIZATION TOOL



PAL50PA02YB
Box, 10,000 PA-02 Loose (Yellow),
2 PAD-3M



STS14022
Compartment Box,
Black/Yellow,
2-3/4"H x 11-3/8"L x 14-5/8"W, 1EA



STS14027
Adjustable Compartment Box,
Black/Yellow,
3-1/2"H x 13"L x 17-3/8"W, 1EA

Other Accessories

WORK LIGHTS



6WORKLIGHT
High Intensity LED Work Light



6VERSALITE
Versa-Lite Maximum Versatility

PUMP RUPTURE VALVES



PRV-R102

Pipe Rupture Valve 2" – Flow sensitive, pressure activated valves act as a "velocity fuse" to retard the downward motion of a descending elevator to provide gradual stop

- Flow rates to 380 GPM, 50 to 640 PSI operating range
- Fully adjustable closing rate, manual lowering around the valve when set
- Fully adjustable flow rate minimum pressure loss in the up direction 90 degrees



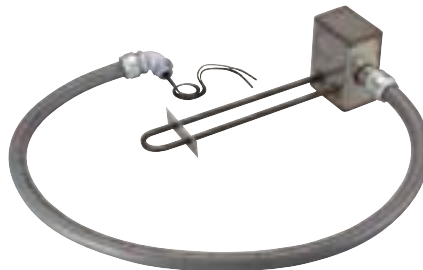
PRV-R102V

Pipe Rupture Valve 2" Vicalic – Flow sensitive, pressure activated valves act as a "velocity fuse" to retard the downward motion of a descending elevator to provide gradual stop

- Flow rates to 380 GPM, 50 to 640 PSI operating range
- Fully adjustable closing rate, manual lowering around the valve when set
- Fully adjustable flow rate minimum pressure loss in the up direction 90 degrees



TH120FP
Tank Heater 115 VAC, 275W 2.3A
100°F thermostat w/plug
Hard wiring not required



TH120F
Tank Heater 115Vac, 275W 2.3A
Quick, plug in, installation.
Hard wiring required



MTH1153
Magnetic Tank Heater
200 watt, external mount,
3' 6" cord



MTH1160
Magnetic Tank Heater
300 watt, external mount,
3' 6" cord



5080619
Hydraulic Oil AW #32 Premium Grade



PS-UP100HB
15"x17" Gray Universal Pads



A-1
Oil Odor Diffuser



PS-OP100HB
15"x17" White Pads (for oil only)

MAXTON VALVES

Part #	Description
UC1A	Maxton valve. RH only, 2.5" ports and valves, with 4 coils, 115VAC, threaded ports
UC4-E2	15"x17" Gray Universal Pads. Maxton valve RH, E2 flow guides, 2" ports and valves, with 4 coils, 115VAC, threaded ports
UC4M-E2	Maxton valve. LH, E2 flow guides, 2" ports and valves, with 4 coils, 115VAC, threaded ports



Pit Products

Top view. Flexible Drip Ring installed on a typical hydraulic cylinder. Shows top and inside of Drip Ring pan, clamp, fitting and drain hose.



FLEXIBLE DRIP RING

Contain leaking fluid with flexible drip rings for your hydraulic elevators. Advancing Technologies is a product design and development company owned and operated by experienced elevator trade professionals.

- Installation can be accomplished by one mechanic in approximately 15 minutes
- Tools needed: utility knife, marker, straight edge, screwdriver
- Manufactured and molded from high quality, durable oil-resistant materials
- Oversized drain to resist clogging
- Fits cylinders up to 15.5" diameter
- Fits Otis and Dover inverted pistons from 3–3.875"

Our Flexible Drip Ring package comes with a complete installation kit including full instructions, fittings, drain tubing, clamp and sealant. All of the materials necessary for a quick, simple, leak-free installation.

Patent No. 6,374,723 field installed and tested

Part #	Description
DR-1	Fits cylinder diameter of 5–7", cylinder circumference of 18–22"
DR-2	Fits cylinder diameter of 7–8", cylinder circumference of 22–26"
DR-3	Fits cylinder diameter of 8–10", cylinder circumference of 26–31"
DR-4	Fits cylinder diameter of 10–12", cylinder circumference of 31–37"
DR-5	Fits cylinder diameter of 12–15", cylinder circumference of 37–47"
DR-IVO	Fits 3-7/8" Dover inverted holeless jack
DR-OINV	Fits 3" Otis inverted holeless jack
CMT	Cylinder tape measure

Sizing Chart

Diameter	Circumference	Model
5-3/4 – 7"	18" – 22"	DR-1
7 – 8-1/2"	22" – 26"	DR-2
8-1/2 – 10"	26 – 31"	DR-3
10 – 12"	31" – 37-1/2"	DR-4
12 – 15-1/2"	37-1/2" – 59"	DR-5
3-7/8"	Dover Inverted	DR-IVO
3"	Otis Inverted	DR-OINV

GORMAN PACKING SEALS

Door Astragal, 10' piece

Part #	Description
00-00-109-10-00000	style #109
00-00-119-10-00000	style #119
00-00-122-10-00000	style #122

Round Rod, with center hole

Part #	Description
00-00-RR5000-ROD00	1/2"
00-00-RR5625-ROD00	9/16"
00-00-RR6250-ROD00	5/8"
00-00-RR6875-ROD00	11/16"
00-00-RR8125-ROD00	13/16"
00-00-RR8750-ROD00	7/8"
00-00-RR1000-ROD00	1"

Geared Machines, worm gear kit

Part #	Description
00-50-F02167-180R	Mitsubishi #EM-3640, 55m x 80mm (2.167")
00-50-G02757-180RO	Mitsubishi #EM-3640H, 70mm x 100mm (2.750")
00-50-F02500-180RO	Schindler / Westinghouse #28 kit 2-1/2" x 3-1/2"

Complete Packing Kits

	Part #	Description
Amtech/Idessa	01-31-F04500-E000	4-1/2"
	01-31-F05000-E0000	5"
	01-31-F05500-E0000	5-1/2"
	01-31-F06000-E0000	6"
Bore Max	14-25-F04000-E0000	4" w/ wiper, 2 seals and bearing
	14-25-F04375-E0000	4-3/8" w/ wiper, 2 seals and bearing
	14-25-F05500-E0000	5-1/2" w/ wiper, 2 seals and bearing
	14-25-F06000-E0000	6" w/ wiper, 2 seals and bearing
	14-25-F06500-E0000	6-1/2" w/ wiper, 2 seals and bearing
Dover	10-72-R04375-LF10Z	4-3/8" Rotary 4S, mfg 1993-2002
	10-72-R05437-LF107	5-7/16" Rotary 5S, mfg 1994-2002
	10-72-R06500-LF10Z	6-1/2" Rotary 6S, mfg 1994-2002
Dover/TKE	06-00-F03875-LF10Z	3-7/8" Dover kit w/ wiper seal and O-ring, no bearing
	06-72-F03000-LF20Z	3" Dover 2S (TKE) holeless complete kit w/ LF2 seal
	06-72-F03875-E000Z	3-7/8" Dover 3S (TKE) complete kit w/ E series seal
Econo / US Elevator	14-37-F04500-E0000	4-1/2" w/ wiper, seal and bearing (hexagon shaped)
EECO	03-39-DC3000-0000Z	3" PJ3NET w/ wiper, seal, bearing and o-ring
	03-39-F03437-LF100	3-7/16" PJ3R w/ wiper, seal, bearing and no o-ring
	03-39-F03875-LF10Z	3-7/8" PJ387 w/ wiper, LF seal, bearing and no o-ring
	03-33-F04375-LF1ZZ	4-3/8" LJ/FJ w/ 2 seals, bearing, lantern and 2 o-rings
Miscellaneous	14-00-F05500-E0000	Canton Elevator 5-1/2" kit w/ wiper and seal
	14-00-F05437-E0000	Hollister-Whitney 5-7/16" kit w/ wiper and seal
	14-36-F05500-LF100	Winter & Bain 5-1/2" kit, has 1 oil groove, bore max has 2 oil grooves
Otis	12-04-F02750-LF100	2-3/4" Holeless kit, mfg prior to 2000
	12-04-F02840-LF1S0	2.840" Holeless kit, mfg prior to 2000
	14-04-EE3938-LF200	3.938" Holeless/roped kit w/ wiper, spacer, seal and bearing, mfg after 2000
	14-04-EE4438-LF200	4.438" Holeless/roped kit w/ wiper, spacer, seal and bearing, mfg after 2000
	14-04-EE5500-LF200	5-1/2" Holeless/roped kit w/ wiper, spacer, seal and bearing, mfg after 2000

continued

GORMAN PACKING SEALS continued

Complete Packing Kits continued

	Part #	Description
Schindler	18-42-B05500-GW000	5-1/2" MPH2/F2 w/ snap-in bearing, mfg after 1989
	18-42-MM0750-09000	75mm x 90mm Schindler inverted Gemini telescopic kit
	18-42-MM0900-10500	90mm x 105mm Schindler inverted Gemini telescopic kit
Thyssen Krupp	17-18-T25III-LF2Z7	2.5T-III, 3 Stage kit, 2-1/4", 3-3/4" & 5" telescopic
	17-18-T25000-LF2Z4	2.5T, 2 Stage kit, 2-1/2" & 3-3/4" telescopic
	17-18-T30000-LF2Z4	3.0T, 2 Stage kit, 3" & 4-1/4" (4.250") telescopic
	10-72-F04375-LF10Z	4-3/8" New style 4S kit, mfg 2002- present day
	10-72-F05437-LF10Z	5-7/16" new style 5S kit, mfg 2002- present day
	10-72-F06500-LF10Z	6-1/2" new style 6S kit, mfg 2002- present day
US Elevator before 1982	01-17-F04500-18000	4-1/2" Stack kit w/ wiper, split spacer & 3 split seals
	01-17-F06000-18000	6" Stack kit w/ wiper, split spacer & 3 split seals



Gorman Low Friction Jack Seals
Full selection in stock



Otis



Schindler/Westinghouse



Montgomery



01002
Packing Puller, 1 pair

Gorman's Tools

Part #	Description
01002	Packing puller, 1 pair

Microswitches

Part #	Description
3SE52320CC05	Position switch. Plastic enclosure according to EN 50047, 31 mm device connection 1 x (M20 x 1.5) 1 NO/1 NC, quick action contacts (replaceable), rounded plunger form B
3SE52320HD03	Position switch. Plastic enclosure according to EN 50047, 31 mm device connection 1 x (M20 x 1.5) 1 NO/1 NC quick action contacts integrated (not replaceable) roller plunger, Form C with plastic roller 10 mm
3SE52320HE10	Position switch. Plastic enclosure according to EN 50047, 31 mm device connection 1 x (M20 x 1.5) 1 NO/1 NC quick action contacts integrated (not replaceable) roller lever with plastic roller 13 mm
3SE52320HF10	Position switch. Plastic enclosure according to EN 50047, 31 mm device connection 1 x (M20 x 1.5) 1 NO/1 NC quick action contacts integrated (not replaceable) angular roller lever with plastic roller 13 mm
3SE52320HK21	Position switch. Plastic enclosure according to EN 50047, 31 mm device connection 1 x (M20 x 1.5) 1 NO/1 NC quick action contacts integrated (not replaceable) twist lever, 21 mm long right/left adjustable with plastic roller 19 mm
3SE52320HK50	Position switch. Plastic enclosure according to EN 50047, 31 mm device connection 1 x (M20 x 1.5) 1 NO/1 NC quick action contacts integrated (not replaceable) adjustable-length twist lever right/left adjustable with plastic roller 19 mm
BZ-2RD-A2	Basic switch. Precision, snap action; large plunger SPDT, screw terminals
BZ-2RW82-A2	Microswitch long arm w/roller. SPDT 15A @ 125VAC
BZ-2RW822-A2	Microswitch short arm w/roller. SPDT 15A @ 125VAC
BZ-2RW84-A2	Microswitch w/straight lever. SPDT 15A @ 125VAC; Used with A575KXX reversing contactors
BZ-2RW84381-A2	Universal basic switch. BZ series; plunger, solder lugs; CE, CSA; SPDT 15A @ 250VAC
D2SW-3MS	Switch. Snap action NO/NC. SPDT pin plunger 3A 250VAC 30VDC 1.77N screw mount wire lead
V7-1C17D8	Microswitch miniature w/pin plunger. For Dover V-7 push button SPDT
Z15GQB7K	Microswitch w/plunger. SPDT 15A @ 120/250VAC; body size 2" x .7" x 1"



Z15GQB7K



V7-1C17D8



BZ-2RW82-A2



BZ-2RW822-A2



BZ-2RW84-A2



MT0075G



MT0500G



B100MQ15XK



B150BT13RB

Transformers

SIEMENS TRANSFORMERS

All transformers are epoxy encapsulated which completely seals the transformer coils against moisture, dust, dirt, and other contamination. Most models (50 – 750VA) come with an integral 120V fuse clip. Molded terminal barriers provide extra protection against short circuits.

All transformers listed below have a primary rating of 208/230/460VAC and a secondary voltage of 115VAC. The primary voltage is selected by the use of jumper links (included).

Part #	VA Rating	Dimensions (inches)	Weight (lbs)
MT0050G	50	3.13 x 3 x 2.56	3
MT0075G	75	3.38 x 3.38 x 2.88	5
MT0100G	100	3.69 x 3.38 x 2.88	5
MT0150G	150	4.19 x 3.75 x 3.19	8
MT0200G	200	4.25 x 4.50 x 3.81	10
MT0250G	250	4.75 x 4.50 x 3.81	12
MT0300G	300	5.25 x 4.50 x 3.81	14
MT0500G	500	6.00 x 5.25 x 4.75	22
MT1000G	1000	7.13 x 6.38 x 5.38	30
MT1500G	1500	7.50 x 6.75 x 5.69	34
MT2000G	2000	8.25 x 6.75 x 5.69	43
MT3000G	3000	8 x 9 x 7.56	64
MT5000G	5000	8.67 x 9 x 8.06	89

Note: Fuse is not included as shown in photo

MICRON TRANSFORMERS

Micron's fully encapsulated ImperviTRAN industrial control transformer is the most accepted transformer in the industry. Its clean design and toughness make it a favorite of industrial and commercial equipment manufacturers.

ImperviTRAN Series Information

- Epoxy encapsulated coil
- Corrosion-protected windings and solder
- Molded-in terminals and terminal barriers
- Pre-installed mounting holes
- Meets UL and cUL

Part #	Description
B075PU7JK	75VA, Primary 240/480, Secondary 24
B100MQ15XK	100VA, Primary 208/277, Secondary 120
B100PU7JK	100VA, Primary 240/480, Secondary 24
B150BT13RB	150VA, Primary 240/480, Secondary 120

Signage

- Made of durable plastic with a non-glare finish
- Comes with quality 3M full back adhesive
- Processed screen inks are permanent and resist fading from indoor lighting and sunlight
- All signs are also available in brass, stainless steel and Muntz.
- Printing on metal signs can be done with epoxy bond printing, engraved or chemically etched.

IN CASE OF FIRE

Part #	Size (inches)
ICF-335-8CA	3 x 3.5
ICF-58-39	5 x 8
ICF-58-40	5 x 8
ICF-67-1MI	6 x 7
ICF-67-33CA	6 x 7



ICF-335-8CA



ICF-58-39



ICF-58-40



ICF-67-1MI



ICF-67-33CA

FIRE SIGN

Part #	Size (inches)
PHASE2-FH-7525-2006-003	7w x 5.25" h



PHASE2-FH-7525-2006-003

DATA TAGS

Part #	Size
TAG	5" w x 2-1/2" h
TAG-A17.1	4" w x 3" h
TAGGOV	3" w x 4" h

TEST TAGS

Part #	Size
F-1055	5" w x 4-3/4" h
F-1056	5" w x 4-1/4" h
F-1057	5" w x 4-1/4" h
F-1058	5" w x 3-3/4" h
F-1080	10" x 7"



F-1055



F-1056



F-1057

Aluminum, 20ga. (0.032") thickness, tags in stock. Custom tags also available, call for quote.



F-1058



F-1080

LEAD SEAL

Part #	Description
2011T11	Seal, blank lead and wire, 6"

FIRE SERVICE

Part #	Description	Size (inches)
SFOM-66-10	Fire Service	6 x 6
SFOM-66-11	Fire Service	6 x 6
SFOM-66-14	Fire Service	6 x 6
SFOM-66-15	Fire Service	6 x 6
SFOM-66-16	Fire Service	6 x 6
SFOM-66-17	Fire Service	6 x 6
SFOM-66-18	Fire Service	6 x 6
SFOM-66-19	Fire Service	6 x 6
SFOM-66-20	Fire Service	6 x 6
SFOM-66-34	Fire Service	6 x 6
SFOMC-69-14	Fire Service	6 x 9



SFOM-66-10



SFOM-66-11

4x4 signs can be ordered upon request.



SFOM-66-14



SFOM-66-15



SFOM-66-16



SFOM-66-17



SFOM-66-18



SFOM-66-19



SFOM-66-20



SFOM-66-34



SFOMC-69-14

BRAILLE JAMB PLATES

White letters black background. 4x4 square

Part #	
SBJ442-*S	"STAR S"
WBJ442-*G	"STAR G"
WBJ442-G	"G"
WBJ442-1	"1"
WBJ442-2	"2"
WBJ442-3	"3"
WBJ442-4	"4"



SBJ442-*S



WBJ442-*G



WBJ442-G



WBJ442-1



C1382-001CA



C1382-002CA



C1382-003CA



C1382-004CA



C1382-005CA



C1382-006CA



C1382-007CA



C1382-008CA



C1382-009CA



C1382-010CA



C1382-001CA-AL



C1382-001CA-DC



C1382-001CA-DO



C1382-001CA-ES



C1382-001CA-PH

BRAILLE HALL PLATES

White letter black background, 3M Full Back Adhesive. 1.375" square

Part #	
C1382-001CA-1	"1" without star
C1382-001CA	"STAR 1"
C1382-002CA	"2"
C1382-003CA	"3"
C1382-004CA	"4"
C1382-005CA	"5"
C1382-006CA	"6"
C1382-007CA	"7"
C1382-008CA	"8"
C1382-009CA	"9"
C1382-010CA	"10"
C1382-001CA-AL	"Alarm"
C1382-001CA-DC	"Door Close"
C1382-001CA-DO	"Door Open"
C1382-001CA-ES	"Emergency Stop"
C1382-001CA-PH	"Phone"

ESCALATOR SIGNS

Part #	Description	Size (Inches)
ESCAL-10	Escalator	5 x 9
ESCAL-11	Escalator	5 x 9



ESCAL-10



ESCAL-11



NOTICE-8511-MASK



CAUT-6FT-ALL



HANDI-77-W



MIP34



NOTICE-107-3



NOTICE-107-6



SOL-P-Blue



Title 8 Group II



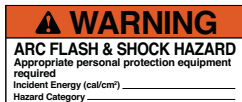
Title 8 Group III



Title 8 Group IV



WARN-ANTI CREEP



WARN-ARC FLASH

COVID SIGNS

Part #	Description	Size (inches)
CAUT-6FT-ALL	"Please remain 6ft apart at all times" yellow on black background.	8" circle
NOTICE-8511-MASK	"Notice - you must wear a mask to ride this elevator"	8.5 x 11
NOTICE-FMR	"Facemask Required" - Plastic, sturdy .055"-thick HDPE. Pre-drilled mounting holes and 4 strips of double-sided mounting tape.	7 x 10
NOTICE-STAY6FT	"Please Practice Social Distancing, Stay 6 Ft Apart" Sign - Aluminum Corrosion resistant with engineer-grade reflective enamel finish. Pre-drilled mounting holes.	12 x 18
SAFE-F6FT	"Maintain Distance, Stay Healthy" Plastic, sturdy .055"-thick HDPE. Pre-drilled mounting holes and 4 strips of double-sided mounting tape.	7 x 10

MISCELLANEOUS SIGNS

Part #	Description	Size (inches)
HANDI-77-W	Handicapped	7 x 7
MIP34	Maintenance In Progress paper tags Paper Post-it notes, 50 per pad	4 x 6
NOTICE-107-3	OSHA Notice: Elevator Equipment Room Authorized Personnel Only	10 x 7
NOTICE-107-6	OSHA Notice: This Elevator is for Freight Only Not for Passengers	10 x 7
NOTICE-107-7	OSHA Notice: Elevator Machine Room, No storage allowed	10 x 7
NOTICE-107-11	OSHA Notice: Contact on pit door	10 x 7
NOTICE-BLANK-710	Write-On Blank Safety Sign - Use with permanent or wet erase markers.	7 x 10
CAUTION-BLANK-710	Write-On Blank Safety Sign - Use with permanent or wet erase markers.	7 x 10
DANG-BLANK	Write-On Blank Safety Sign - Use with permanent or wet erase markers.	7 x 10
SOL-P-Blue	Star of Life (Blue)	4 x 4
Title 8 Group II	Title 8 Group II adhesive label	3 x 1
Title 8 Group III	Title 8 Group III adhesive label	3 x 1
Title 8 Group IV	Title 8 Group IV adhesive label	3 x 1
WARN-ANTI CREEP	OSHA Warning (vinyl sticker)	5 x 2-1/4
WARN-ARC FLASH	OSHA Warning (vinyl sticker)	4 x 2
WARN-DEC-1-V	OSHA Warning (vinyl sticker)	5 x 2-1/4
WARN-DEC-2-V	OSHA Warning (vinyl sticker)	5 x 2-1/4



WARN-DEC-1-V



WARN-DEC-2-V

Elevator Lamps

Part #	Volts	Watts	Description / Base	Bulb
10S6-120V-CS	120	10	Candelabra screw	S-6
10S6-250V-CS	250	10	Candelabra screw	S-6
10S6-250V-DC	250	10	Double contact bayonet	S-6
12PSB	12	2.04	#5 slide	T-2
120MB	120	3	Miniature bayonet	T-2-1/2
120MS	120	3	Miniature screw	T-3-1/4
120PSB	120	3	#5 slide	T-2
120PSB-NE	120	2	#5 slide	T-2
120RC	120	3	Candelabra screw	T-2
120RC-NE	120	3	Candelabra screw	T-2
1252	28	6.44	Double contact bayonet	G6
1383	13	20	Single contact bayonet	R12
1477	24	4.08	Miniature screw	T-3
15B-002	N/A	N/A	Holder, candelabra screw	N/A
155MB	155	2	Miniature bayonet	T-2-1/2
155PSB	155	2	#5 slide	T-2
15T7-130V-CS	130	15	Candelabra screw	T-7
161	14	2.66	Wedge	T-3-1/4
1638	28	1.02	Double contact bayonet	S-8
1815	14	2.8	Miniature bayonet	T-3-1/4
1820	28	2.8	Miniature bayonet	T-3-1/4
1822	36	3.6	Miniature bayonet	T-3-1/4
1828	37.5	1.87	Miniature bayonet	T-3-1/4
1829	28	1.04	DC bayonet	T-31/4
1835	55	2.75	Miniature bayonet	T-3-1/4
1843	28	.616	Miniature bayonet	T-3-1/4
1847	6.3	.945	Miniature bayonet	T-3-1/4
1850	5.0	.45	Miniature bayonet	T-3-1/4
1893	14.0	4.62	Miniature bayonet	T-3-1/4
24MB	24	1.68	Miniature bayonet	T-2-1/2
24PSB	24	1.752	#5 slide	T-2
240MB	240	2.4	Miniature bayonet	T-2-1/2
25S11-120V-CS	120	25	Candelabra screw	S-11
25S6-130V-CS	130	25	Candelabra screw	S-11
25T8-130V-CS	130	25	Candelabra screw	T-8
25T8-130V-DC	130	25	Double contact bayonet	T-8
28MB	28	1.12	Miniature bayonet	T-2-1/2
28PSB	28	1.12	#5 slide	T-2
28RC	28	1.12	Candelabra screw	T-2
303	28	0.3	Single contact bayonet	G6
307	28	0.7	Single contact bayonet	S-8
308	28	18.75	Double contact bayonet	S-8
313	28	4.75	Miniature bayonet	T-3-1/4
327	28	1.12	Midget flanged	T-1-3/4
35PSB	35	1.7	#5 slide	T-2



120PSB



15B-002



1835

continued

Elevator Lamps



E12-002-10

Part #	Volts	Watts	Description/ Base	Bulb
40	6.3	.10	Miniature screw	T-3-1/4
44	6.3	.575	Miniature bayonet	T-3-1/4
48MB	48	2.5	Miniature bayonet	T-2-1/2
48PSB	48	2.4	#5 slide	T-2
502	5.1	.765	Miniature screw	G-4-1/2
503	5.1	.765	Miniature bayonet	G-4-1/2
51H/B2A-NE	120	2	Miniature bayonet	T-2-1/2
60MB	60	3	Miniature bayonet	T-2-1/2
60PSB	60	3	#5 slide	T-2
60RB	60	3	Miniature bayonet	T-2
60RC	60	3	Candelabra screw	T-2
64425	12	20	Medical/optical lamp	N/A
656	28	1.68	Wedge	T-3-1/4
657	28	2.24	Wedge	T-3-1/4
67	13.5	7.96	Single contact bayonet	G-6
67K	13.5	7.96	Candelabra screw	G6
6MB	6	.84	Miniature bayonet	T-2-1/2
6PSB	6	0.84	#5 slide	T2
656-6V-CS	6	6	Candelabra screw	S-6
656-12V-CS	12	6	Candelabra screw	S-6
656-120V-CS	120	6	Candelabra screw	S-6
656-120V-DC	120	6	Candelabra screw	S-6
656-130V-CS	130	6	Candelabra screw	S-6
656-130V-DC	130	6	Double contact bayonet	S-6
656-145V-CS	145	6	Candelabra screw	S-6
656-145V-DC	145	6	Double contact bayonet	S-6
656-155V-CS	155	6	Candelabra screw	S-6
656-155V-SCB	155	6	Single contact bayonet	S-6
656-230V-CS	230	6	Candelabra screw	S-6
656-24V-DC	24	6	Double contact bayonet	S-6
656-30V-CS	30	6	Candelabra screw	S-6
656-30V-DC	30	6	Double contact bayonet	S-6
656-48V-CS	48	6	Candelabra screw	S-6
656-60V-CS	60	6	Candelabra screw	S-6
7355	28	1.12	Midget grooved	T-1-3/4
7C7-130V-CS	130	7	C7 Miniature bulb; current: 0.054A, base type: E12 - Candelabra screw, life hours: 4,500, glass: clear, dimensions: 2.13 in. length	
755	6.3	1	Double contact bayonet	T-1-3/4
757	28	1.68	Miniature bayonet	T-3-1/4
90MB	90	2.7	Miniature bayonet	T-2-1/2
E12-002-10	N/A	N/A	Holder, screw	N/A
JC-G4 12V 10W	12	10	Bi-pin	G4
N85	28	1.12	Sub-miniature wedge	T1-3/4

Part #	Volts	Watts	Current	Color Emitted	Base	Description	Bulb
LED120PSBR-ACDC	120	0.80	6mA	Red	Slide base #5	Light output: 1000 mcd, life hours: 100,000, dimensions: 25.5 mm L x 7 mm diameter, viewing angle: 160 degree	T2 LED
LED120PSBA-ACDC	120	0.80	6mA	Amber	Slide base #5	Light output: 1000 mcd, life hours: 100,000, dimensions: 25.5 mm L x 7 mm diameter, viewing angle: 160 degree	T2 LED
LED120PSBW-ACDC	120	0.80	6mA	White	Slide base #5	Light output: 1000 mcd, life hours: 100,000, dimensions: 25.5 mm L x 7 mm diameter, viewing angle: 160 degree	T2 LED
LED28PSB-A	24-28	0.80	20mA	Amber	Slide base #5	Life hours: 100,000, dimensions: 25.5 mm L x 7 mm diameter, viewing angle: 160 degree	T2 LED
LED28PSB-RED	24-28	0.80	20mA	Red	Slide base #5	Light output: 1000 mcd, life hours: 100,000, dimensions: 25.5 mm L x 7 mm diameter, viewing angle: 160 degree	T2 LED
LED28PSBG-ACDC	24-28	0.80	20mA	Green	Slide base #5	Light output: 1000 mcd, life hours: 100,000, dimensions: 25.5 mm L x 7 mm diameter, viewing angle: 160 degree	T2 LED
LED28PSBW-AC/DC	24-28	0.80	20mA	White	Slide base #5	Light output: 1000 mcd, life hours: 100,000, dimensions: 25.5 mm L x 7 mm diameter, viewing angle: 160 degree	T2 LED
LED48MBA-AC/DC	48	0.5	15mA	Yellow	Miniature bayonet	Light output: 1000 mcd, life hours: 100,000, dimensions: 26 mm L x 9 mm diameter, viewing angle: 160 degree	T3-1/4 LED
LED48MBW-AC/DC	48	0.5	15mA	White	Miniature bayonet	Light output: 1000 mcd, life hours: 100,000, dimensions: 26 mm L x 9 mm diameter, viewing angle: 160 degree	T3-1/4 LED
LED-48PSB-RED	48	0.80	15mA	Red	Slide base #5	Light output: 1000 mcd, life hours: 100,000, dimensions: 25.5 mm L x 7 mm diameter, viewing angle: 160 degree	T2 LED
LED60MBB-ACDC	60	0.5	10mA	Blue	Miniature bayonet	Light output: 1000 mcd, life hours: 100,000, dimensions: 26 mm L x 9 mm diameter, viewing angle: 160 degree	T3-1/4 LED
LED60MBW-ACDC	60	0.5	10mA	White	Miniature bayonet	Light output: 1000 mcd, life hours: 100,000, dimensions: 26 mm L x 9 mm diameter, viewing angle: 160 degree	T3-1/4 LED
LED-85-GREEN	28	0.50	20mA	Green	Wedge	Light output: 500 mcd, life hours: 100,000, dimensions: 18.5 mm L x 5 mm diameter, viewing angle: 120 degree	T-1 3/4 (5mm) LED
LED-85-RED	28	0.50	20mA	Red	Wedge	Light output: 500 mcd, life hours: 100,000, dimensions: 18.5 mm L x 5 mm diameter, viewing angle: 120 degree	T-1 3/4 (5mm) LED
LED-85-WHITE	28	0.50	20mA	White	Wedge	Light output: 500 mcd, life hours: 100,000, dimensions: 18.5 mm L x 5 mm diameter, viewing angle: 120 degree	T-1 3/4 (5mm) LED
LED-85-YELLOW	28	0.50	20mA	Amber	Wedge	Light output: 500 mcd, life hours: 100,000, dimensions: 18.5 mm v x 5 mm diameter, viewing angle: 120 degree	T-1 3/4 (5mm) LED
LED-SB3KDC-24-28V	20-38	3			Double contact bayonet	Color temp (Kelvin): 3000K, lumens: 220, Replaces: 25-40W incandescent, length: 1.85 in., diameter: 0.65 in., average life hours: 50,000, viewing angle: 360 degree	LED: tubular bulb
LED-SB3KDC-120V	120	3			BA15D (double contact bayonet)	Color temp (Kelvin): 3000K, lumens: 220, replaces: 25-40W incandescent, length: 1.80 in., diameter: 0.70 in., average life hours: 50,000, viewing angle: 360 degree	LED: tubular bulb



LED120PSBR-ACDC



LED120PSBA-ACDC



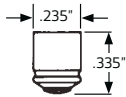
LED120PSBW-ACDC

Elevator Lamps

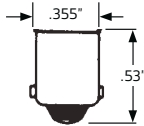
COMMON LAMP BASES WITH DIMENSIONS

Bases provide electrical contact to the lamp and, in most cases, also support the lamp in the fixture. For miniature and subminiature lamps, bayonet or wedge base types are generally preferred over screw types when vibration is present. In addition, wedge bases reduce socket size and complexity. Flanged or collared types are usually associated with requirements for filament location.

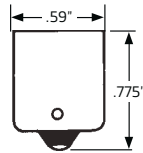
All dimensions are $\pm 1\%$. All length dimensions include the solder contact.



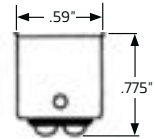
Midget Grooved (T-1 3/4)



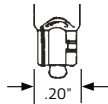
Miniature Bayonet (BA9S)



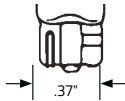
S.C. Bayonet (BA15S)



D.C. Bayonet (BA15D)



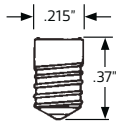
Glass Wedge (T-1 3/4)



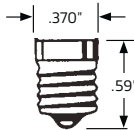
Glass Wedge (T-3 1/4)



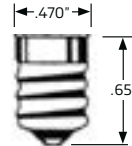
Glass Wedge (T-5)



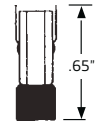
Midget Screw (E5)



Miniature Screw (E-10)



Candelabra Screw (E-12)



Slide #5

GFUSE COMBO

Variety of glass fuses (customer can customize)

- 1 amp
- 2 amp
- 3 amp
- 4 amp
- 5 amp
- 6 amp
- 10 amp



GFUSE COMBO XL

Variety of glass fuses, not available for customization, except where noted!

Contains 75 boxes; 1 box each of the following:

ABC 1/2, 1/4, 1, 1-1/2 and 3

AGC 3/16, 3/8, 1/4, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 14, 15, 20, 25 and 30

GMA 100MA, 200MA, 250MA 300MA, 3-1/2, 5, 6, 7, 8, 10 and 15

GMC 63MA and 250MA

MDA 3/10, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 15, 25 and 30

MDL 3/16, 3/4, 1/2, 1/4, 1/8, 1/10, 2/10, 6/10, 7/10, 8/10, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15 and 20

and one of your choice.





SMALL DIMENSION FAST ACTING GLASS/CERAMIC FUSES

Type ABC

Description Fast-acting
Dimensions 1/4" x 1-1/4" (6.4 x 31.7 mm)
Construction Ceramic tube with nickel-plated brass endcaps
Ratings **Volts:** 250VAC/125VDC, (1/4–15A, 20–30A), 250VAC (18A) **Amps:** 1/4–30A
IR 35A (1/4–1A @ 250VAC) 10kA (1/4–15A @ 125VAC)
 100A (1-1/2–3A @ 250VAC) 1kA (18–30A @ 125VAC)
 200A (4–10A @ 250VAC) 10kA (1/4–15, 20A @ 125VDC)
 750A (12–15A @ 250VAC) 400A (25–30A @ 250VAC)
 400A (18–20A @ 250VAC) 200A (25–30A @ 250VAC)

Features and benefits Ceramic body allows for higher amp/volt rating combinations

Part #	Description	Part #	Description
ABC1/4	Fast-acting ceramic 1/4" x 1-1/4" .25 amp	ABC6	Fast-acting ceramic 1/4" x 1-1/4" 6 amp
ABC1/2	Fast-acting ceramic 1/4" x 1-1/4" 0.5 amp	ABC7	Fast-acting ceramic 1/4" x 1-1/4" 7 amp
ABC3/4	Fast-acting ceramic 1/4" x 1-1/4" .75 amp	ABC8	Fast-acting ceramic 1/4" x 1-1/4" 8 amp
ABC1	Fast-acting ceramic 1/4" x 1-1/4" 1 amp	ABC10	Fast-acting ceramic 1/4" x 1-1/4" 10 amp
ABC1-1/2	Fast-acting ceramic 1/4" x 1-1/4" 1.5 amp	ABC12	Fast-acting ceramic 1/4" x 1-1/4" 12 amp
ABC2	Fast-acting ceramic 1/4" x 1-1/4" 2 amp	ABC15	Fast-acting ceramic 1/4" x 1-1/4" 15 amp
ABC3	Fast-acting ceramic 1/4" x 1-1/4" 3 amp	ABC20	Fast-acting ceramic 1/4" x 1-1/4" 20 amp
ABC4	Fast-acting ceramic 1/4" x 1-1/4" 4 amp	ABC25	Fast-acting ceramic 1/4" x 1-1/4" 25 amp
ABC5	Fast-acting ceramic 1/4" x 1-1/4" 5 amp	ABC30	Fast-acting ceramic 1/4" x 1-1/4" 30 amp

Type AGC



Description Fast-acting
Dimensions 1/4" x 1-1/4" (6.4 x 31.7 mm)
Construction Glass tube with nickel-plated brass endcaps
Ratings **Volts:** 250VAC (1/20–10A), 32VAC (12–30A) **Amps:** 1/20–30A
IR 35A (1/20–1A @ 250VAC) 10kA (1/20–10A @ 125VAC)
 100A (1-1/4–3A @ 250VAC) 1000A (12–30A @ 32VAC)
 200A (4–10A @ 250VAC)

Features and benefits Original electronic tube fuse
 Fast-acting for maximum protection
 Wide amp/volt ratings allow versatility of protecting electronic circuits

Part #	Description	Part #	Description
AGC1/32	Fast-acting glass 1/4" x 1-1/4" 0.03125 amp	AGC1	Fast-acting glass 1/4" x 1-1/4" 1 amp
AGC1/10	Fast-acting glass 1/4" x 1-1/4" 0.1 amp	AGC1-1/2	Fast-acting glass 1/4" x 1-1/4" 1.5 amp
AGC3/16	Fast-acting glass 1/4" x 1-1/4" 0.1875 amp	AGC1-6/10	Fast-acting glass 1/4" x 1-1/4" 1.6 amp
AGC2/10	Fast-acting glass 1/4" x 1-1/4" 0.2 amp	AGC1-3/4	Fast-acting glass 1/4" x 1-1/4" 1.75 amp
AGC1/4	Fast-acting glass 1/4" x 1-1/4" 0.25 amp	AGC2	Fast-acting glass 1/4" x 1-1/4" 2 amp
AGC3/10	Fast-acting glass 1/4" x 1-1/4" 0.3 amp	AGC2-1/2	Fast-acting glass 1/4" x 1-1/4" 2.5 amp
AGC3/8	Fast-acting glass 1/4" x 1-1/4" 0.375 amp	AGC3	Fast-acting glass 1/4" x 1-1/4" 3 amp
AGC1/2	Fast-acting glass 1/4" x 1-1/4" 0.5 amp	AGC3-1/2	Fast-acting glass 1/4" x 1-1/4" 3.5 amp
AGC6/10	Fast-acting glass 1/4" x 1-1/4" 0.6 amp	AGC4	Fast-acting glass 1/4" x 1-1/4" 4 amp
AGC3/4	Fast-acting glass 1/4" x 1-1/4" 0.75 amp	AGC4-1/2	Fast-acting glass 1/4" x 1-1/4" 4.5 amp
AGC8/10	Fast-acting glass 1/4" x 1-1/4" 0.8 amp		

Type AGC continued

Part #	Description
AGC5	Fast-acting glass 1/4" x 1-1/4" 5 amp
AGC6	Fast-acting glass 1/4" x 1-1/4" 6 amp
AGC6-1/4	Fast-acting glass 1/4" x 1-1/4" 6.25 amp
AGC7	Fast-acting glass 1/4" x 1-1/4" 7 amp
AGC7-1/2	Fast-acting glass 1/4" x 1-1/4" 7.5 amp
AGC8	Fast-acting glass 1/4" x 1-1/4" 8 amp
AGC9	Fast-acting glass 1/4" x 1-1/4" 9 amp

Part #	Description
AGC10	Fast-acting glass 1/4" x 1-1/4" 10 amp
AGC12	Fast-acting glass 1/4" x 1-1/4" 12 amp
AGC14	Fast-acting glass 1/4" x 1-1/4" 14 amp
AGC15	Fast-acting glass 1/4" x 1-1/4" 15 amp
AGC20	Fast-acting glass 1/4" x 1-1/4" 20 amp
AGC25	Fast-acting glass 1/4" x 1-1/4" 25 amp
AGC30	Fast-acting glass 1/4" x 1-1/4" 30 amp

Type AGX

Description	Fast-acting
Dimensions	1/4" x 1" (6.4 x 25.4 mm)
Construction	Glass tube
Ratings	Volts: 250VAC (1/200 – 2A), 125VAC (2-1/2 – 7A) Amps: 1/4 – 30A IR 35A (1/4 – 1/2A @ 250VAC) 1000A (5 – 6A @ 125VAC) 100A (3/4 – 2A @ 250VAC) 1000A (8 – 30A @ 32VAC) 10kA (1/4 – 5A @ 125VAC)

Features and benefits Size rejects insertion of other fuse types

Part #	Description
AGX1/32	1/4" – 1" glass 0.03125 amp
AGX1	1/4" – 1" glass 1 amp
AGX2	1/4" – 1" glass 2 amp
AGX3	Eaton/Bussman 1/4" – 1" glass 3 amp

Part #	Description
AGX5	1/4" – 1" glass 5 amp
AGX6	1/4" – 1" glass 6 amp
AGX10	1/4" – 1" glass 10 amp



SMALL DIMENSION TIME-DELAY GLASS FUSES

Type MDA

Description	Time-delay
Dimensions	1/4" x 1-1/4" (6.35 x 31.75 mm)
Construction	Ceramic tube with nickel-plated brass endcaps
Ratings	Volts: 250VAC or less, 125VDC (20A – 30A) Amps: 1/4 – 30A IR 35A (1/4 – 1A @ 250VAC) 1500A (20 – 30A @ 250VAC) 100A (1-1/2 – 2A @ 250VAC) 10kA (1/4 – 30A @ 125VAC) 200A (2-1/2 – 10A @ 250VAC) 10kA (20 – 30A @ 125VDC) 750A (12 – 15A @ 250VAC)

Features and benefits Ceramic body allows for higher amp/volt rating combinations
 Inventory consolidation by replacing MDL fuses allows for reduced SKU investment and minimizing potential for misapplying fuse

Part #	Description
MDA3/10	1/4" x 1-1/4" ceramic 3/10 amp
MDA1/2	1/4" x 1-1/4" ceramic 0.5 amp
MDA8/10	1/4" x 1-1/4" ceramic 0.8 amp
MDA1	1/4" x 1-1/4" ceramic 1 amp
MDA2	1/4" x 1-1/4" ceramic 2 amp
MDA3	1/4" x 1-1/4" ceramic 3 amp
MDA4	1/4" x 1-1/4" ceramic 4 amp
MDA5	1/4" x 1-1/4" ceramic 5 amp
MDA6	1/4" x 1-1/4" ceramic 6 amp

Part #	Description
MDA6-1/4	1/4" x 1-1/4" ceramic 6.25 amp
MDA7	1/4" x 1-1/4" ceramic 7 amp
MDA8	1/4" x 1-1/4" ceramic 8 amp
MDA10	1/4" x 1-1/4" ceramic 10 amp
MDA12	1/4" x 1-1/4" ceramic 12 amp
MDA15	1/4" x 1-1/4" ceramic 15 amp
MDA20	1/4" x 1-1/4" ceramic 20 amp
MDA25	1/4" x 1-1/4" ceramic 25 amp
MDA30	1/4" x 1-1/4" ceramic 30 amp





SMALL DIMENSION TIME-DELAY GLASS FUSES continued

Type MDL

Description Time-delay
Dimensions 1/4" x 1-1/4" (6.4 x 31.17 mm)
Construction Glass tube, nickel-plated brass endcaps
Ratings **Volts:** 250VAC (1/16 – 8A), 32VAC (9 – 30A) **Amps:** 1/16 – 30A
IR 5A (1/16 – 1A @ 250VAC) 10000A (1/16 – 8A @ 125VAC)
 100A (1-1/4 – 3A @ 250VAC) 1000A (9 – 30 @ 32VAC)
 200A (4 – 8A @ 250VAC)

Features and benefits Time-delay allows close sizing on inductive circuits

Part #	Description	Part #	Description
MDL1/10	250VAC time-delay midget 0.1 amp	MDL2-1/4	250VAC time-delay midget 2.25 amp
MDL1/8	250VAC time-delay midget 0.125 amp	MDL2-1/2	250VAC time-delay midget 2.5 amp
MDL3/16	250VAC time-delay midget 0.1875 amp	MDL2-8/10	250VAC time-delay midget 2.8 amp
MDL2/10	250VAC time-delay midget 0.2 amp	MDL3	250VAC time-delay midget 3 amp
MDL1/4	250VAC time-delay midget 0.25 amp	MDL3-1/2	250VAC time-delay midget 3.5 amp
MDL1/2	250VAC time-delay midget 0.5 amp	MDL4	250VAC time-delay midget 4 amp
MDL6/10	250VAC time-delay midget 0.6 amp	MDL5	250VAC time-delay midget 5 amp
MDL7/10	250VAC time-delay midget 0.7 amp	MDL6	250VAC time-delay midget 6 amp
MDL3/4	250VAC time-delay midget 0.75 amp	MDL6-1/4	250VAC time-delay midget 6.25 amp
MDL8/10	250VAC time-delay midget 0.8 amp	MDL7	250VAC time-delay midget 7 amp
MDL1	250VAC time-delay midget 1 amp	MDL8	250VAC time-delay midget 8 amp
MDL1-1/4	250VAC time-delay midget 1.25 amp	MDL9	250VAC time-delay midget 9 amp
MDL1-1/2	250VAC time-delay midget 1.5 amp	MDL10	250VAC time-delay midget 10 amp
MDL1-6/10	250VAC time-delay midget 1.6 amp	MDL12	250VAC time-delay midget 12 amp
MDL1-8/10	250VAC time-delay midget 1.8 amp	MDL15	250VAC time-delay midget 15 amp
MDL2	250VAC time-delay midget 2 amp	MDL20	250VAC time-delay midget 20 amp

MIDGET FAST-ACTING FUSES

Type MOL

Description	250VAC or less, fast-acting	
Dimensions	13/32" dia. x 1-1/2" length	
Ratings	Volts: 0.5 – 15 amps, 250VAC, 20 – 30 amps, 125VAC Amps: 0.5 – 30	
Cross reference	BAF (Bussman) OTM (Gould Shawmut) DLF (Littlefuse)	
	IR 10kA @ 125VAC 20 – 30A	200A @ 250VAC 6.5 – 10A
	35A @ 250VAC 0.5 – 1A	750 @ 250VAC 12 – 15A
	100A @ 250VAC 1.5 – 6A	



Features and benefits	Compact dimensions; Economical laminated paper tube design
Applications	Supplemental protection for non-inductive control and lighting circuits

Part #	Description	Part #	Description
MOL.5	250VAC fast-acting midget 0.5 amp	MOL8	250VAC fast-acting midget 8 amp
MOL1	250VAC fast-acting midget 1 amp	MOL9	250VAC fast-acting midget 9 amp
MOL1.5	250VAC fast-acting midget 1.5 amp	MOL10	250VAC fast-acting midget 10 amp
MOL2	250VAC fast-acting midget 2 amp	MOL12	250VAC fast-acting midget 12 amp
MOL3	250VAC fast-acting midget 3 amp	MOL15	250VAC fast-acting midget 15 amp
MOL4	250VAC fast-acting midget 4 amp	MOL20	250VAC fast-acting midget 20 amp
MOL5	250VAC fast-acting midget 5 amp	MOL25	250VAC fast-acting midget 25 amp
MOL6	250VAC fast-acting midget 6 amp	MOL30	250VAC fast-acting midget 30 amp

Type MCL

Description	600VAC or less, fast-acting	
Dimensions	13/32" dia. x 1-1/2" length	
Ratings	Volts: 600VAC Amps: 0.1 – 30	
	IR 100kA RMS amps	
Cross reference	KTK (Bussman) ATM (Gould Shawmut) KLK (Littlefuse)	
Features and benefits	Compact dimensions High interrupting rating Fast-acting design respond quickly to both overloads and short-circuit current	
Applications	Street lighting holders, HID lighting, control circuits, electronic equipment protection	



Part #	Description	Part #	Description
MCL.125	600VAC fast-acting midget .0125 amp	MCL7	600VAC fast-acting midget 7 amp
MCL.2	600VAC fast-acting midget 0.20 amp	MCL8	600VAC fast-acting midget 8 amp
MCL.25	600VAC fast-acting midget 0.25 amp	MCL9	600VAC fast-acting midget 9 amp
MCL.3	600VAC fast-acting midget 0.30 amp	MCL12	600VAC fast-acting midget 12 amp
MCL.5	600VAC fast-acting midget 0.50 amp	MCL15	600VAC fast-acting midget 15 amp
MCL.75	600VAC fast-acting midget 0.75 amp	MCL20	600VAC fast-acting midget 20 amp
MCL1.5	600VAC fast-acting midget 1.50 amp	MCL25	600VAC fast-acting midget 25 amp
MCL3.5	600VAC fast-acting midget 3.50 amp	MCL30	600VAC fast-acting midget 30 amp
MCL4	600VAC fast-acting midget 4 amp	MCL35	600VAC fast-acting midget 35 amp
MCL5	600VAC fast-acting midget 5 amp	MCL50	600VAC fast-acting midget 50 amp
MCL6	600VAC fast-acting midget 6 amp		



MIDGET TIME-DELAY FUSES

Type MEN

Description	Time-delay
Dimensions	1/4" dia. x 1-1/2" length
Ratings	Volts: 250VAC Amps: 0.5 – 30 IR 10kA RMS amps @ 125V
Cross reference	FNM (Bussman) TRM (Gould Shawmut) FLM (Littlefuse)
Features and benefits	Compact dimensions Fiber tube construction Dual-element construction allows harmless inductive surges to pass without opening
Applications	Supplemental protection of small motors, transformers, solenoids and other high in-rush power electronic circuits

Part #	Description	Part #	Description
MEN.1	250VAC time-delay midget 0.10 amp	MEN3	250VAC time-delay midget 3 amp
MEN.15	250VAC time-delay midget 0.15 amp	MEN3.2	250VAC time-delay midget 3.2 amp
MEN.2	250VAC time-delay midget 0.20 amp	MEN3.5	250VAC time-delay midget 3.50 amp
MEN.25	250VAC time-delay midget 0.25 amp	MEN4	250VAC time-delay midget 4 amp
MEN.3	250VAC time-delay midget 0.30 amp	MEN4.5	250VAC time-delay midget 4.50 amp
MEN.4	250VAC time-delay midget 0.40 amp	MEN5	250VAC time-delay midget 5 amp
MEN.5	250VAC time-delay midget 0.50 amp	MEN5.6	250VAC time-delay midget 5.60 amp
MEN.8	250VAC time-delay midget 0.80 amp	MEN6	250VAC time-delay midget 6 amp
MEN1	250VAC time-delay midget 1 amp	MEN6.25	250VAC time-delay midget 6.25 amp
MEN1.125	250VAC time-delay midget 1.125 amp	MEN7	250VAC time-delay midget 7 amp
MEN1.25	250VAC time-delay midget 1.25 amp	MEN8	250VAC time-delay midget 8 amp
MEN1.4	250VAC time-delay midget 1.40 amp	MEN10	250VAC time-delay midget 10 amp
MEN1.5	250VAC time-delay midget 1.50 amp	MEN12	250VAC time-delay midget 12 amp
MEN1.6	250VAC time-delay midget.60 amp	MEN15	250VAC time-delay midget 12 amp
MEN1.8	250VAC time-delay midget 1.80 amp	MEN20	250VAC time-delay midget 20 amp
MEN2	250VAC time-delay midget 2 amp	MEN25	250VAC time-delay midget 25 amp
MEN2.25	250VAC time-delay midget 2.25 amp	MEN30	250VAC time-delay midget 30 amp
MEN2.5	250VAC time-delay midget 2.50 amp		
MEN2.8	250VAC time-delay midget 2.80 amp		

Type MEQ

Description	Time-delay
Dimensions	1/4" dia. x 1-1/2" length
Ratings	Volts: 500Vac Amps: 0.1 – 30 IR 10kA RMS amps
Cross reference	FNQ (Bussman) ATQ (Gould Shawmut) FLQ (Littlefuse)
Features and benefits	Compact dimensions Fiber tube construction Time-delay allows harmless inductive surges to pass without needless fuse opening
Applications	Supplemental protection of transformers, solenoids, and other high in-rush circuits For motor applications, refer to type EDCC



Part #	Description
MEQ.125	500VAC time-delay midget 0.125 amp
MEQ.15	500VAC time-delay midget 0.15 amp
MEQ.25	500VAC time-delay midget 0.25 amp
MEQ.4	500VAC time-delay midget 0.4 amp
MEQ.5	500VAC time-delay midget 0.5 amp
MEQ.6	500VAC time-delay midget 0.6 amp
MEQ.8	500VAC time-delay midget 0.8 amp
MEQ1	500VAC time-delay midget 1 amp
MEQ1.125	500VAC time-delay midget 1.125 amp
MEQ1.25	500VAC time-delay midget 1.25 amp
MEQ1.5	500VAC time-delay midget 1.5 amp
MEQ2	500VAC time-delay midget 2 amp
MEQ2.25	500VAC time-delay midget 2.25 amp
MEQ2.5	500VAC time-delay midget 2.5 amp
MEQ3	500VAC time-delay midget 3 amp
MEQ3.2	500VAC time-delay midget 3.2 amp
MEQ3.5	500VAC time-delay midget 3.50 amp

Part #	Description
MEQ4	500VAC time-delay midget 4 amp
MEQ4.5	500VAC time-delay midget 4.50 amp
MEQ5	500VAC time-delay midget 5 amp
MEQ5.6	500VAC time-delay midget 5.60 amp
MEQ6	500VAC time-delay midget 6 amp
MEQ6.25	500VAC time-delay midget 6.25 amp
MEQ7	500VAC time-delay midget 7 amp
MEQ8	500VAC time-delay midget 8 amp
MEQ9	500VAC time-delay midget 9 amp
MEQ10	500VAC time-delay midget 10 amp
MEQ12	500VAC time-delay midget 12 amp
MEQ15	500VAC time-delay midget 15 amp
MEQ20	500VAC time-delay midget 20 amp
MEQ25	500VAC time-delay midget 25 amp
MEQ30	500VAC time-delay midget 30 amp

CLASS CC FUSES

Type HCLR



- Description** Fast-acting
- Dimensions** 13/32" dia. x 1-1/2" length
- Ratings** **Volts:** HCLR-600VAC **Amps:** 0.1 – 30
IR 200,000 RMS symmetrical amps
- Cross reference** KTKP (Bussman)
ATMR (Gould Shawmut)
KLKR (Littlefuse)
- Current limiting** Class CC Fuse
- Features and benefits** Branch circuit rated for 600VAC
Compact dimensions
Fast-acting design responds quickly to both overload and short-circuit current
- Applications** Lighting and resistive heating loads

Part #	Description	Part #	Description
HCLR.1	600VAC fast-acting Class CC 0.1 amp	HCLR4	600VAC fast-acting Class CC 4 amp
HCLR.125	600VAC fast-acting Class CC 0.125 amp	HCLR5	600VAC fast-acting class CC 5 amp
HCLR.25	600VAC fast-acting Class CC 0.25 amp	HCLR6	600VAC fast-acting Class CC 6 amp
HCLR.3	600VAC fast-acting Class CC 0.3 amp	HCLR7	600VAC fast-acting Class CC 7 amp
HCLR.5	600VAC fast-acting Class CC 0.5 amp	HCLR8	600VAC fast-acting Class CC 8 amp
HCLR1	600VAC fast-acting Class CC 1 amp	HCLR9	600VAC fast-acting Class CC 9 amp
HCLR2	600VAC fast-acting Class CC 2 amp	HCLR10	600VAC fast-acting Class CC 10 amp
HCLR2.5	600VAC fast-acting Class CC 2.5 amp	HCLR20	600VAC fast-acting Class CC 20 amp
HCLR3	600VAC fast-acting Class CC 3 amp	HCLR30	600VAC fast-acting Class CC 30 amp

Type HCTR



- Description** Time-delay
- Dimension** 13/32" dia. x 1-1/2" length
- Ratings** **Volts:** HCTR-600VAC **Amps:** 0.25 – 30
IR 200,000 RMS symmetrical amps
- Cross reference** FNQR (Bussman)
ATQR (Gould Shawmut)
KLDR (Littlefuse)
- Current limiting** Class CC Fuse
- Features and benefits** Branch circuit rated for 600VAC
Compact dimensions
Time-delay design allows looser sizing for inductive loads such as control transformers and solenoids
- Applications** Primary protection for control

Part #	Description	Part #	Description
HCTR2	600VAC time-delay Class CC 2 amp	HCTR6	600VAC time-delay Class CC 6 amp
HCTR2.5	600VAC time-delay Class CC 2.5 amp	HCTR6.25	600VAC time-delay Class CC 6.25 amp
HCTR3	600VAC time-delay Class CC 3 amp	HCTR8	600VAC time-delay Class CC 8 amp
HCTR3.5	600VAC time-delay Class CC 3.5 amp	HCTR10	600VAC time-delay Class CC 10 amp
HCTR4	600VAC time-delay Class CC 4 amp	HCTR15	600VAC time-delay Class CC 15 amp
HCTR5	600VAC time-delay Class CC 5 amp	HCTR20	600VAC time-delay Class CC 20 amp



Type EDCC

Description	Time-delay
Dimensions	13/32" dia. x 1-1/2" length
Ratings	Volts: EDCC-600VAC Amps: 0.5 – 30 IR 200,000 RMS symmetrical amps
Cross reference	LP-CC (Bussman) ATDR (Gould Shawmut) CCMR (Littlefuse)
Current limiting	Class CC fuse
UL listed DC rating	Voltage rating: EDCC 0.5 – 2.8A, 20 – 30A 300VDC, 3 – 15A 150VDC IR 20,000 amps DC
Features and benefits	Branch circuit rated for 600VAC Time-delay for motor branch circuit protection Excellent current-limiting performance Upgrade for standard "midget" fuses
Applications	Use for protection of small horsepower motor circuit or other circuit requiring small dimension, time-delay fuses Can provide Type 2 "No damage" protection for IEC or NEMA starters/contactors

Part #	Description	Part #	Description
EDCC.6	600VAC time-delay Class CC fuse 0.6 amp	EDCC3.2	600VAC time-delay Class CC fuse 3.2 amp
EDCC1	600VAC time-delay Class CC fuse 1 amp	EDCC4.5	600VAC time-delay Class CC fuse 4.5 amp
EDCC1.25	600VAC time-delay Class CC fuse 1.25 amp	EDCC6	600VAC time-delay Class CC fuse 6 amp
EDCC1.5	600VAC time-delay Class CC fuse 1.5 amp	EDCC6.25	600VAC time-delay Class CC fuse 6.25 amp
EDCC1.6	600VAC time-delay Class CC fuse 1.6 amp	EDCC7	600VAC time-delay Class CC fuse 7 amp
EDCC1.8	600VAC time-delay Class CC fuse 1.8 amp	EDCC7.5	600VAC time-delay Class CC fuse 7.5 amp
EDCC2	600VAC time-delay Class CC fuse 2 amp	EDCC8	600VAC time-delay Class CC fuse 8 amp
EDCC2.25	600VAC time-delay Class CC fuse 2.25 amp	EDCC10	600VAC time-delay Class CC fuse 10 amp
EDCC2.5	600VAC time-delay Class CC fuse 2.5 amp	EDCC12	600VAC time-delay Class CC fuse 12 amp
EDCC2.8	600VAC time-delay Class CC fuse 2.8 amp	EDCC15	600VAC time-delay Class CC fuse 15 amp
EDCC3	600VAC time-delay Class CC fuse 3 amp	EDCC25	600VAC time-delay Class CC fuse 25 amp



ONE-TIME FUSES

Type KON

Description "One-Time" fast-acting
Ratings **Volts:** 250VAC **Amps:** 1 – 600
Cross reference NON (Bussman)
 OT (Gould Shawmut)
 NLN (Littlefuse)

Features and benefits Economical, for general-purpose use

Applications Lighting or heating circuit not subject to high levels of in-rush current
 Circuit having relatively low levels of availability short-circuit current

Part #	Description
KON1	250VAC Class K5 fast-acting "one time" 1 amp
KON2	250VAC Class K5 fast-acting "one time" 2 amp
KON3	250VAC Class K5 fast-acting "one time" 3 amp
KON4	250VAC Class K5 fast-acting "one time" 4 amp
KON5	250VAC Class K5 fast-acting "one time" 5 amp
KON6	250VAC Class K5 fast-acting "one time" 6 amp
KON7	250VAC Class K5 fast-acting "one time" 7 amp
KON8	250VAC Class K5 fast-acting "one time" 8 amp
KON10	250VAC Class K5 fast-acting "one time" 10 amp

Part #	Description
KON12	250VAC Class K5 fast-acting "one time" 12 amp
KON15	250VAC Class K5 fast-acting "one time" 15 amp
KON20	250VAC Class K5 fast-acting "one time" 20 amp
KON30	250VAC Class K5 fast-acting "one time" 30 amp
KON35	250VAC Class K5 fast-acting "one time" 35 amp
KON40	250VAC Class K5 fast-acting "one time" 40 amp
KON50	250VAC Class K5 fast-acting "one time" 50 amp
KON60	250VAC Class K5 fast-acting "one time" 60 amp
KON100	250VAC Class K5 fast-acting "one time" 100 amp



Type KOS

Description "One-Time" fast acting
Ratings **Volts:** 600VAC **Amps:** 1 – 600
Cross reference NON (Bussman)
 OT (Gould Shawmut)
 NLN (Littlefuse)

Features and benefits Economical, for general-purpose use

Applications Lighting or heating circuit not subject to high levels of in-rush current
 Circuit having relatively low levels of availability short-circuit current

Part #	Description
KOS1	600VAC Class K5 fast-acting "one time" 1 amp
KOS2	600VAC Class K5 fast-acting "one time" 2 amp
KOS3	600VAC Class K5 fast-acting "one time" 3 amp
KOS4	600VAC Class K5 fast-acting "one time" 4 amp
KOS5	600VAC Class K5 fast-acting "one time" 5 amp
KOS6	600VAC Class K5 fast-acting "one time" 6 amp
KOS7	600VAC Class K5 fast-acting "one time" 7 amp
KOS8	600VAC Class K5 fast-acting "one time" 8 amp

Part #	Description
KOS10	600VAC Class K5 fast-acting "one time" 10 amp
KOS15	600VAC Class K5 fast-acting "one time" 15 amp
KOS30	600VAC Class K5 fast-acting "one time" 30 amp
KOS35	600VAC Class K5 fast-acting "one time" 35 amp
KOS50	600VAC Class K5 fast-acting "one time" 50 amp
KOS60	600VAC Class K5 fast-acting "one time" 60 amp
KOS70	600VAC Class K5 fast-acting "one time" 70 amp
KOS100	600VAC Class K5 fast-acting "one time" 100 amp

DUAL-ELEMENT TIME-DELAY FUSES, CLASS RK5

Type ECNR

- Description** Dual-element time-delay
- Ratings** **Volts:** ECNR-250VAC, ECSR-600VAC **Amps:** 1,600
IR 200,000 RMS symmetrical amps
- Cross reference** FRN-R (Bussman)
TR-R (Gould Shawmut)
FLNR (Littlefuse)
- Current limiting** RK5 Fuse
- Features and benefits** True dual-element contraction allows sizing of 125% FLA for motor backup protection
Superior overload and cycling capabilities
Current limiting provides component short-circuit protection
- Applications** Recommended for AC power distribution system mains, feeders and branch circuits
Protection of motors and motor branch circuits
Protection of transformers and other inductive loads
All general-purpose applications including lighting, heating and other non-inductive loads



Part #	Description
ECNR1	250VAC Class RK5 dual element time-delay 1 amp
ECNR1.125	250VAC Class RK5 dual element time-delay 1.125 amp
ECNR1.25	250VAC Class RK5 dual element time-delay 1.25 amp
ECNR1.4	250VAC Class RK5 dual element time-delay 1.4 amp
ECNR1.5	250VAC Class RK5 dual element time-delay 1.5 amp
ECNR1.6	250VAC Class RK5 dual element time-delay 1.6 amp
ECNR2	250VAC Class RK5 dual element time-delay 2 amp
ECNR2.5	250VAC Class RK5 dual element time-delay 2.5 amp
ECNR2.8	250VAC Class RK5 dual element time-delay 2.8 amp
ECNR3	250VAC Class RK5 dual element time-delay 3 amp
ECNR3.2	250VAC Class RK5 dual element time-delay 3.2 amp
ECNR3.5	250VAC Class RK5 dual element time-delay 3.5 amp
ECNR4	250VAC Class RK5 dual element time-delay 4 amp
ECNR4.5	250VAC Class RK5 dual element time-delay 4.5 amp
ECNR5	250VAC Class RK5 dual element time-delay 5 amp
ECNR6	250VAC Class RK5 dual element time-delay 6 amp
ECNR6.25	250VAC Class RK5 dual element time-delay 6.25 amp
ECNR7	250VAC Class RK5 dual element time-delay 7 amp
ECNR8	250VAC Class RK5 dual element time-delay 8 amp
ECNR9	250VAC Class RK5 dual element time-delay 9 amp

Part #	Description
ECNR10	250VAC Class RK5 dual element time-delay 10 amp
ECNR12	250VAC Class RK5 dual element time-delay 12 amp
ECNR15	250VAC Class RK5 dual element time-delay 15 amp
ECNR20	250VAC Class RK5 dual element time-delay 20 amp
ECNR25	250VAC Class RK5 dual element time-delay 25 amp
ECNR30	250VAC Class RK5 dual element time-delay 30 amp
ECNR35	250VAC Class RK5 dual element time-delay 35 amp
ECNR40	250VAC Class RK5 dual element time-delay 40 amp
ECNR45	250VAC Class RK5 dual element time-delay 45 amp
ECNR50	250VAC Class RK5 dual element time-delay 50 amp
ECNR60	250VAC Class RK5 dual element time-delay 60 amp
ECNR70	250VAC Class RK5 dual element time-delay 70 amp
ECNR75	250VAC Class RK5 dual element time-delay 75 amp
ECNR80	250VAC Class RK5 dual element time-delay 80 amp
ECNR90	250VAC Class RK5 dual element time-delay 90 amp
ECNR100	250VAC Class RK5 dual element time-delay 100 amp
ECNR200	250VAC Class RK5 dual element time-delay 200 amp
ECNR225	250VAC Class RK5 dual element time-delay 225 amp
ECNR250	250VAC Class RK5 dual element time-delay 250 amp
ECNR300	250VAC Class RK5 dual element time-delay 300 amp



DUAL-ELEMENT TIME-DELAY FUSES, CLASS RK5 continued

Type ECSR

- Description** Dual-element time-delay
- Ratings** **Volts:** ECNR-250VAC, ECSR-600VAC **Amps:** 1,600
IR 200,000 RMS symmetrical amps
- Cross reference** FRS-R (Bussman)
TRS-R (Gould Shawmut)
FLSR (Littlefuse)
- Current limiting** RK5 Fuse
- Features and benefits** True dual-element contraction allows sizing of 125% FLA for motor backup protection
Superior overload and cycling capabilities
Current limiting provides component short-circuit protection
- Applications** Recommended for AC power distribution system mains, feeders and branch circuits
Protection of motors and motor branch circuits
Protection of transformers and other inductive loads
All general-purpose applications including lighting, heating and other non-inductive load

Part #	Description
ECSR.25	600VAC Class RK5 dual element time-delay .25 amp
ECSR1	600VAC Class RK5 dual element time-delay 1 amp
ECSR1.5	600VAC Class RK5 dual element time-delay 1.5 amp
ECSR2	600VAC Class RK5 dual element time-delay 2 amp
ECSR2.5	600VAC Class RK5 dual element time-delay 2.5 amp
ECSR3	600VAC Class RK5 dual element time-delay 3 amp
ECSR3.2	600VAC Class RK5 dual element time-delay 3.2 amp
ECSR3.5	600VAC Class RK5 dual element time-delay 3.5 amp
ECSR4	600VAC Class RK5 dual element time-delay 4 amp
ECSR4.5	600VAC Class RK5 dual element time-delay 4.5 amp
ECSR5	600VAC Class RK5 dual element time-delay 5 amp
ECSR6.25	600VAC Class RK5 dual element time-delay 6.25 amp
ECSR8	600VAC Class RK5 dual element time-delay 8 amp
ECSR10	600VAC Class RK5 dual element time-delay 10 amp

Part #	Description
ECSR15	600VAC Class RK5 dual element time-delay 15 amp
ECSR20	600VAC Class RK5 dual element time-delay 20 amp
ECSR25	600VAC Class RK5 dual element time-delay 25 amp
ECSR30	600VAC Class RK5 dual element time-delay 30 amp
ECSR45	600VAC Class RK5 dual element time-delay 45 amp
ECSR50	600VAC Class RK5 dual element time-delay 50 amp
ECSR60	600VAC Class RK5 dual element time-delay 60 amp
ECSR70	600VAC Class RK5 dual element time-delay 70 amp
ECSR75	600VAC Class RK5 dual element time-delay 75 amp
ECSR80	600VAC Class RK5 dual element time-delay 80 amp
ECSR90	600VAC Class RK5 dual element time-delay 90 amp
ECSR100	600VAC Class RK5 dual element time-delay 100 amp
ECSR200	600VAC Class RK5 dual element time-delay 200 amp
ECSR600	600VAC Class RK5 dual element time-delay 600 amp

HIGH SPEED SEMI-CONDUCTOR PROTECTION FUSES

Applications Designed specifically for supplementary protection of semiconducting devices such as silicon-controlled rectifiers (SCRs), diodes, thyristors, triacs, transistors and similar solid-state devices. These devices are used in power equipment including variable speed drives, power rectifiers, UPS systems, DC power supplies, and in a wide range of electronic equipment.

Type E25S

Description Very fast-acting semiconductor fuse
Ratings **Volts:** 250VAC/DC **Amps:** 5 – 2,500
Cross reference FWX (Bussman)
 A25X (Gould Shawmut)
 L25S (Littlefuse)



Part #	Description
E25S40	250VAC semiconductor 40 amp
E25S60	250VAC semiconductor 60 amp
E25S80	250VAC semiconductor 80 amp
E25S150	250VAC semiconductor 150 amp
E25S175	250VAC semiconductor 175 amp
E25S200	250VAC semiconductor 200 amp

Part #	Description
E25S225	250VAC semiconductor 225 amp
E25S350	250VAC semiconductor 350 amp
E25S400	250VAC semiconductor 400 amp
E25S500	250VAC semiconductor 500 amp
E25S600	250VAC semiconductor 600 amp
E25S800	250VAC semiconductor 800 amp

Type E50S

Description Very fast-acting semiconductor fuse
Ratings **Volts:** 500VAC/DC **Amps:** 5 – 1,600
Cross reference FWH (Bussman)
 A50P (Gould Shawmut)
 L50S (Littlefuse)



Part #	Description
E50SF5	500VAC semiconductor 5 amp
E50SF12	500VAC semiconductor 12 amp
E50SF15	500VAC semiconductor 15 amp
E50SF20	500VAC semiconductor 20 amp
E50SF25	500VAC semiconductor 25 amp
E50S40	500VAC semiconductor 40 amp
E50S50	500VAC semiconductor 50 amp
E50S70	500VAC semiconductor 70 amp
E50S90	500VAC semiconductor 90 amp

Part #	Description
E50S150	500VAC semiconductor 150 amp
E50S225	500VAC semiconductor 225 amp
E50S275	500VAC semiconductor 275 amp
E50S325	500VAC semiconductor 325 amp
E50S400	500VAC semiconductor 400 amp
E50S450	500VAC semiconductor 450 amp
E50S600	500VAC semiconductor 600 amp
E50S800	500VAC semiconductor 800 amp

HIGH SPEED SEMI-CONDUCTOR PROTECTION FUSES continued

Cooper Bussman

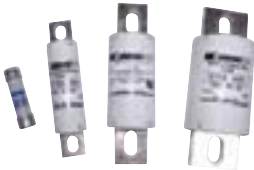
Description Low arc voltage and low energy let through, excellent cycling capability and dc performance, used with finger safe holders/blocks, low watts loss in a compact size

Ratings **Volts:** 500VAC/DC **Amps:** 5 – 1,600

Cross reference E50S (Edison)
A50P (Gould Shawmut)
L50S (Littlefuse)

Part #	Description
FWH-50B	500VAC semiconductor fuse 50A
FWH-60B	500VAC semi-onductor fuse 60A
FWH-80A	500VAC semiconductor fuse 80A
FWH-100A	500VAC semiconductor fuse 1000VAC, 800VDC
FWH-125A	500VAC semiconductor fuse 125A
FWH-175B	500VAC semiconductor fuse 175A
FWH-200A	500VAC semiconductor fuse 200A
FWH-200B	500VAC semiconductor fuse 200A

Part #	Description
FWH-225A	500VAC semiconductor fuse 225A
FWH-250A	500VAC semiconductor fuse 250A
FWH-275A	500VAC semiconductor fuse 275A
FWH-300A	500VAC semiconductor fuse 300A
FWH-325A	500VAC semiconductor fuse 325A
FWH-350A	500VAC semiconductor fuse 35A
FWH-400A	500VAC semiconductor fuse 400A
FWH-450A	500VAC semiconductor fuse 450A



Type E70S

Description Very fast-acting semiconductor fuse

Ratings **Volts:** 700VAC/DC **Amps:** 5 – 1,200

Cross reference FWP (Bussman)
A70P (Gould Shawmut)
L70S (Littlefuse)

Part #	Description
E70SF15	700VAC semiconductor 15 amp
E70SF20	700VAC semiconductor 20 amp
E70S35	700VAC semiconductor 35 amp
E70S40	700VAC semiconductor 40 amp
E70S60	700VAC semiconductor 60 amp
E70S90	700VAC semiconductor 90 amp

Part #	Description
E70S125	700VAC semiconductor 125 amp
E70S200	700VAC semiconductor 200 amp
E70S225	700VAC semiconductor 225 amp
E70S350	700VAC semiconductor 350 amp
E70S600	700VAC semiconductor 600 amp
E70S800	700VAC semiconductor 800 amp

Cooper Bussman

Description High speed cylindrical fuses are suitable for the protection of AC and DC Drives, power converters/ rectifiers and variable speed drives. They are available as gR and aR operating class.

Ratings **Volts:** 700VAC/DC **Amps:** 5 – 1,200

Cross reference EE70S (Edison)
A70P (Gould Shawmut)
L70S (Littlefuse)

Part #	Description
FWP-40A	700VAC semiconductor fuse 40 amp
FWP-50A	700VAC semiconductor fuse 50 amp
FWP-60A	700VAC semiconductor fuse 60 amp
FWP-70A	700VAC semiconductor fuse 60 amp
FWP-80A	700VAC semiconductor fuse 80 amp
FWP-90A	700VAC semiconductor fuse 90 amp
FWP-100A	700VAC semiconductor fuse 100 amp

Part #	Description
FWP-100B	700VAC semiconductor fuse 100 amp
FWP-125A	700VAC semiconductor fuse 125 amp
FWP-150A	700VAC semiconductor fuse 150 amp
FWP-200A	700VAC semiconductor fuse 200 amp
FWP-300A	700VAC semiconductor fuse 300 amp
FWP-600A	700VAC semiconductor fuse 600 amp
FWP-800A	700VAC semiconductor fuse 800 amp

FUSE HOLDERS

Ferraz Shawmut

- UltraSafe™
- Non-indicator type
- Finger safe to an IP20 grade of protection under IEC standards
- Facilitates quick and easy fuse changes
- Can be mounted to 35 mm DIN rail
- Tough and durable polyamide body
- AC voltage rating 600
- DC voltage rating 600



USCC2



USCC3

Part #	Description
US6J2	60 amp, 2 pole, for Class J fuses
US6J3	60 amp, 3 pole, for Class J fuses

Part #	Description
USCC2	60 amp, 2 pole, for Class CC fuses
USCC3	60 amp, 3 pole, for Class CC fuses

Bussman

- Non-indicator type
- Finger safe to an IP20 grade of protection under IEC Standards
- Facilitates quick and easy fuse changes
- Can be mounted to 35 mm DIN rail
- Tough and durable polyamide body
- AC voltage rating 800
- DC voltage rating 1000

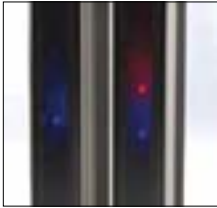
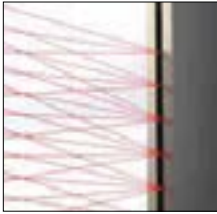


CHM2D



CHM3D

Part #	Description
CHM2D	30 amp, 600v, 2 pole, for midget fuses
CHM3D	30 amp, 600v, 3 pole, for midget fuses



Tri-Tronics



INVISIGUARD SPECIFICATIONS

Optical

Operating range	0–11.5ft (0–3.5 m)
Protection height	71.547" (1,817mm)
Lowest beam	22mm (0.867")
Beam spacing	2.283" (58mm)
Vertical displacement at 0mm	12 mm
Horizontal displacement at 0mm	6 mm
Horizontal displacement at 25 mm	15 mm
Horizontal displacement at 50 mm	25 mm
Horizontal displacement at 75 mm	37 mm
Longitudinal angular displacement at 0mm	25°
Transversal angular displacement at 0mm	60°
No. of optical elements	32
No. of beams at 32 elements	154 criss-cross beams
Max. ambient light	100,000 lux

Mechanical

Dimensions (W x H x L)	12 mm x 15.85 mm x 1,903 mm
Housing material	Aluminum
Surface protection	Anodized, natural color
Enclosure rating	IP65
Mounting holes required	No less than 4
Operating temperature range	-20°C to +60°C

Electrical

Supply voltage	11–40VDC
Typ. current consumption at 24 VDC	65mA
Output	Push-pull, short circuit protected
Output logic polarity	High/low selectable
Max. output load	100mA
Typ. response time at 32 elements	70 ms

General

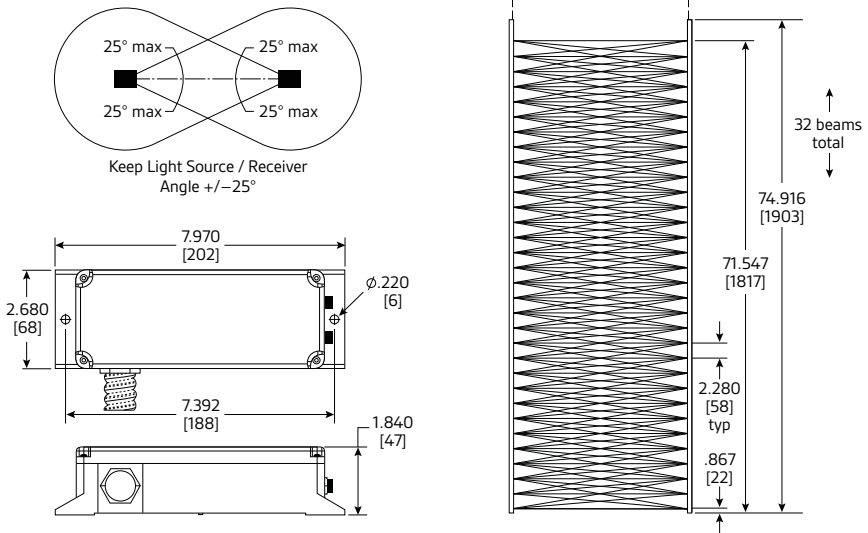
Synchronization	Optical
Cable length	5 m
Material	PUR, AWG26
Edge connection	M8 (3-pin)
Highest and lowest beam standard	EN-81-70: 5.2.4
EMC emission	EN 12015: 2014
EMC immunity	EN 12016: 2013
Vibration	IEC 60068-2-6:2007
Shock	IEC 60068-2-27:2008
Cable durability	IEC 60227-2:2003
Composite temperature/humidity cyclic test	IEC 60068-2-28: 1974
IP rating	IEC 60529: 2001
RoHS	2011/65/EU
Certificates	CE, CSA B44.7 ASME A17.5

Power supply

- Enclosure rating IP65
- Rated voltage 20 to 265VAC/VDC, single phase, 50/60 Hz
- Fuse rating 500 mA
- Output voltage 24VDC @ 100ma +/-10%
- Contact rating 10A/250VAC/8A @ 28VDC
- Certificates CE, CSA B44.7 ASME A17.5
- EMC emission / EMC immunity EN 12015:2014, EN 12016:2013
- Vibration and shock IEC 60068-2-6:2007, IEC 60068-2-27:2008,
IEC 60227-2:2003
- Fire protection UL 94 5VA
- Housing material ABS case, PC clear cover
- Operation temp range -20°C to +60°C
- Obstruction buzzer Standard
- Relay test button Standard
- Nudge relay Optional

Model	Description
IG-R	InvisiGuard System with PSC-UR universal power supply
IG-RN	InvisiGuard System with PSC-URN nudging universal power supply
IG-RDC	InvisiGuard System without universal power supply

DIMENSIONS





EDGE SPECIFICATIONS

Light Beam and Receiver Arrays

Size (W x L x D)	1.57" x 81.125" x .75" (39.7 mm x 2,061 mm x 19 mm)
Cable length	18 ft (5,486 mm) Connectorized at both ends
Distance between bottom of receiver housing and lowest detector	2" (50.8 mm)
Distance between bottom of receiver housing and highest detector	64" (1,625 mm)
Range	Up to 12 ft (3,658 mm)
Number of light beams	64 (2 per detector operating in a redundant mode) Rated at 100,000 lux
Operating voltage range of arrays	12–30VDC
Maximum allowable installed misalignment	+/-20° @ 3 ft.
Response time	50 milliseconds nominal 75 milliseconds max
Maximum current draw	130mA total of both arrays
Ratings	NEMA 1 for Standard Leading Edge NEMA 4, IP67 for waterproof arrays
Diagnostic indicators	
Receiver array indicators	Top red LED: DSA™ indicator (Dynamic Sensitivity Adjustment) Lower red LED: output status indicator
Light beam array	Red LED: flash rate indicator Flash rate denotes operation status Exceeds ADA American Disability requirements

Power Supplies

Size (H x W x D)	Non-metallic: 3.25" x 9.2" x 5" (82.5 mm x 233.1 mm x 127 mm) Non-metallic waterproof, NEMA 4: 3" x 9.375" x 6" (76.2 mm x 238.13 mm x 152.4 mm)
Voltage requirements	120 or 240VAC power supply
Power consumption	5VA maximum
Plug-in outlet relay	Master control relay: SPDT action with contacts rated up to 10A @ 250VAC or 30VDC. Relay de-energizes when obstruction is detected.
Models equipped with Nudge-1 PC assembly:	
Accessory relay switch selectable options	Option 1: Functions as a nudging relay that energizes after adjustable delay Option 2: Functions as a redundant relay i.e., master control relay and accessory relay operate simultaneously
Buzzer options	On/Off switch selectable. Energizes after adjustable delay
Diagnostic indicators	Main output status indicator Nudge relay status indicator on nudge board DC power ON indicator
Nudge time out	Adjustable from 5 to 45 seconds
Power supply enclosures	NEMA 1 for non-metallic NEMA 4, IP67 non-metallic for W Series
Operating temperature range	-40° to +158°F (-40C to 70C)
Operating humidity range	Up to 95% relative humidity at 104°F (40C)

Complete Standard Systems	Power Supply Case		Nudging		Parting		
	Part #, Description	PSC-4 / PSC-4N	PSC-5W / PSC-5NW	Yes Nudge*	No	Slide Parting	Center Parting
EDGE-4	X				X	X	X
EDGE-4VS (vandal resistant, fast mount)	X				X	X	
EDGE-4VC (vandal resistant, fast mount)	X				X		X
EDGE-4N	X		X		X		X
EDGE-4NVS (vandal resistant, fast mount)	X		X		X		
EDGE-4NVC (vandal resistant, fast mount)	X		X				X

Complete Waterproof Systems						
EDGE-5W		X		X	X	X
EDGE-5WVS (vandal resistant, fast mount)		X		X	X	
EDGE-5WVC (vandal resistant, fast mount)		X		X		X
EDGE-5NW		X	X		X	
EDGE-5NWVS (vandal resistant, fast mount)		X	X		X	
EDGE-5NWVC (vandal resistant, fast mount)		X	X			X

Leading Edge Arrays Less-Power Supply <i>Note: Accessory Connector not included</i>				
EDGE-6				X X
EDGE-6VS (vandal resistant, fast mount)				X
EDGE-6VC (vandal resistant, fast mount)				X
EDGE-6W (waterproof)				X X
EDGE-6WVS (waterproof, vandal resistant, fast mount)				X
EDGE-6WVC (waterproof, vandal resistant, fast mount)				X

Accessory Connectors <i>Wire direct to door operator or existing power supply for EDGE-6</i>	
ECl-1	Leading edge array interface cable NPN
ECl-3	Leading edge array interface cable NPN, use with GAL MOVFR
ECl-4	Leading edge array interface cable NPN Sinking/PNP Sourcing, N.C.Opto Isolated
ECl-5	Leading edge array interface cable NPN Sinking/PNP Sourcing, N.O.Opto Isolated

All standard models include the EGAC-4 kit, which consists of mounting brackets and hardware.

All VS/VC models include the EGAC-6 kit.

* The NUDGE-1 PC Assembly can be field installed on any model power supply.

Warning

Tri-Tronics elevator door control products are designed for elevator door protection only. Our edges are not designed to be used in applications such as top of elevator cab protection, or in residential elevators in conjunction with scissor gates. Additionally, they are not designed to be used as machine safety light curtains commonly found in industrial robotic areas, or around machines that could pinch, grab, or cut person or persons in close proximity.



6940AR1 Universal Spirator
5" diameter, w/cable



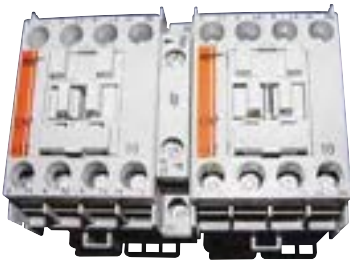
RDB716
Rubber Door Bumper
1" diameter x 3/4" long



RDB8023
Rubber Door Bumper
Stick-on, 13/16" square,
w/1/2" surface x 5/16 thick, 12/pkg



S-2XT20AC100V2A2B



CAU7-12 (AC coil)



CAU7-12E (DC coil)

Door-open/Door-close Relays

MITSUBISHI

S-2XT20AC100V2A2B

- Rated 18 amps, 5HP @ 208/240V
- Includes 2N/O, 2N/C aux contacts on each side
- Compact dimensions: 3.1"H x 3.8"W x 4.3"D
- Available AC coil voltages: 120, 208, 230

SPRECHER+SCHUH

CAU7-12 (AC coil)

- Dimensions: 3.2"H x 3.9"W x 3.2"D
- Available AC coil voltages: 24, 48, 120, 208, 480, 600

CAU7-12E (DC coil)

- Dimensions: 3.2"H x 3.9"W x 4.3"D
- Available DC coil voltages: 12, 24, 48, 110, 220

Note: Extra aux contacts can be added to the top and sides of these S+5 Door-open/Door-close relays.

Part #	Max Motor Amps	HP@ 200V	HP@ 230V	HP@ 460V	Notes
CAU7-12-22-	12	3	3	7.5	Includes 2N/O, 2N/C aux, specify additional and aux AC coil voltage
CAU7-12E-22-	12	3	3	7.5	Includes 2N/O, 2N/C aux, specify additional aux and DC coil voltage

Provide coil voltage to complete part number.

STRUTHERS-DUNN

A275KXX91- _

- Rated 9.6 inductive (motor) amps
- 2HP @ 208V, 3HP @ 240-600V
- Includes 4 Form C aux contacts
- Dimensions: 3.6" h x 3.0" w x 2.75" d
- Available coil voltages: 24VAC, 120VAC, 208VAC, 240VAC, 48VDC, 115/125VDC



A275KXX91- _

A575KXX90- _

- Rated 17.5 inductive (motor) amps
- 5HP @ 2 40V, 7.5HP @ 480 - 600V
- Includes 2 Form C aux contacts.
- Dimensions: 4.5" h x 5.25" w x 3.0" d
- Available coil voltages: 24VAC, 120VAC, 208VAC, 240VAC, 48VDC, 115/125VDC



A575KXX90- _

Door Rollers



9838351 Dover Door Pick-up Roller, 1-5/8" x 3/4"



9875426 Dover Upthrust Roller, 5/8" ID, 13/16" OD, 1-1/2" wide. Used on high pocket and low pocket hanger assembly



R8858G01 Westinghouse Hanger Roller, 3.375" OD x .705" with 6204 bearing



Adjustable Nylon Door Gibs, Roller Bearing Gibs and Rail Gibs

CHASSIS

Model	Part #	Description
D-3	10B26P02	1" wide, 8 gib adjustments
D-4	10B26P01	1-1/8" wide, 10 gib adjustments
D-5	10B25P01	1-1/4" wide, 12 gib adjustments

DOOR GIBS

Model	Description
DGCECD4C	1-1/8" wide chassis w/ 15/32" wide white nylon gib, 10 adjustments
DGCECD5C	1-1/4" wide chassis w/ 15/32" wide white nylon gib, 12 adjustments
DGCEHD4C	1-1/8" wide chassis w/ 17/32" wide green nylon gib, 10 adjustments
DGCEHD5C	1-1/4" wide chassis w/ 17/32" wide green nylon gib, 12 adjustments
DGCETD4C	1-1/8" wide chassis w/ 1/2" wide blue nylon gib, 10 adjustments
DGCETD5C	1-1/4" wide chassis w/ 1/2" wide blue nylon gib, 12 adjustments
DGCEMGD4C	1-1/8" wide chassis w/ 7/16" wide black nylon gib, 10 adjustments
DGCEMGD5C	1-1/4" wide chassis w/ 7/16" wide black nylon gib, 12 adjustments
EP-GBBR (Fire Gib)	Roller bearing door gib for extended door operation life <ul style="list-style-type: none"> • Eliminates door side play • Specify chassis width when ordering: 1", 1-1/8", or 1-1/4"
EP-BRD3	1"
EP-BRD4	1-1/8"
EP-BRD5	1-1/4"



A3-002663 EMI-III LH Interlock



A3-002664 EMI-III LH Interlock

Waupaca Elevator Company

INTERLOCKS

- Positive safety interlock
- Adaptable to all swing doors
- UL Approved
- Compact, no protruding armature
- Available in AC and DC voltages, right and left hand models
- 10-1/4" H x 2-7/8" W x 2-1/4" D

Part #	Description
A3-002663	EMI-III left-hand
A3-002664	EMI-III right-hand
A4-002371	EMI-IV left-hand
A4-002373	EMI-IV right-hand

GAL – We only sell genuine GAL parts

MOVFR Door Operators

Part #	Description
MOVFR-04L	SS-DS 35" – 39" D.O MOVFR II, 220V 13" left hand
MOVFR-04R	SS-DS 35" – 39" D.O MOVFR II, 220V 13" right hand
MOVFR-05L	SS-2S 40" – 44" D.O MOVFR II, 220V 13" left hand
MOVFR-05R	SS-2S 40" – 44" D.O MOVFR II, 220V 13" right hand
MOVFR-06L	SS-2S 45" – 48" D.O MOVFR II, 220V 13" left hand
MOVFR-06R	SS-2S 45" – 48" D.O MOVFR II, 220V 13" right hand
MOVFR-3N3	SS-CP 40" – 49" D.O. MOVFR II, 220V, 15"

ACCESSORIES

Part #	Description
DO-CHIP	Eprom chip for GAL door operator
DRV-0009N	GAL door operator parameter unit, hand held
DRV-0081N	GAL door operator drive 230v
ECI-3	GAL interface cable with WAGO connector for Tri-Tronics Leading Edge
MOVFR-0002N	Board. MOVFR and MOVFR II input PC
MOVFR-0099N	GAL door operator drive 120v
MOVFR-0012N	Board. MOVFR main PC, with (3) input PC board
MOVFR-0075AN	MOVFR board. Replaces MOVFR-0069N
MOVFR-ADPT	GAL adapter for Tri-Tronics Edge-4
MOVFR-CONN	Connector kit. IG-RDC to MOVFR

REPLACEMENT PARTS

Part #	Description
CL5-0001L	Closer, SS 22-27 DO and CP 24-55 DO spring
CL5-0001R	Broken arm spring assembly, RH
CL5-0051N	Spring and rod assembly. For door closer
CLU1-0036N	Clutch roller. 13/16" diameter. Used on clutch models CWZ-R, LW, LW-LOW, LW-LRC, LWZ-1, LWZ-1-LOW, LWZ-1-LRC, LWZ-1-LRC
CLU1-0037N	Clutch roller. 15/16" diameter. Used on clutch models L, L-LOW
CLU3-0259L	Locking assembly, LWZ-1 clutch SS 40-44 DO. 2SP 24-29 DO. and 40-44 DO.CP 50-59 DO
CLU3-0259R	Locking assembly, LWZ-1 clutch SS 40-44 DO. 2SP 24-29 DO. and 40-44 DO.CP 50-59 DO
CLU9-0003L	Clutch. LWZ-2 8" link w/24" rod, SS and 2SP 35-39 DO/CP 50-59 and 68-74 DO/2SCP 70-74 DO/3SP 40-44 DO
CLU9-0003R	Clutch. LWZ-2 8" link w/24" rod, SS and 2SP 35-39 DO/3SP 40-44 DO
CLU9-0004L	Clutch. LWZ-2 12" link w/24" rod, SS 45-48 DO/2SP 45-52 DO/2SCP 90-106
CLU9-0004R	Clutch. LWZ-2 12" link w/24" rod, SS 45-48 DO/2SP 45-52 DO/2SCP 90-106 DO
CLU9-0049L	LH, CAM. LWZ-2 standard locking
CLU9-0049R	RH, CAM. LWZ-2 standard locking
CLU9-0084N	Clutch link. 6" CL standard
CLU9-0108N	36" Clutch zone locking rod
CLU9-0113N	Clutch roller. 1-1/4" diameter. Used on clutch model LWZ-2

continued

REPLACEMENT PARTS continued

Part #	Description
CLU9-0115L	Locking assembly (left). LWZ-2 clutch zone 36" rod
CLU9-0115R	Locking assembly (right). LWZ-2 clutch zone 36" rod
CONT-0001N	Stationary carbon contact for intermediate relay. 3/8"-dia. carbon contact on threaded hex stud w/nut
HH1-0024N	Eccentric sheave. Used on hanger models, type A and HA
HH1-0025N	Door hanger roller kit. AKA NH roller, 3-1/4" diameter. Includes wiper and hardware
HH1-0026N	Wiper/oiler/cleaner. For HH1-0025N NH roller
HH1-0105L	Door hanger assembly LH sheave, 4.125 CL bolt CL with top safety retainer
HH1-0105R	Door hanger RH sheave, 4.125 CL 3/8-16, with top safety retainer
HH3-0042L	L/H tension pulley assembly. With nylon wheel
HH3-0042R	R/H tension pulley assembly. With nylon wheel
HH10-0041N	Type OS hanger roller kit. 2-1/4" diameter
HWBR-0008N	Car door clutch bearing kit. 7/8" shoulder
HWBS-0001N	Nylon liner bushing. 1/4" id (4L2-FF snap-in type 7)
INS-0025N	Insulator. For lower stationary contact on INT-5-6
INT-2-6	MO upper linkage rod. Does not include link pin and retainer clip
INT-2-12	Rod. Lower linkage MO 19"INT-2-12
INT1H-0002L	MOH interlock assembly, L/H
INT1H-0002R	MOH interlock assembly, L/H
INT1H-0003R	MOH interlock assembly, R/H
INT1H-0013L	L/H MO interlock switch housing and contacts
INT1H-0013R	R/H MO interlock switch housing and contacts
INT1H-0016L	L/H MO interlock keeper assembly
INT1H-0016R	R/H MO interlock keeper assembly
INT1H-0017N	Contact. For MO keeper bridging block
INT1H-0018N	Upper MO interlock, link assembly. 10-1/2" x 1/2" x 1/8". Includes snap pin and 1/4" ID nylon liner bushings
INT1H-0022L	Type MO/MOH pickup roller assembly, L/H. Includes cast alum. mounting base, release rocker and roller releases
INT1H-0022R	Type MO/MOH pickup roller assembly, R/H. Includes cast alum. mounting base, release rocker and roller releases
INT1H-0023N	Pickup roller with shaft. For MO interlock
INT1H-0034N	MO interlock emergency drop key
INT1H-0035N	Tomahawk jumper. For MO interlock assembly
INT1H-0036L	L/H MO and MOCP-KT contact kit
INT1H-0036R	RH MO and MOCP-KT contact kit
INT2H-0007N	MOCP interlock switch assembly
INT2H-0017R	R/H MOCP-KT-R interlock contact kit
INT4-0001N	Swing door keeper. Surface mount for type M/N/SM interlock
INT4-0004N	Slide door keeper
INT5-0014N	Upper M interlock contact kit. Used on interlock model M. For use on slide manual hatch and swing manual hatch, doors, all sizes
INT5-0015N	Lower M interlock contact kit. Used on interlock models CSM, M, SM. For use on slide manual hatch and swing manual hatch, all sizes
INT5-0016N	Upper stationary contact assembly. For M interlock
INT5-0017N	Lower stationary contact assembly. For M interlock
INT5-0018N	Bridging contact. For type M/N/NHA interlock

REPLACEMENT PARTS continued

Part #	Description
INT5-0019N	Bridging contact. For type M/N swing door keeper. Used on CSM, DM, M, N. For use on slide manual hatch and swing manual hatch, all sizes
INT5-0025N	Arm and assembly. Used on SN and SN-Z lock and contact. 4-1/2" CL arm and roller assembly for M/N/SM interlock and SN/SN-Z lock and electric contact used on swing doors with surface mounted lock. Interlock models: DM, DM-MH- M, N NHA, SDM, SM, SN, SN-Z W, WP, WX
INT5-0029N	Jumper. For type M/N interlocks
INT5-0030N	M/N interlock key
INT5-0042N	Universal jumper. For type M/N/MO interlocks
INT22-0019N	Upper contact kit. For type N/NHA interlock. Do not use as replacement for type M interlocks
INT22-0020N	Lower contact kit. For type N interlock. Do not use as replacement for type M interlocks
INT22-0021N	Upper stationary contact assembly. For N interlock
INT22-0022N	Lower stationary contact assembly. For N/NHA interlock. Also used on SN-Z and SN-C lock and contact
KS1-0096V	Access up/down, vertical. Round, black, (1612 key)
LC-0021L	Movable finger contact, short lead 3/4" rivet L/H
LC-0021R	Movable finger contact, short lead 3/4" rivet R/H
LC-26-9	Silver stationary contact assembly
OP10-0032N	Operator pulley stop
SW1-0044N	Model G gate switch
SW1-0001N	Model G gate switch assembly with bracket
SW5-0001N	Type LS limit switch. 1 NC contact
SW1-0003N	Contact assembly. For Type G gate switch
SW1-0007N	Gate switch roller and bolt. Used on switch models G, SW2 (VG gate switch)



MOVFR-R05L
Door operator, left hand door
SS-2S 40" – 44" D.O. MOVFR II, 220V 13"



MOVFR-06R
Door operator, right hand door
SS-2S 45" – 48" D.O. MOVFR II, 220V, 13"



MOVFR-3N3
Door operator, center parting doors
CP 40" – 49", D.O. MOVFR II, 220V, 15"

GAL MOVFR II DOOR OPERATORS

The fastest, easiest, quietest, and most dependable door operators ever available from GAL, now in stock at Access Elevator & Electric Supply. Order before 4:00 pm PST for same day shipping.

Please call for details.

- Door control with built-in diagnostics
- Plug and Play door protection
- Regulated speed via motor closed loop feedback
- LED indication of all inputs and outputs
- Test switches for open, close, nudging and heavy door
- Inputs: Door Open, Door Close and Nudging
- Input voltage: universal, 24-300VAC or VDC
- Motor: Heavy duty, 3-phase, 1/2 HP
- Non-contact optical couplers
- Supply circuit: 200-230VAC, 1-phase, 500VA min.

13" Header Height, Single Speed, Two Speed, 220VAC

Door Operator Assembly		Door Style and Opening		
Model	OEM#	Door Hand	Single Speed	Two Speed
DO-MOVFR02L	OP99-0002L	Left	2 5" – 29"	
DO-MOVFR02R	OP99-0002R	Right		
DO-MOVFR03L	OP99-0003L	Left	30" – 34"	30" – 34"
DO-MOVFR03R	OP99-0003R	Right		
DO-MOVFR04L	OP99-0004L	Left	35" – 39"	35" – 39"
DO-MOVFR04R	OP99-0004R	Right		
DO-MOVFR05L	OP99-0005L	Left	40" – 44"	40" – 44"
DO-MOVFR05R	OP99-0005R	Right		
DO-MOVFR06L	OP99-0006L	Left	45" – 48"	45" – 48"
DO-MOVFR06R	OP99-0006R	Right		

15" Header Height, Single Speed, Center Parting, 220VAC

Door Operator Assembly		Door Style and Opening
Model	OEM#	Single Speed Center Parting
OP100-0001N	OP99-0002L	30" – 33"
DO-MOVFR-3N2	OP99-0002R	34" – 39"
DO-MOVFR-3N3	OP99-0003L	40" – 49"

MOVFR II door operator includes:

- Door drive arm
- Nudging and gate switch
- Mounting hardware OEM# OP2-0050N

Optional: Model DO-ECHIP, OEM# DPPC-0001N

US enabling (IC) chip simplifies the door operator reopening circuits for Formula Systems, Scanguard, and Tri-Tronics infrared light curtain detectors.

Refer to wiring diagram 8032 for connections (see next page)

INSTRUCTIONS FOR G.A.L. PARAMETER UNIT

CAUTION: To transfer data from one drive to another, user must READ (COPY) from the first drive.
 HOW TO READ (COPY) FROM THE DRIVE: Press UP Arrow, press READ, wait for the completed signal from the display.
 HOW TO WRITE (DOWNLOAD) TO THE DRIVE: Press SET, press UP Arrow, press WRITE, wait for the completed signal from the display.
 HOW TO CHANGE PARAMETERS: Press SET, enter par. number, press READ, enter a new value, press WRITE, wait for the completed signal from the display.

CLOSING	PARAMETER #	RANGE	DEFAULT VALUE						OPENING	PARAMETER #	RANGE	DEFAULT VALUE						
			STANDARD		WATERPROOF		STANDARD					WATERPROOF						
			C/P	S/O	C/P	S/O	C/P	S/O				C/P	S/O					
MAX. CLOSE SPEED	0	0-30	30	30	30	30	30	30	21	0-6	0.8	1.0	1.4	1.8	0.8	1.0	1.4	1.8
HOLDING TORQUE	1	11	0-30	3	3	3	3	3	22	0-400	5	5	5	5	5	5	5	5
HOLDING SPEED	2	12	0-400	2	2	2	1.5	1.5	23	0-400	31	36	45	23	24	12	30	18
CLOSE TORQUE	3	13	0-400	225	225	173	173	173	24	0-400	14	14	20	20	10	15	15	15
HIGH SPEED HSC	4	14	0-400	23	12	19	10	14	7	12	8	8	8	8	8	8	8	8
FINAL SPEED FSC	5	15	0-400	4	4	5	3	3	26	0-320	8	8	4	4	8	8	8	8
NUDGING SPEED	6	16	0-400	8	8	9	5	5	27	0-320	8	8	10	10	9	10	10	10
ACCELERATION TIME	7	17	0-320	9	8	6	7	7	28	0-32	8	8	8	8	8	8	8	8
DECELERATION TIME	8	18	0-320	6	8	10	10	17	29	25	25	25	25	25	25	25	25	25
STALL REV FORCE	9	19	0-2	1.4	1.4	1.4	1.4	1.4	30	0-100	100	100	100	100	100	100	100	100
OVERLOAD	99	99	0-5	3	3	3	3	3	31	0-10	10	10	10	10	10	10	10	10

C/P = CENTER PARTING DOOR REG = REGULAR DOOR
 S/O = SIDE OPENING DOOR S/O = HEAVY DOOR
 ■ TO LOWER TORQUE, INCREASE TORQUE PARAMETER VALUE

RECOMMENDED FUSE SIZES

200/230VAC IF 230VAC DRIVE IS USED & 500 VA MIN.

100/115VAC IF 115VAC DRIVE IS USED & 500 VA MIN.

4 AMP SLOW BLOW FUSES FOR 230VAC DRIVE (5 AMP MAX.)

8 AMP SLOW BLOW FUSES FOR 115VAC DRIVE (12 AMP MAX.)

250VAC LINE

L1

L2

EGND

GS

GS1

U

V

W

CONNECT TO GAL PARAMETER UNIT

OPENING AND CLOSING

PARAMETER #	RANGE	DEFAULT VALUE					
		STANDARD		WATERPROOF			
		C/P	S/O	C/P	S/O		
QUICK STOP ON REV	21	21	0-6	0.8	1.0	1.4	1.8
SLOW START S/S	22	22	0-400	5	5	5	5
HIGH SPEED HSO	23	33	0-400	31	36	45	23
MEDIUM SPEED MMS	34	34	0-400	14	14	20	20
FINAL SPEED FSD	35	35	0-400	3	3	5	2
ACCELERATION TIME	26	36	0-320	8	8	4	4
DECLARATION TIME	27	37	0-320	8	8	10	10
SLOW SPD TORQUE	28	38	0-32	8	8	8	8
OPEN TORQUE	29	39	0-400	120	100	100	100

ALL TERMINALS ARE PLUGGABLE (SEE NOTE 1)

RELAY CONTACTS ARE RATED AT 10 AMP, 250 VAC

CONNECT TO ANY VOLTAGE SOURCE FROM 24-230 VOLTS AC OR DC, 30mA MIN. (OPTIONAL)

CONTROL RELAYS MUST HAVE THE SAME COMMON AND RELAY HOLD VOLTAGE MUST BE FROM 24V TO 230V AC OR DC.

SUITABLE FOR USE ON A CIRCUIT CAPABLE OF DELIVERING NOT MORE THAN 5000 RMS SYMMETRICAL AMPERES 230 VOLTS MAXIMUM

DRIVE OVERLOAD FACTORY SET AT 2.5A

METHOD 1 CONNECTION METHODS

CONNECT TO ANY VOLTAGE SOURCE FROM 24-230 VOLTS AC OR DC, 30mA MIN. (OPTIONAL)

CONNECT TO G.A.L. CERTIFIED LIGHT DETECTOR EDGES

METHOD 2 CONNECTION METHODS

CONNECT TO ANY VOLTAGE SOURCE FROM 24-230 VOLTS AC OR DC, 30mA MIN. (OPTIONAL)

CONNECT TO G.A.L. CERTIFIED LIGHT DETECTOR EDGES

INFRARED LIGHT CURTAIN CONNECTIONS

TYPE	MFG.	TL (COM)		TR (COM)		CONNECTION BETWEEN TL & TR
		TL	TR	TL	TR	
DPS	PARALLA SYSTEMS	BLU	BRN	BLU	BRN	NONE
		BRN	BLU	BRN	BLU	NONE
DPT	THE TRONICS	RED	BLU	ORG	BLU	To "S/P"
		RED	WHI	BLK	BLU	NONE

NOTES:

1-Heavy lines represent connections from elevator controller to door operator pc board

2-Make sure that the enable chip U5 is inserted into the socket as shown.

WARNING:

All equipment must be installed and adjusted to meet federal, state, and local codes.

To prevent an electric shock, the flexible metallic conduit must be fastened firmly to the motor and the control box. The control box must be grounded.

INFRARED LIGHT CURTAIN CONNECTIONS

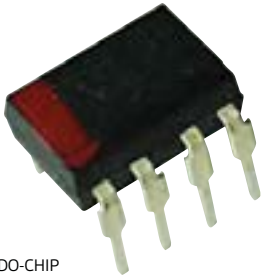
TYPE	MFG.	TL (COM)	TR (COM)	CONNECTION BETWEEN TL & TR
DPS	PARALLA SYSTEMS	BLU	BRN	NONE
		BRN	BLU	NONE
DPT	THE TRONICS	RED	BLU	To "S/P"
		RED	WHI	NONE

G.A.L. MANUFACTURING CORP.
 50 E. 1534 STREET BROOK, N.Y. 10401
 TEL. 718 292 9000 FAX 718 292 3034

MOVFR DOOR OPERATOR WITH MOVFR II LIMIT CONTROL CONNECTION DIAGRAM

DATE 1-24-05 REV M
 DOC. No. 8032 12/09

ACCESSORIES



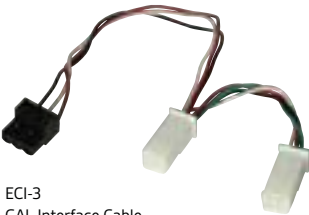
DO-CHIP
Eprom Chip for GAL Door Operator



DRV-0009N
GAL Door Operator Parameter Unit
Hand held



DRV-0081N
GAL Door Operator Drive 230v



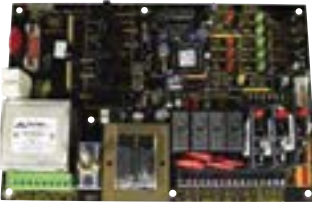
ECI-3
GAL Interface Cable
With WAGO connector for Tri-Tronics
Leading Edge



MOVFR-0002N
Board
MOVFR and MOVFR II input PC



MOVFR-0099N
GAL Door Operator Drive 115v



MOVFR-0012N
Board
MOVFR main PC, with (3) input PC board



MOVFR-0075AN
MOVFR Board
Replaces MOVFR-0069N



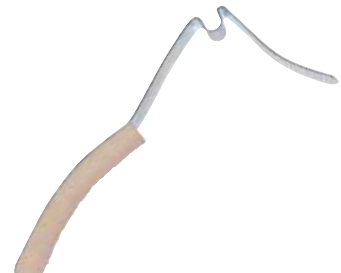
MOVFR-ADPT
GAL Adapter for Tri-Tronics Edge-4



MOVFR-CONN
Connector Kit
IG-RDC to MOVFR



HH1-0025N
Door Hanger Roller Kit
AKA NH roller, 3-1/4" diameter
Includes wiper and hardware



HH1-0026N
Wiper/Oiler/Cleaner
For HH1-0025N NH roller



HH10-0041N
Type OS Hanger Roller Kit
2-1/4" diameter



INT5-0016N
Upper Stationary Contact Assembly
For M interlock



INT5-0017N
Lower Stationary Contact Assembly
For M interlock



INT22-0021N
Upper Stationary Contact Assembly
For N interlock



INT22-0022N
Lower Stationary Contact Assembly
For N/NHA interlock
Also used on SN-Z and SN-C lock and contact



INT5-0018N
Bridging Contact
For type M/N/NHA interlock



INT5-0019N
Bridging Contact
For type M/N swing door keeper,
Used on CSM, DM, M, N
For use on slide manual hatch and swing
manual hatch, all sizes



INT5-0014N
Upper M Interlock Contact Kit
Used on interlock model M
For use on slide manual hatch and swing
manual hatch, doors, all sizes



INT5-0015N
Lower M Interlock Contact Kit
Used on interlock models CSM, M, SM
For use on slide manual hatch and swing
manual hatch, all sizes



INT22-0019N
Upper Contact Kit
For type N/NHA interlock
Do not use as replacement for type M interlocks



INT22-0020N
Lower Contact Kit
For type N interlock
Do not use as replacement for type M interlocks



INT1H-0016L
L/H MO Interlock Keeper Assembly



INT1H-0016R
R/H MO Interlock Keeper Assembly



INT2H-0015N
MOCIP Interlock Fixed Keeper
Includes bridging block contact assembly



INT1H-0017N
Contact
For MO keeper bridging block



CL5-0051N
Spring and Rod Assembly
For door closer



HH1-0042N
Eccentric Sheave
Used on hanger models, type A and HA



HH3-0042L
L/H Tension Pulley Assembly with nylon wheel



HH3-0042R
R/H Tension Pulley Assembly with nylon wheel



INT-2-6
MO Upper Linkage Rod
Does not include link pin and
retainer clip



INT4-0004N
Slide Door Keeper



INT4-0001N
Swing Door Keeper
Surface mount for type M/N/SM interlock



HWBS-0001N
Nylon Liner Bushing
1/4" id (4L2-FF snap-in type 7)



INT1H-0018N
Upper MO Interlock, Link Assembly
10-1/2" x 1/2" x 1/8"
Includes snap pin and 1/4" ID nylon
liner bushings



INT1H-0023N
Pickup Roller with Shaft
For MO interlock



INT1H-0013L
L/H MO Interlock Switch Housing
and Contacts



INT1H-0013R
R/H MO Interlock Switch Housing
and Contacts



INT1H-0022L
Type MO/MOH Pickup Roller Assembly, L/H
Includes cast alum. mounting base,
release rocker and roller releases



INT1H-0022R
Type MO/MOH Pickup Roller Assembly, R/H
Includes cast alum. mounting base,
release rocker and roller releases

GAL Accessories

GAL: Accessories



INT2H-0017R
Contact, Interlock R/H MOCP Contact Kit



INT2H-0007N
MOCP Interlock Switch Assembly



INT5-0025N
Arm and Assembly
Used on SN and SN-Z lock and contact
4-1/2" CL arm and roller assembly for M/N/SM interlock and SN/SN-Z lock and electric contact used on swing doors with surface mounted lock
Interlock models: DM, DM-MH- M, N NHA, SDM, SM, SN, SN-Z W, WP, WX



INT1H-0035N
Tomahawk Jumper
For MO interlock assembly



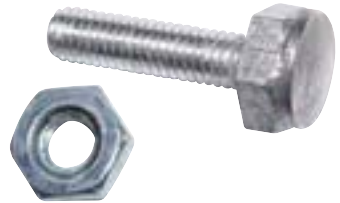
INT5-0029N
Jumper
For type M/N interlocks



INT5-0042N
Universal Jumper
For type M/N/MO interlocks



INS-0025N
Insulator
For lower stationary contact on INT-5-6



LC-26-9
Silver Stationary Contact Assembly



INT1H-0034N
MO Interlock Emergency Drop Key



INT5-0030N
M/N Interlock Key



OP10-0032N
Operator Pulley Stop



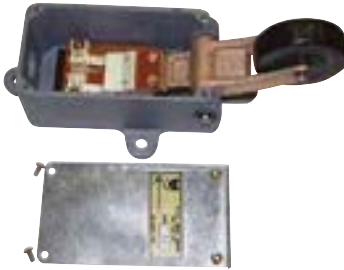
HWBR-0008N
Car Door Clutch Bearing Kit
7/8" shoulder



SW1-0044N
Model G Gate Switch



SW1-0001N
Model G Gate Switch Assembly
with Bracket



SW5-0001N
Type LS Limit Switch
1 NC contact



SW1-0003N
Contact Assembly
For Type G gate switch



SW1-0007N
Gate Switch Roller and Bolt
Used on switch models G, SW2
(VG gate switch)



CLU9-0113N
Clutch Roller
1-1/4" diameter
Used on clutch model LWZ-2



CLU1-0036N
Clutch Roller
13/16" diameter
Used on clutch models CWZ-R, LW,
LW-LOW, LW-LRC, LWZ-1, LWZ-1-LOW,
LWZ-1-LRC, LWZ-1-LRC



CLU1-0037N
Clutch Roller
15/16" diameter
Used on clutch models L, L-LOW



CLU9-0084N
Clutch Link
6" CL standard
Used on clutch models L-2, LW-2,
LW-2-LCR STD, LWZ-2, LWZ-2-LRC STD

RELAYS

IDEC	74
Aromat	95
Aromat / Omron	95
Line Electric	95
Misc. Relays	96
Omron	96
Relay Logic IBM	96
Siemens	97
Struthers-Dunn	97
Tyco Electronics	98
Tyco/Schrack	98



IDEC Relays

Setting the Industry Standard

Designed with attention to every detail, IDEC Relays go the extra mile in performance and dependability. RU relays are constructed with no internal wiring in a 100 percent automated robotic-assembly process, which for you means no weak solder points. Our RH relays are built to last and third-party tested at 500,000 operating cycles, even though UL approval only requires an electrical lifespan of 6,000 cycles.

When you want peace of mind, IDEC Relays are the only choice.

- Non-polarized, green LED (conforming to IEC requirements for non-hazardous situations) indicates power status
- Color marking plates allow you to organize your control panel
- Spot welding technology eliminates lead, the need for internal jumper wires, and solder joints
- Color check button differentiates AC and DC coils
- 100 percent robotic assembly ensures quality and precision

IDEC Relays are manufactured with precision and accuracy to ensure dependable performance you can always rely on. They may be small but when relays fail, it can be a large problem costing you time, money and your sense of security.

THE IDEC RELAY FAMILY: 60 YEARS OF DESIGN EXCELLENCE

IDEC was founded in 1945 and over the years has introduced many innovations to its family of relays. Thanks to technological advances, creative engineering and excellent customer support, our relays have continued to set a new standard as we strive to meet the needs of our customers. Global approvals and acceptance only prove how IDEC has made every effort to make its relays the best. Our vision to surpass our competitors in consistency, reliability and quality in the global market has become a reality.

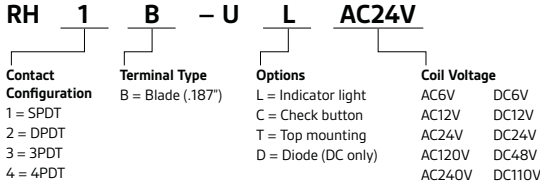
It's paying attention to the little things that makes a difference and at IDEC, that means going further to make sure you are satisfied. With that in mind, we continually strive to create products with features that will enhance your productivity and ensure your success.

IDEC. Smart Products. Simple Solutions.

IDEC RH Series Relays	75
IDEC RJ Series	77
IDEC RR Series Relays	78
IDEC RU Series Relays	80
IDEC RY Series Relays	81
IDEC Relay and Timer Sockets	82
DIN Rail	

IDEC RH SERIES – COMPACT POWER RELAYS

- Small, industrial 10A GP relay
- SPDT, DPDT, 3PDT, 4PDT contacts
- Options: Indicator LED, check-button and surge suppression diode
- DIN rail and through panel sockets available



	RH1	RH2	RH3	RH4
Specifications	Contact Material: Silver cadmium oxide (AgCdO)			
	Contact Rating: 10A			
	14 x 27.5 x 42	21 x 27.5 x 42	31 x 27.5 x 42	41 x 27.5 x 42

Relays	Standard DIN Rail Mount	Through Panel Mount
RH1B	SH1B-05	SH1B-51
RH2B	SH2B-05	SH2B-51
RH3B	SH3B-05	SH3B-51
RH4B	SH4B-05	SH4B-51

Part #	Description	Socket
RH1B-U-AC12V	10 amp SPDT 12VAC coil	SH1B-05, SH1B-51
RH1B-U-AC24V	10 amp SPDT 24VAC coil	SH1B-05, SH1B-51
RH1B-U-AC120V	10 amp SPDT 120VAC coil	SH1B-05, SH1B-51
RH1B-U-DC12V	10 amp SPDT 12VDC coil	SH1B-05, SH1B-51
RH1B-U-DC24V	10 amp SPDT 24VDC coil	SH1B-05, SH1B-51
RH1B-U-DC48V	10 amp SPDT 48VDC coil	SH1B-05, SH1B-51
RH1B-U-DC110V	10 amp SPDT 110VDC coil	SH1B-05, SH1B-51
RH1B-UT-AC120V	10 amp SPDT 120VAC coil w/UT top bracket	SH1B-05, SH1B-51
RH2B-U-AC24V	10 amp DPDT 24VAC coil	SH2B-05, SH2B-51
RH2B-U-AC120V	10 amp DPDT 120VAC coil	SH2B-05, SH2B-51
RH2B-U-DC12V	10 amp DPDT 12VDC coil	SH2B-05, SH2B-51
RH2B-U-DC24V	10 amp DPDT 24VDC coil	SH2B-05, SH2B-51
RH2B-U-DC48V	10 amp DPDT 48VDC coil	SH2B-05, SH2B-51
RH2B-U-DC110V	10 amp DPDT 110VDC coil	SH2B-05, SH2B-51
RH2B-UD-DC12V	10 amp DPDT 12VDC coil w/diode arc suppressor	SH2B-05, SH2B-51
RH2B-UD-DC24V	10 amp DPDT 24VDC coil w/diode arc suppressor	SH2B-05, SH2B-51
RH2B-UD-DC48V	10 amp DPDT 48VDC coil w/diode arc suppressor	SH2B-05, SH2B-51
RH2B-UD-DC110V	10 amp DPDT 110VDC coil w/diode arc suppressor	SH2B-05, SH2B-51

continued

IDEC RH SERIES continued

Cross Reference IDEC

Omron LY2	RH2
Omron LY3	RH3
Omron LY4	RH4
P&B K10	RH2B
MSD 78(1)XAX	RH1B
MSD 782XBX	RH2B
MSD 783XCX	RH3B
MSD 784XDX	RH4B
MSD 78XCX	RH3B
MSD 78XDX	RH4B
MSD W78(A)R	RH2B

Part #	Description	Socket
RH2B-UL-AC24V	10 amp DPDT 24VAC coil w/light	SH2B-05, SH2B-51
RH2B-UL-AC120V	10 amp DPDT 120VAC coil w/light	SH2B-05, SH2B-51
RH2B-UL-AC240V	10 amp DPDT 240VAC coil w/light	SH2B-05, SH2B-51
RH2B-UL-DC6V	10 amp DPDT 6VDC coil w/light	SH2B-05, SH2B-51
RH2B-UL-DC12V	10 amp DPDT 12VDC coil w/light	SH2B-05, SH2B-51
RH2B-UL-DC24V	10 amp DPDT 24VDC coil w/light	SH2B-05, SH2B-51
RH2B-UL-DC48V	10 amp DPDT 48VDC coil w/light	SH2B-05, SH2B-51
RH2B-UL-DC110V	10 amp DPDT 110VDC coil w/light	SH2B-05, SH2B-51
RH2B-ULC-AC12V	10 amp DPDT 12VDC coil w/light and check button	SH2B-05, SH2B-51
RH2B-ULC-AC24V	10 amp DPDT 24VAC coil w/light and check button	SH2B-05, SH2B-51
RH2B-ULC-AC120V	10 amp DPDT 120VAC coil w/light and check button	SH2B-05, SH2B-51
RH2B-ULC-AC240V	10 amp DPDT 240VAC coil w/light and check button	SH2B-05, SH2B-51
RH2B-ULC-DC6V	10 amp DPDT 6VDC coil w/light and check button	SH2B-05, SH2B-51
RH2B-ULC-DC12V	10 amp DPDT 12VDC coil w/light and check button	SH2B-05, SH2B-51
RH2B-ULC-DC24V	10 amp DPDT 24VDC coil w/light and check button	SH2B-05, SH2B-51
RH2B-ULC-DC48V	10 amp DPDT 48VDC coil w/light and check button	SH2B-05, SH2B-51
RH2B-ULC-DC110V	10 amp DPDT 110VDC coil w/light and check button	SH2B-05, SH2B-51
RH3B-U-AC24V	10 amp 3PDT 24VAC coil	SH3B-05, SH3B-51
RH3B-U-AC120V	10 amp 3PDT 120VAC coil	SH3B-05, SH3B-51
RH3B-U-AC240V	10 amp 3PDT 240VAC coil	SH3B-05, SH3B-51
RH3B-U-DC24V	10 amp 3PDT 24VDC coil	SH3B-05, SH3B-51
RH3B-UL-AC24V	10 amp 3PDT 24VAC coil w/light	SH3B-05, SH3B-51
RH3B-UL-AC120V	10 amp 3PDT 120VAC coil w/light	SH3B-05, SH3B-51
RH3B-UL-AC240V	10 amp 3PDT 240VAC coil w/light	SH3B-05, SH3B-51
RH3B-UL-DC24V	10 amp 3PDT 24VDC coil w/light	SH3B-05, SH3B-51
RH3B-UL-DC48V	10 amp 3PDT 48VDC coil w/light	SH3B-05, SH3B-51
RH3B-UL-DC110V	10 amp 3PDT 110VDC coil w/light	SH3B-05, SH3B-51
RH3B-ULC-AC120V	10 amp 3PDT 120VAC coil w/light and check button	SH3B-05, SH3B-51
RH3B-ULC-AC240V	10 amp 3PDT 240VAC coil w/light and check button	SH3B-05, SH3B-51
RH3B-ULC-DC24V	10 amp 3PDT 48VDC coil w/light and check button	SH3B-05, SH3B-51
RH3B-ULC-DC110V	10 amp 3PDT 110VDC coil w/light and check button	SH3B-05, SH3B-51
RH4B-U-AC24V	10 amp 4PDT 24VAC coil	SH4B-05, SH4B-51
RH4B-U-AC120V	10 amp 4PDT 120VAC coil	SH4B-05, SH4B-51
RH4B-U-AC240V	10 amp 4PDT 240VAC coil	SH4B-05, SH4B-51
RH4B-U-DC24V	10 amp 4PDT 24VDC coil	SH4B-05, SH4B-51
RH4B-U-DC48V	10 amp 4PDT 48VDC coil	SH4B-05, SH4B-51
RH4B-U-DC110V	10 amp 4PDT 110VDC coil	SH4B-05, SH4B-51
RH4B-UL-AC120V	10 amp 4PDT 120VAC coil w/light	SH4B-05, SH4B-51
RH4B-UL-AC240V	10 amp 4PDT 240VAC coil w/light	SH4B-05, SH4B-51
RH4B-UL-DC24V	10 amp 4PDT 24VDC coil w/light	SH4B-05, SH4B-51
RH4B-UL-DC48V	10 amp 4PDT 48VDC coil w/light	SH4B-05, SH4B-51
RH4B-UL-DC110V	10 amp 4PDT 110VDC coil w/light	SH4B-05, SH4B-51
RH4B-ULC-AC24V	10 amp 4PDT 24VAC coil w/light and check button	SH4B-05, SH4B-51
RH4B-ULC-AC120V	10 amp 4PDT 120VAC coil w/light and check button	SH4B-05, SH4B-51
RH4B-ULC-AC240V	10 amp 4PDT 240VAC coil w/light and check button	SH4B-05, SH4B-51
RH4B-ULC-DC12V	10 amp 4PDT 12VDC coil w/light and check button	SH4B-05, SH4B-51
RH4B-ULC-DC24V	10 amp 4PDT 24VDC coil w/light and check button	SH4B-05, SH4B-51
RH4B-ULC-DC48V	10 amp 4PDT 48VDC coil w/light and check button	SH4B-05, SH4B-51
RH4B-ULC-DC110V	10 amp 4PDT 110VDC coil w/light and check button	SH4B-05, SH4B-51

IDEC RJ SERIES

Part #	Description	Socket
RJ22V-C-A120	Bifurcated PCB relay DPDT AC120V	
RJ22V-C-A240	Bifurcated PCB relay DPDT AC240V	
RJ22V-C-D100	Bifurcated PCB relay DPDT DC110V	
RJ22V-C-D24	Bifurcated PCB relay DPDT DC24V	
RJ22V-C-D48	Bifurcated PCB relay DPDT DC48	
RJ2V-C-A120	PCB Mount relay 8A contact DPDT 120VAC coil	
RJ2V-C-A24	PCB Mount relay 8A contact DPDT 24VAC coil	
RJ2V-C-D100	PCB Mount relay 8A contact DPDT 110VDC coil	
RJ2V-C-D24	PCB Mount relay 8A contact DPDT 24VDC coil	



IDEC RR SERIES – POWER RELAYS

- Rugged, industrial 10A relay
- SPDT, DPDT, 3PDT 10A contacts
- Options: Indicator LED, check-button and side flange mounting
- Round 8- and 11-pin base and square blade base relays
- Horsepower rated for small motors and solenoids

RR 1 BA – U L AC120V

Contact Configuration	Terminal Type	Options	Coil Voltage
1 = SPDT#	P = 8 Pin (DPDT)	L = Indicator light	AC6V DC6V
2 = DPDT	PA = 11 Pin (3PDT)	C = Check button	AC12V DC12V
3 = 3PDT	B = Blade (3PDT)	LC = Indicator and check button	AC24V DC24V
	BA = Blade (SPDT, DPDT)	S = Side flange*#	AC120V DC110V
			AC240V DC240V

* Indicator light and check button not available
Available in blade type only

	RR2P	RR3PA	RR1BA	RR2BA	RR3B
Specifications	Contact Material				
	Silver (Ag)				
	Contact Rating				
	10A				
Dimensions (w x d x h) mm	29.3x36.4x56	36.4x36.4x56	36.4x36.4x55.4		

Relays	Standard DIN Rail Mount	Through Panel Mount
RR2P	SR2P-05, SR2P-06	SR2P-51
RR3PA	SR3P-05, SR3P-06	SR3P-51
RR1BA RR2BA RR3B	SR3B-05	SR3B-51

Part #	Description	Socket
RR2BA-UL-AC24V	10 amp DPDT 24VAC coil w/light	SR3B-05, SR3B-51
RR2BA-UL-AC120V	10 amp DPDT 120VAC coil w/light	SR3B-05, SR3B-51
RR2BA-UL-AC240V	10 amp DPDT 240VAC coil w/light	SR3B-05, SR3B-51
RR2BA-UL-DC110V	10 amp DPDT 110VDC coil w/light	SR3B-05, SR3B-51
RR2BA-ULC-AC240V	10 amp DPDT 240VAC coil w/light and check button	SR3B-05, SR3B-51
RR2BA-ULC-DC48V	10 amp DPDT 48VDC coil w/light and check button	SR3B-05, SR3B-51
RR2BA-ULC-DC110V	10 amp DPDT 110VDC coil w/light and check button	SR3B-05, SR3B-51
RR2KP-U-AC120V	10 amp DPDT 120VAC coil, latching (set/reset)	SR3P-05, SR3P-06, SR3P-51
RR2KP-U-AC240V	10 amp DPDT 240VAC coil, latching (set/reset)	SR3P-05, SR3P-06, SR3P-51
RR2KP-U-DC24V	10 amp DPDT 24VDC coil, latching (set/reset)	SR3P-05, SR3P-06, SR3P-51
RR2KP-U-DC110V	10 amp DPDT 110VDC coil, latching (set/reset)	SR3P-05, SR3P-06, SR3P-51
RR2P-U-AC24V	10 amp DPDT 24VAC coil	SR2P-05, SR2P-06, SR2P-51
RR2P-U-AC120V	10 amp DPDT 120VAC coil	SR2P-05, SR2P-06, SR2P-51
RR2P-U-DC24V	10 amp DPDT 24VDC coil	SR2P-05, SR2P-06, SR2P-51
RR2P-U-DC48V	10 amp DPDT 48VDC coil	SR2P-05, SR2P-06, SR2P-51
RR2P-U-DC110V	10 amp DPDT 110VDC coil	SR2P-05, SR2P-06, SR2P-51

Part #	Description	Socket
RR2P-UL-AC120V	10 amp DPDT 120VAC coil w/light	SR2P-05, SR2P-06, SR2P-51
RR2P-UL-AC240V	10 amp DPDT 240VAC coil w/light	SR2P-05, SR2P-06, SR2P-51
RR2P-UL-DC24V	10 amp DPDT 24VDC coil w/light	SR2P-05, SR2P-06, SR2P-51
RR2P-UL-DC110V	10 amp DPDT 110VDC coil w/light	SR2P-05, SR2P-06, SR2P-51
RR2P-ULC-AC24V	10 amp DPDT 24VAC coil w/light and check button	SR2P-05, SR2P-06, SR2P-51
RR2P-ULC-AC120V	10 amp DPDT 120VAC coil w/light and check button	SR2P-05, SR2P-06, SR2P-51
RR2P-ULC-AC240V	10 amp DPDT 240VAC coil w/light and check button	SR2P-05, SR2P-06, SR2P-51
RR2P-ULC-DC110V	10 amp DPDT 110VDC coil w/light and check button	SR2P-05, SR2P-06, SR2P-51
RR3B-U-AC120V	10 amp 3PDT 120VAC coil	SR3B-05, SR3B-51
RR3B-U-AC240V	10 amp 3PDT 240VAC coil	SR3B-05, SR3B-51
RR3B-U-DC12V	10 amp 3PDT 12VDC coil	SR3B-05, SR3B-51
RR3B-U-DC24V	10 amp 3PDT 24VDC coil	SR3B-05, SR3B-51
RR3B-U-DC48V	10 amp 3PDT 48VDC coil	SR3B-05, SR3B-51
RR3B-U-DC110V	10 amp 3PDT 110VDC coil	SR3B-05, SR3B-51
RR3B-UL-AC12V	10 amp 3PDT 12VAC coil w/light	SR3B-05, SR3B-51
RR3B-UL-AC24V	10 amp 3PDT 24VAC coil w/light	SR3B-05, SR3B-51
RR3B-UL-AC120V	10 amp 3PDT 120VAC coil w/light	SR3B-05, SR3B-51
RR3B-UL-AC240V	10 amp 3PDT 240VAC coil w/light	SR3B-05, SR3B-51
RR3B-UL-DC6	10 amp 3PDT 6VDC coil w/light	SR3B-05, SR3B-51
RR3B-UL-DC24V	10 amp 3PDT 24VDC coil w/light	SR3B-05, SR3B-51
RR3B-UL-DC48V	10 amp 3PDT 48VDC coil w/light	SR3B-05, SR3B-51
RR3B-UL-DC110V	10 amp 3PDT 110VDC coil w/light	SR3B-05, SR3B-51
RR3B-ULC-AC24V	10 amp 3PDT 24VAC coil w/light and check button	SR3B-05, SR3B-51
RR3B-ULC-AC120V	10 amp 3PDT 120VAC coil w/light and check button	SR3B-05, SR3B-51
RR3B-ULC-AC240V	10 amp 3PDT 240VAC coilT w/light and check button	SR3B-05, SR3B-51
RR3B-ULC-DC12V	10 amp 3PDT 12VDC coil w/light and check button	SR3B-05, SR3B-51
RR3B-ULC-DC24V	10 amp 3PDT 24VDC coil w/light and check button	SR3B-05, SR3B-51
RR3B-ULC-DC48V	10 amp 3PDT 48VDC coil w/light and check button	SR3B-05, SR3B-51
RR3B-ULC-DC110V	10 amp 3PDT 110VDC coil w/light and check button	SR3B-05, SR3B-51
RR3PA-U-AC120V	10 amp 3PDT 120VAC coil	SR3P-05, SR3P-06, SR3P-51
RR3PA-U-AC240V	10 amp 3PDT 240VAC coil	SR3P-05, SR3P-06, SR3P-51
RR3PA-U-DC110V	10 amp 3PDT 110VDC coil	SR3P-05, SR3P-06, SR3P-51
RR3PA-UL-AC120V	10 amp 3PDT 120VAC coil w/light	SR3P-05, SR3P-06, SR3P-51
RR3PA-ULC-AC120V	10 amp 3PDT 120VAC coil w/light and check button	SR3P-05, SR3P-06, SR3P-51
RR3PA-ULC-AC240V	10 amp 3PDT 240VAC coil w/light and check button	SR3P-05, SR3P-06, SR3P-51
RR3PA-ULC-DC24V	10 amp 3PDT 24VDC coil w/light and check button	SR3P-05, SR3P-06, SR3P-51
RR3PA-ULC-DC110V	10 amp 3PDT 110VDC coil w/light and check button	SR3P-05, SR3P-06, SR3P-51

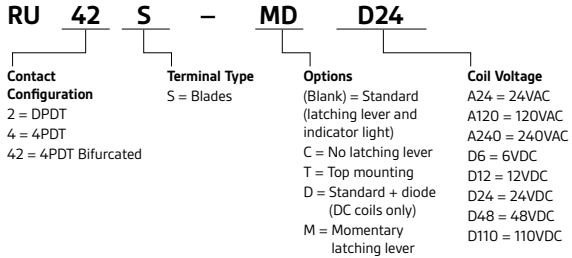
Cross Reference	IDEC	Cross Reference	IDEC
Omron MK2P	RR2P	MSD 750XCX	RR3PA
Omron MK3P	RR3PA	MSD 788XBX	RR2BA
Omron MJN1	RR1BA	MSD 788XCX	RR3B
Omron MJN2	RR2BA	MSD A283XAX	RR1BA
Omron MJN3	RR3B	MSD A283XBX	RR2BA
Omron MRL	RR2KP	MSD A283XCX	RR3B
P&B KRP(A)-11	RR2P	MSD A314XBX	RR2P
P&B KRP(A)-14	RR3PA	MSD A314XCX	RR3PA
P&B KUP-11	RR2BA	MSD W250ACPX	RR2P
P&B KUP-14	RR3B	MSD W250CPX	RR3PA
P&B KUP93-11	RR3B	MSD W388	
MSD 750XBX	RR2P	RR1BA/2BA/3B	

Relays: IDEC: RR Series



IDEC RU SERIES – UNIVERSAL RELAYS

- 100 percent robotic assembly
- DPDT 10A, 4PDT 6A and bifurcated 4PDT 3A contacts
- Spot welding technology eliminates internal wires and solder
- Non-polarized, green LED
- Color-coded, snap-on marking plates
- RoHS compliant



	RU4	RU42
Specifications		
Contact Material	AuAg/Ag	AuAg/AgNi
Contact Rating	6A	3A (bifurcated)
Dimensions (w x d x h) mm	21 x 27.5 x 41.4	

Relays	Standard DIN Rail Mount	Panel Mount
Sockets RU2S (DPDT) RU4S (4PDT) RU42S (4PDT)	SY4S-05	SY4S-51

Cross Reference	IDEC
Omron MY2	RU2
Omron MY4	RU4
P&B KHAU-11	RU2S
P&B KHAU-17	RU4S
Schrack PT2	RU2S
Schrack PT4	RU4S
MSD 782XB1/2	RU2S
MSD 782XD1/2	RU4S
MSD 782XD3	RU42S
MSD W78(A)CSX	RU4S
MSD W78(A)T	RU42S

Part #	Description	Socket
RU2S-M-A24	10 amp DPDT 24VAC coil w/light and check button	SY4S-05, SY4S-51
RU2S-M-A110	10 amp DPDT 110VAC coil w/light and check button	SY4S-05, SY4S-51
RU2S-M-A220	10 amp DPDT 220VAC coil w/light and check button	SY4S-05, SY4S-51
RU2S-M-D24	10 amp DPDT 24VDC coil w/light and check button	SY4S-05, SY4S-51
RU2S-M-D110	10 amp DPDT 110VDC coil w/light and check button	SY4S-05, SY4S-51
RU42S-M-A110	5 amp 4PDT 120VAC coil bifurcated w/light and check button	SY4S-05, SY4S-51
RU42S-M-A220	5 amp 4PDT 240VAC coil bifurcated w/light and check button	SY4S-05, SY4S-51
RU42S-M-D12	5 amp 4PDT 12VAC coil bifurcated w/light and check button	SY4S-05, SY4S-51
RU42S-M-D24	5 amp 4PDT 24VDC coil bifurcated w/light and check button	SY4S-05, SY4S-51
RU42S-M-D48	5 amp 4PDT 48VDC coil bifurcated w/light and check button	SY4S-05, SY4S-51
RU42S-M-D110	5 amp 4PDT 110VDC coil bifurcated w/light and check button	SY4S-05, SY4S-51
RU4S-M-A24	6 amp 4PDT 24VAC coil w/light and check button	SY4S-05, SY4S-51
RU4S-M-A110	6 amp 4PDT 120VAC coil w/light and check button	SY4S-05, SY4S-51
RU4S-M-A220	6 amp 4PDT 240VAC coil w/light and check button	SY4S-05, SY4S-51
RU4S-M-D12	6 amp 4PDT 12VDC coil w/light and check button	SY4S-05, SY4S-51
RU4S-M-D24	6 amp 4PDT 24VDC coil w/light and check button	SY4S-05, SY4S-51
RU4S-M-D48	6 amp 4PDT 48VDC coil w/light and check button	SY4S-05, SY4S-51
RU4S-M-D110	6 amp 4PDT 110VDC coil w/light and check button	SY4S-05, SY4S-51

IDEC RY SERIES – MINIATURE RELAYS

- Small, industrial GP signaling relay
- DPDT 3A, 4PDT 5A contacts
- Bifurcated 4PDT 1A contacts available
- Options: Indicator LED, check-button and surge suppression diode



RY 2 S – U L AC24V

Contact Configuration

- 2 = DPDT
- 4 = 4PDT
- 42 = 4PDT Bifurcated

Terminal Type

S = Blade (.110")

Options

- L = Indicator light
- C = Check button
- T = Top bracket
- D = Diode*

Coil Voltage

- AC6V DC6V
- AC12V DC12V
- AC24V DC24V
- AC120V DC48V
- AC240V DC110V



*Diode for DC coils only

	RY2	RY4	RY42
Contact Material	Silver (Ag), gold-plated		Ag-Pd alloy
Contact Rating	3A	5A	1A (bifurcated)
Dimensions (w x d x h) mm	14.2 x 27.5 x 41.5		21.2 x 27.5 x 41.5

	Relays	Standard DIN Rail Mount	Through Panel Mount
Sockets	RY2S	SY2S-05	SY2S-51
	RY4S	SY4S-05	SY4S-51
	RY42S		

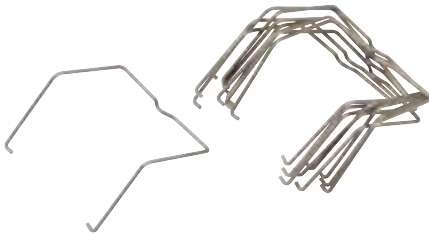
Part #	Description	Socket
RY2KS-U-AC120V	3 amp DPDT 120VAC latching-dual coil	SY4S-05
RY2KS-U-AC220V	3 amp DPDT 220VAC latching-dual coil	SY4S-05
RY2KS-U-DC12V	3 amp DPDT 12VDC latching-dual coil	SY4S-05
RY2KS-U-DC24V	3 amp DPDT 24VDC latching-dual coil	SY2S-05
RY2KS-U-DC48V	3 amp DPDT 48VDC latching-dual coil	SY2S-05
RY2KS-U-DC110V	3 amp DPDT 110VDC latching-dual coil	SY2S-05
RY2S-U-AC24V	5 amp DPDT 24VAC coil	SY2S-05
RY2S-U-AC110V	5 amp DPDT 120VAC coil	SY2S-05
RY2S-U-DC12V	5 amp DPDT 12VDC coi	SY2S-05
RY2S-U-DC24V	5 amp DPDT 24VDC coil	SY2S-05
RY2S-U-DC48V	5 amp DPDT 48VDC coil	SY2S-05
RY2S-U-DC110V	5 amp DPDT 110VDC coil	SY2S-05
RY2S-UL-AC120V	5 amp DPDT 120VAC coil w/light	SY2S-05
RY2S-UL-DC24V	5 amp DPDT 24VDC coil w/light	SY2S-05
RY2S-ULC-AC120V	5 amp DPDT 120VAC coil w/ light and check button	SY2S-05
RY4S-UL-AC24V	5 amp 4PDT 24VAC coil w/light	SY4S-05, SY4S-51
RY4S-UL-AC240V	5 amp 4PDT 240VAC coil w/light	SY4S-05, SY4S-51
RY4S-UL-DC48V	5 amp 4PDT 48VDC coil w/light	SY4S-05, SY4S-51
RY4S-UL-DC110V	5 amp 4PDT 110VDC coil w/light	SY4S-05, SY4S-51
RY4S-ULC-AC12V	5 amp 4PDT 12VAC coil w/light and check button	SY4S-05, SY4S-51
RY4S-ULC-AC24V	5 amp 4PDT 24VAC coil w/light and check button	SY4S-05, SY4S-51
RY4S-ULC-AC240V	5 amp 4PDT 240VAC coil w/light and check button	SY4S-05, SY4S-51
RY4S-ULC-DC6V	5 amp 4PDT 6VDC coil w/light and check button	SY4S-05, SY4S-51
RY4S-ULC-DC12V	5 amp 4PDT 12VDC coil w/light and check button	SY4S-05, SY4S-51
RY4S-ULC-DC48V	5 amp 4PDT 48VDC coil w/light and check button	SY4S-05, SY4S-51



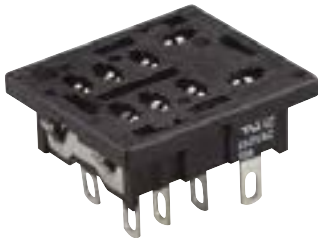
BNDN-1000
Aluminum low-profile DIN rail
Length: 1 meter, 39.5"



BNL5
DIN rail end stop



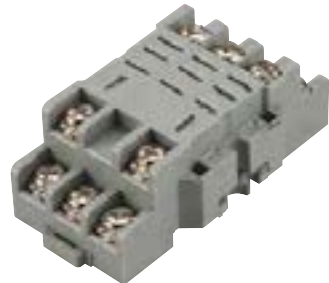
SR3B-02F1
Hold Down Spring Clip



SY4S-051
Socket, panel mount



SR2P-06
DIN rail or surface mount



SH3B-05
DIN rail or surface mount

IDEC RELAYS AND TIMER SOCKETS, DIN RAIL

Series	Part #	No. of Poles	Receptacle	Compatible IDEC Relay and Timer
SR	SR2P-05 SR2P-06	2	8-pin	GT3 (8-pin), GT5P, RR2P, RTE-P1
	SR3P-05 SR3P-06	3	11-pin	GT3 (11-pin), RR2KP, RR3PA, RTE-P2
	SR3B-05	3	11-blade	RR1BA, RR2BA, RR3B, RTE-B
SH	SH1B-05	1	5-blade	RH1B
	SH2B-05	2	8-blade	RH2B
	SH3B-05	3	11-blade	RH2LB, RH3B
	SH4B-05	4	14-blade	RH4B
SH	SH1B-51	1	5-blade	RH1B
	SH2B-51	2	8-blade	RH2B
	SH3B-51	3	11-blade	RH2LB, RH3B
	SH4B-51	4	14-blade	RH4B
SY	SY2S-05	2	8-blade	RY2S, RY22S
	SY4S-05	4	14-blade	GT5Y, RU2S, RU4S, RU42S, RY2KS, RY2LS, RY4S, RY42S
SY	SY4S-51	4	14-blade	GT5Y, RU2S, RU4S, RU42S, RY2KS, RY2LS, RY4S, RY42S

IDEC PS5R-V SERIES SWITCHING POWER SUPPLIES



Output Capacity	Part Number	Input Voltage	Output Voltage	Output Current
7.5W	P55R-VA05	100 to 240VAC Voltage range: 85 to 264VAC / 100 to 370VDC)	5V	1.5A
	P55R-VA12		12V	0.6A
	P55R-VA24		24V	0.3A
10W	P55R-VB05		5V	2.0A
15W	P55R-VB12		12V	1.3A
	P55R-VB24		24V	0.65A
30W	P55R-VC12		12V	2.5A
	P55R-VC24		24V	1.3A
60W	P55R-VD24		24V	2.5A
90W	P55R-VE24		24V	3.75A
120W	P55R-VF24		24V	5.0A
240W	P55R-VG24		24V	10.0A

Part number structure PS5R - V

- | | |
|-----------------|---------------------|
| Output capacity | Output voltage |
| A 7.5W | 05 5V ³ |
| B 10W/15W | 12 12V ⁴ |
| C 30W | 24 24V |
| D 60W | |
| E 90W | |
| F 120W | |
| G 240W | |

Note 3: P55R-VA/VB only

Note 4: P55R-VA/VB/VC only

Use only for interpreting part numbers.

Do not use for developing part numbers.

IDEC PS5R-V SERIES – POWER SUPPLIES

- Compact size preserves panel space
Slim size (width): 22.5mm (10W/15W/30W) 36mm (60W/90W) 46mm (120W) 60mm (240W)
- Universal voltage input: 85–264VAC/100–370VDC
- Wide operating temperature range
- Spring-up terminals accept ring and fork terminals
- Approved for use in Class I Division 2 hazardous locations
- Can be installed in six directions
- DIN-rail or panel mount
- Overcurrent protection with auto-reset
- Meets SEMI F47 Sag Immunity (208V AC input)
- RoHS compliant
- Five-year factory warranty



PS5R-VD24



PS5R-VF24

Part #	Description
PS5R-VB05	10W 5VDC DIN RAIL
PS5R-VB12	15W 12VDC DIN RAIL
PS5R-VB24	15W 24VDC DIN RAIL
PS5R-VC12	30W 12VDC DIN RAIL
PS5R-VC24	30W 24VDC DIN RAIL
PS5R-VD24	60W 24VDC DIN RAIL
PS5R-VE24	90W 24VDC DIN RAIL
PS5R-VF24	120W 24VDC DIN RAIL
PS5R-VG24	240W 24VDC DIN RAIL



FL1F-H12SCD

IDEC 6TH GENERATION SMARTRELAYS

Part #	Description
FL1F-H12RCA	SmartRelay CPU 24VAC-DC
FL1F-H12RCC	SmartRelay CPU 100-20VAC-DC
FL1F-H12RCE	SmartRelay CPU 24VDC tran out 10.8 to 28
FL1F-H12SCD	SmartRelay CPU 24VDC trans out

Accessories

FL1F-M08B2R2	4in 4out 12–24VDC exp. module
FL1F-M08C2R2	4in 4out 100–240VAC exp. module

Series L8 UL1077 Supplementary Protectors

Supplemental short circuit protection for a variety of applications up to 63 amps

Sprecher+Schuh Series L8 Supplementary Protectors provide supplemental overcurrent protection for control circuits, solenoids, actuators, appliances, business equipment and a range of other applications where a high performance current limiting device is required. Advanced features and global approvals make them ideal for use in equipment installed throughout the world.

BROAD PRODUCT RANGE

Series L8 Supplementary Protectors are available in up to 20 different current ratings from 0.5A to 63A, in one, two and three pole configurations. Over 180 base models are available with a full complement of accessories.



Devices can be used in applications up to 480V AC and 48V DC with interrupting capacities up to 10kA.

SAFETY FEATURES PROVIDE ENHANCED PROTECTION

The terminals of Series L8 Supplementary Protectors provide IP20 protection to guard against accidental contact with live parts.

To aid troubleshooting, a color-coded indicator provides positive visual indication of the device status (green for OFF, red for ON) and isolation function.

Sprecher+Schuh Supplementary Protectors also incorporate a trip-free mechanism, ensuring that the device operation cannot be defeated by holding the operator in the ON position.

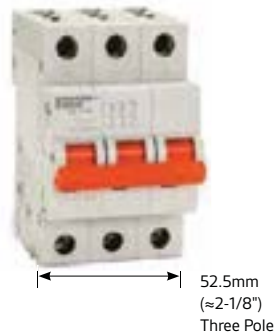
EASY INSTALLATION

Sprecher+Schuh Supplementary Protectors mount on a standard 35mm DIN-rail. Wire terminals accept multiple conductors, and UL 508 approved bus bars can be used to quickly distribute power to many Supplementary Protectors simultaneously. In addition, power to the circuit breakers can be fed from the line or load side.

GLOBAL APPROVALS FOR WORLDWIDE ACCEPTANCE

Series L8 Supplementary Protectors are UL Recognized for use in the United States in accordance with NFPA 79 (NEC, National Electrical Code). The devices comply with UL 1077 and CSA 22.2 No.235, meeting the requirements for supplementary protectors intended for use as overcurrent protection where branch circuit protection is not required, or is provided by another device such as a fuse or molded case circuit breaker. These Supplementary Protectors also comply with IEC 60947-2 for use in commercial and residential applications and are CE marked.

See online white paper *Methods of Applying Circuit Protection*.



THREE TRIP CHARACTERISTICS

All Sprecher+Schuh L8 Supplementary Protectors are available with three different tripping characteristics, Type "B", "C", and "D". The tripping characteristic defines the device's speed of response (trip-time) to various levels of overcurrent. The figure below shows trip-time versus overcurrent for Type B, C, and D devices. The time-current characteristics enable the device to be optimally matched to the application. For example, PLC outputs that can only tolerate minimal overcurrents are best protected by Supplementary Protectors with Type B trip characteristics.

Sprecher+Schuh L8 Supplementary Protectors are also current limiting — interrupting fault currents within one half cycle. Current limiting devices protect circuit components from damage by reducing the peak let-through current which causes damaging magnetic forces and let-through energy which generates heat.

Type "B" Characteristic

Developed primarily to protect conductors and low level signal devices such as PLCs. Instantaneous trip is three to five times the rated current of the Supplementary Protector (3-5 x In). The fast trip time of these devices minimizes damage to control circuit conductors from low-level faults.



Type "C" Characteristic

Developed primarily for applications with moderate inrush currents such as lighting, control circuits and coils, computers and appliances. Instantaneous trip is five to ten times the rated current of the Supplementary Protector (5-10 x In). The higher instantaneous trip level prevents nuisance tripping, and components being protected can typically withstand higher fault currents without being damaged.

Type "D" Characteristic

Developed primarily for applications with high inrush currents, i.e., transformers, power supplies and heaters. Instantaneous trip is 10 to 20 times the rated current of the Supplementary Protector (10-20 x In). The high instantaneous trip level prevents nuisance tripping, and components being protected can typically withstand higher fault currents without being damaged.

Compare these advanced features

Box lug terminals accept #18...#4 (1.0...25mm²) wire as standard

Ratings to 480Y/277V AC @230/440VAC
10kA interrupt rating

Amp rating and trip curve characteristic clearly marked on the device for easy identification

Magnetic trip elements provide Type B, C and D trip characteristics, while bimetallic elements protect against slight overloads.



Line and load side terminals designed with dual terminals which allows the connection of two wires, or both a wire and a bus bar

Guarded No.2 pozidrive terminals screws with finger-safe IP20 protection

Devices install on standard 35mm DIN-rail (EN 50022)




Trip-free mechanism; device operation cannot be defeated by holding the operator in the ON position

Color coded indicator provides visual indication of the device status and isolation function

Available in one, two and three pole

Trip Characteristic B


Trip Characteristic B (3–5 x I_N) – Resistive or slightly inductive loads 


Rated Current (A)	1 Pole 		2 Pole 		3 Pole 	
	Catalog Number	Std. Pkg.	Catalog Number	Std. Pkg.	Catalog Number	Std. Pkg.
0.5	L8-0.5/1/B	2	L8-0.5/2/B	1	L8-0.5/3/B	1
1	L8-1/1/B	2	L8-1/2/B	1	L8-1/3/B	1
2	L8-2/1/B	2	L8-2/2/B	1	L8-2/3/B	1
3	L8-3/1/B	2	L8-3/2/B	1	L8-3/3/B	1
4	L8-4/1/B	2	L8-4/2/B	1	L8-4/3/B	1
5	L8-5/1/B	2	L8-5/2/B	1	L8-5/3/B	1
6	L8-6/1/B	2	L8-6/2/B	1	L8-6/3/B	1
7	L8-7/1/B	2	L8-7/2/B	1	L8-7/3/B	1
8	L8-8/1/B	2	L8-8/2/B	1	L8-8/3/B	1
10	L8-10/1/B	2	L8-10/2/B	1	L8-10/3/B	1
13	L8-13/1/B	2	L8-13/2/B	1	L8-13/3/B	1
15	L8-15/1/B	2	L8-15/2/B	1	L8-15/3/B	1
16	L8-16/1/B	2	L8-16/2/B	1	L8-16/3/B	1
20	L8-20/1/B	2	L8-20/2/B	1	L8-20/3/B	1
25	L8-25/1/B	2	L8-25/2/B	1	L8-25/3/B	1
30	L8-30/1/B	2	L8-30/2/B	1	L8-30/3/B	1
32	L8-32/1/B	2	L8-32/2/B	1	L8-32/3/B	1
40	L8-40/1/B	2	L8-40/2/B	1	L8-40/3/B	1
50	L8-50/1/B	2	L8-50/2/B	1	L8-50/3/B	1
63	L8-63/1/B	2	L8-63/2/B	1	L8-63/3/B	1

L8 Supplementary Protector Features:


- UL-1077 Approved, CSA 22.2 No. 235 and IEC/EN 60947-2
- Thermal Magnetic Overcurrent Protection
- Trip characteristics based on 40°C ambient for UL/CSA
- Up to 10kA interruption ratings
- Finger safe design
- DIN-rail mounting



 1-Pole ratings: UL/CSA 277VAC 48VDC, IEC 240/440 VAC

 Multi-pole ratings: UL/CSA 480Y/277 VAC 96VDC, IEC 440 VAC

 See UL Short Circuit ratings U1/U2 in the technical data sections.

Trip Characteristic C


Trip Characteristic C (5~10 x I_N) – Inductive loads 


Rated Current (A)	1 Pole 		2 Pole 		3 Pole 	
	Catalog Number	Std. Pkg.	Catalog Number	Std. Pkg.	Catalog Number	Std. Pkg.
0.5	L8-0.5/1/C	2	L8-0.5/2/C	1	L8-0.5/3/C	1
1	L8-1/1/C	2	L8-1/2/C	1	L8-1/3/C	1
2	L8-2/1/C	2	L8-2/2/C	1	L8-2/3/C	1
3	L8-3/1/C	2	L8-3/2/C	1	L8-3/3/C	1
4	L8-4/1/C	2	L8-4/2/C	1	L8-4/3/C	1
5	L8-5/1/C	2	L8-5/2/C	1	L8-5/3/C	1
6	L8-6/1/C	2	L8-6/2/C	1	L8-6/3/C	1
7	L8-7/1/C	2	L8-7/2/C	1	L8-7/3/C	1
8	L8-8/1/C	2	L8-8/2/C	1	L8-8/3/C	1
10	L8-10/1/C	2	L8-10/2/C	1	L8-10/3/C	1
13	L8-13/1/C	2	L8-13/2/C	1	L8-13/3/C	1
15	L8-15/1/C	2	L8-15/2/C	1	L8-15/3/C	1
16	L8-16/1/C	2	L8-16/2/C	1	L8-16/3/C	1
20	L8-20/1/C	2	L8-20/2/C	1	L8-20/3/C	1
25	L8-25/1/C	2	L8-25/2/C	1	L8-25/3/C	1
30	L8-30/1/C	2	L8-30/2/C	1	L8-30/3/C	1
32	L8-32/1/C	2	L8-32/2/C	1	L8-32/3/C	1
40	L8-40/1/C	2	L8-40/2/C	1	L8-40/3/C	1
50	L8-50/1/C	2	L8-50/2/C	1	L8-50/3/C	1
63	L8-63/1/C	2	L8-63/2/C	1	L8-63/3/C	1

L8 Supplementary Protector features

- UL-1077 Approved, CSA 22.2 No. 235 and IEC/EN 60947-2
- Thermal Magnetic Overcurrent Protection
- Trip characteristics based on 40°C ambient for UL/CSA
- Up to 10kA interruption ratings
- Finger safe design
- DIN-rail mounting

 1-pole ratings: UL/CSA 277VAC 48VDC, IEC 240/440 VAC

 Multi-pole ratings: UL/CSA 480Y/277 VAC 96VDC, IEC 440 VAC

 See UL Short Circuit ratings U1/U2 in the technical data sections.

Trip Characteristic D

Trip Characteristic D (10~20 x I_N) – Highly inductive loads ③

Rated Current (A)	1 Pole ①		2 Pole ②		3 Pole ②	
	Catalog Number	Std. Pkg.	Catalog Number	Std. Pkg.	Catalog Number	Std. Pkg.
0.5	L8-0.5/1/D	2	L8-0.5/2/D	1	L8-0.5/3/D	1
1	L8-1/1/D	2	L8-1/2/D	1	L8-1/3/D	1
2	L8-2/1/D	2	L8-2/2/D	1	L8-2/3/D	1
3	L8-3/1/D	2	L8-3/2/D	1	L8-3/3/D	1
4	L8-4/1/D	2	L8-4/2/D	1	L8-4/3/D	1
5	L8-5/1/D	2	L8-5/2/D	1	L8-5/3/D	1
6	L8-6/1/D	2	L8-6/2/D	1	L8-6/3/D	1
7	L8-7/1/D	2	L8-7/2/D	1	L8-7/3/D	1
8	L8-8/1/D	2	L8-8/2/D	1	L8-8/3/D	1
10	L8-10/1/D	2	L8-10/2/D	1	L8-10/3/D	1
13	L8-13/1/D	2	L8-13/2/D	1	L8-13/3/D	1
15	L8-15/1/D	2	L8-15/2/D	1	L8-15/3/D	1
16	L8-16/1/D	2	L8-16/2/D	1	L8-16/3/D	1
20	L8-20/1/D	2	L8-20/2/D	1	L8-20/3/D	1
25	L8-25/1/D	2	L8-25/2/D	1	L8-25/3/D	1
30	L8-30/1/D	2	L8-30/2/D	1	L8-30/3/D	1
32	L8-32/1/D	2	L8-32/2/D	1	L8-32/3/D	1
40	L8-40/1/D	2	L8-40/2/D	1	L8-40/3/D	1
50	L8-50/1/D	2	L8-50/2/D	1	L8-50/3/D	1
63	L8-63/1/D	2	L8-63/2/D	1	L8-63/3/D	1

L8 Supplementary Protector features

- UL-1077 Approved, CSA 22.2 No. 235 and IEC/EN 60947-2
 - Thermal Magnetic Overcurrent Protection
 - Trip characteristics based on 40°C ambient for UL/CSA
 - Up to 10kA interruption ratings
 - Finger safe design
 - DIN-rail mounting
- ① 1-pole ratings: UL/CSA 277VAC 48VDC, IEC 240/440 VAC
 ② Multi-pole ratings: UL/CSA 480Y/277 VAC 96VDC, IEC 440 VAC
 ③ See UL Short Circuit ratings U1/U2 in the technical data sections.

Supplementary Protectors: S+S

Technical Information: Series L8 Supplementary Protectors

Electrical Ratings

Number of Poles	1, 2, or 3	
Tripping Characteristics	B, C, or D	
Rated Current I_n	0.5...63A	
Rated Frequency	50/60 Hz	
Rated Insulation voltage	Phase-to-ground	250V AC
U_i acc. to IEC/EN 60664-1	Phase-to-phase	440V AC
Overtoltage Category	III	
Pollution Degree	3	

Data acc. to UL/CSA ⑤

Rated voltage	1-pole	AC	277V AC
		DC	48V DC
	2-pole	AC	480Y/277V AC
		DC	96V DC
	3-pole	AC	480Y/277V AC
			≤ 32 A: 10 kA (AC); > 32 A: 5kA (AC); 0.5...63 A: 10 kA (DC)
Rated interrupting capacity	per UL 1077	Supplementary protector for general use; application codes: TC1: [1P] OLO 277V AC, [2P, 3P] OLO 480Y/277V AC, SC: 10 kA (0.5...32 A), 5 kA (35...63 A), U2 480Y/277V AC, FW3	
Application ①		Reference temperature for tripping characteristics: 40°C	
Electrical Endurance		6,000 ops (AC), 6,000 ops. (DC) 1 cycle (1s - ON, 9s - OFF)	

Data acc. to IEC/EN 60947-2

Rated operational voltage U_e		1-pole	230V AC
		2-, 3-pole	400V AC
Highest supply or utilization voltage U_{max}	AC	1-pole	253V AC
		2-, 3-pole	440V AC
	DC ②	1-pole	48V DC
		2-pole	96V DC
Min. operating voltage		12V AC/DC	
Rated ultimate short-circuit breaking capacity I_{cu}		15 kA	
Rated service short-circuit breaking capacity I_{cs}		≤ 40 A: 11.25 kA	
		>40 A: 7.5 kA	
Rated impulse withstand voltage U_{imp} (1.2/50 μ s)		4 kV (test voltage 6.2kV at sea level, 5kV at 2,000m)	
Dielectric test voltage		2 kV (50/60Hz, 1 min.)	
Reference temperature for tripping characteristics		30 °C	
Electrical endurance		1 cycle (2s - ON, 13s - OFF, $I_n \leq 32$ A) $I_n < 30$ A: 20,000 operations (AC)	
		1 cycle (2s - ON, 28s - OFF, $I_n > 32$ A) $I_n \geq 30$ A: 10,000 ops. (AC); 1,000 ops. (DC)	

① 2-pole/3-pole single pole load : TC2

② IEC DC Ratings Self-declared

③ 35mm² self-declared. Not included in IEC/EN approval.

④ Refer to Ambient Temperature Derating tables.

⑤ UL File E65138

⑥ Wires must be of like size and stranding . Up to two wires per terminal slot.

Mechanical Data

Housing	Insulation group II, RAL 7035
Indicator window	red ON/green OFF
Protection degree per EN 60529	IP20, IP40 in enclosure with cover
Mechanical endurance	20,000 operations
Shock resistance per IEC/EN 60068-2-27	25 g - 2 shocks - 13 ms
Vibration resistance per IEC/EN 60068-2-6	5g - 20 cycles at 5...150...5 Hz with load 0.8 In

Environmental

Environmental conditions (damp heat) per IEC/EN 60068-2-30	28 cycles with 55°C/90-96% and 25°C/95-100%
Ambient temperature ③	-25...+55°C
Storage temperature	-40...+70°C

Installation

Terminal	Dual terminal
Cross-section of wire (front/back terminal slot) ④	35/35 mm ² 18...4/18...10 AWG
Flexible	25/10 mm ²
Multi-wire rating per UL, CSA	1 wire, 18...4 AWG 2-4 wires ⑥, 18...10 AWG
Cross-section of bus bars (top / bottom)	10/10 mm ²
	IEC 2.8 N•m
Tightening torque	UL/CSA AWG 18...16: 13.3 in•lb AWG 14...10: 17.7 in•lb AWG 8...4: 39.8 in•lb
Screwdriver	No. 2 Pozidrive
Mounting	DIN Rail (EN 60715, 35 mm) with fast clip
Mounting position	Any
Supply	Optional

Approximate Dimensions/Weight

Pole dimensions	H x D x W	88 x 69 x 17.5 mm (3.46" x 2.72" x 0.69")
Pole weight		115 g (4.1 oz)

Combination with Auxiliary Elements

Auxiliary contact	Yes
Signal contact	Yes
Shunt trip	Yes

Technical Information: Series L8 Supplementary Protectors

Power Loss Due to Current

Rated Current (A)	Power Loss Per Pole (W)	Rated Current (A)	Power Loss Per Pole (W)
0.5	1.4	13	2.3
1	1.4	15	2.4
2	1.8	16	2.5
3	1.6	20	2.5
4	1.8	25	3.2
5	1.9	30	3.5
6	2.0	32	3.7
7	1.1	40	4.5
8	1.5	50	4.5
10	2.1	63	5.4

Zero-stack Derating

The installation of several miniature circuit breaker side by side with rated current on all poles requires a correction factor to the rated current (not required if spacers are used).

Number of Adjacent Devices	Factor
1	1
2, 3	0.9
4, 5	0.8
≥ 6	0.75

L8 Supplementary Protection Devices Ambient Temperature Derating

Note: Application below 0° C is for non-condensing atmosphere. Care should be taken for applications below 0 °C. These devices are not certified to operate correctly in the presence of ice.

Temperature Derating, UL

Reference temperature = 40 °C

Current Rating (A)	Ambient Temperature (°C)										
	-25	-20	-10	0	10	20	30	40	50	55	60
0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
1	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1	1.0	0.9	0.9
2	2.5	2.4	2.4	2.3	2.2	2.1	2.1	2	1.9	1.9	1.8
3	3.7	3.7	3.6	3.4	3.3	3.2	3.1	3	2.9	2.8	2.8
4	5.0	4.9	4.7	4.6	4.4	4.3	4.1	4	3.9	3.8	3.7
5	6.2	6.1	5.9	5.7	5.6	5.4	5.2	5	4.8	4.7	4.6
6	7.4	7.3	7.1	6.9	6.7	6.4	6.2	6	5.8	5.7	5.6
7	8.7	8.6	8.3	8.0	7.8	7.5	7.3	7	6.7	6.6	6.5
8	9.9	9.8	9.5	9.2	8.9	8.6	8.3	8	7.7	7.6	7.4
10	12.4	12.2	11.9	11.5	11.1	10.7	10.4	10	9.6	9.4	9.3
13	16.1	15.9	15.4	14.9	14.4	14.0	13.5	13	12.5	12.3	12.0
15	18.6	18.3	17.8	17.2	16.7	16.1	15.6	15	14.4	14.2	13.9
16	19.8	19.6	19.0	18.4	17.8	17.2	16.6	16	15.4	15.1	14.8
20	24.8	24.4	23.7	23.0	22.2	21.5	20.7	20	19.3	18.9	18.5
25	31.0	30.6	29.6	28.7	27.8	26.9	25.9	25	24.1	23.6	23.1
30	37.2	36.7	35.6	34.4	33.3	32.2	31.1	30	28.9	28.3	27.8
32	39.7	39.1	37.9	36.7	35.6	34.4	33.2	32	30.8	30.2	29.6
40	49.6	48.9	47.4	45.9	44.4	43.0	41.5	40	38.5	37.8	37.0
50	62.0	61.1	59.3	57.4	55.6	53.7	51.9	50	48.2	47.2	46.3
63	78.2	77.0	74.7	72.3	70.0	67.7	65.3	63	60.7	59.5	58.3

Temperature Derating, IEC

Reference temperature = 30 °C

Current Rating (A)	Ambient Temperature (°C)										
	-25	-20	-10	0	10	20	30	40	50	55	60
0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
1	1.2	1.2	1.1	1.1	1.1	1.0	1	1.0	0.9	0.9	0.9
2	2.3	2.3	2.2	2.2	2.1	2.1	2	1.9	1.9	1.8	1.8
3	3.5	3.5	3.4	3.3	3.2	3.1	3	2.9	2.8	2.8	2.7
4	4.7	4.6	4.5	4.4	4.2	4.1	4	3.9	3.8	3.7	3.6
5	5.8	5.8	5.6	5.5	5.3	5.2	5	4.9	4.7	4.6	4.5
6	7.0	6.9	6.7	6.5	6.4	6.2	6	5.8	5.6	5.6	5.5
7	8.2	8.1	7.8	7.6	7.4	7.2	7	6.8	6.6	6.5	6.4
8	9.3	9.2	9.0	8.7	8.5	8.2	8	7.8	7.5	7.4	7.3
10	11.7	11.5	11.2	10.9	10.6	10.3	10	9.7	9.4	9.3	9.1
13	15.1	15.0	14.6	14.2	13.8	13.4	13	12.6	12.2	12.0	11.8
15	17.5	17.3	16.8	16.4	15.9	15.5	15	14.6	14.1	13.9	13.6
16	18.6	18.4	17.9	17.4	17.0	16.5	16	15.5	15.0	14.8	14.6
20	23.3	23.0	22.4	21.8	21.2	20.6	20	19.4	18.8	18.5	18.2
25	29.1	28.8	28.0	27.3	26.5	25.8	25	24.3	23.5	23.1	22.7
30	35.0	34.5	33.6	32.7	31.8	30.9	30	29.1	28.2	27.8	27.3
32	37.3	36.8	35.8	34.9	33.9	33.0	32	31.0	30.1	29.6	29.1
40	46.6	46.0	44.8	43.6	42.4	41.2	40	38.8	37.6	37.0	36.4
50	58.3	57.5	56.0	54.5	53.0	51.5	50	48.5	47.0	46.3	45.5
63	73.4	72.5	70.6	68.7	66.8	64.9	63	61.1	59.2	58.3	57.3

Note: In order to use MCB at 60°C you must use cable suitable for this temperature. Any third party certifications are not covering this ambient temperature rating.

IDEC TW SERIES – 22MM NEMA STYLE PUSHBUTTONS

- TW NEMA style switches with snap-on contacts
- Corrosion resistant octagonal chrome plated locking bezel
- Snap-on 10A contact blocks
- LED illumination
- Slow make, double break, contacts
- Modular construction for maximum flexibility
- Type 4X and IP65 watertight/oiltight panel
- Available assembled or as sub-components
- Finger-safe – spring-up
- Large M3.5 screw terminals with captive sems plate



IDEC has your 22mm switching needs covered.

Button styles include flush, extended, mushroom, or square and all bodies are crafted from fracture-resistant nylon.

All illuminated units feature two lens styles, one that maximizes light dispersion, the other accommodates direct lens engraving.

Contact mechanism allow for a wide current rating, 5mA to 10A, which reduces the need for various contact materials.

When looking for a 22mm switch that is durable, easy to use, and versatile, then IDEC's TW series is your solution.



UL Listed
File No. E68961



CSA Approved
File No. LR21451




File No. DK95-01696



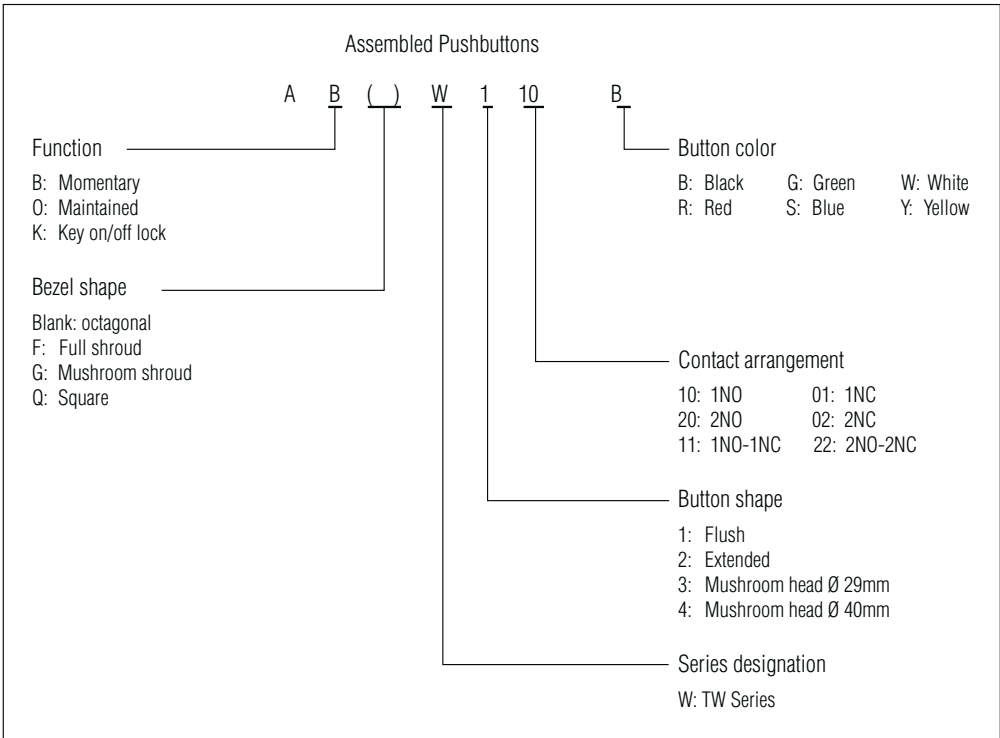
Certificate No.
2030010305027380



Conforming to Standards		EN60947-1, EN60947-5-1, VDE0660-200, UL508, CSA C22-2 No.14																																																					
Approvals		<p>CSA: pushbuttons and selector switches: A600 pilot lights and illuminated pushbuttons with integral transformer (100/110, 115, 120, 200/220, 230, 240, 380, 400/440, 480V)</p> <p>UL: pushbuttons and selector switches: A600 pilot lights and illuminated pushbuttons with integral transformer (100/110, 115, 120, 200/220, 230, 240, 380, 400/440, 480V)</p> <p>TÜV: pushbuttons and selector switches: A600=P600 (N, NC)/O600 (N, O-EM, NC-LB) pilot lights and illuminated pushbuttons, direct supply pilot lights and illuminated pushbut tons with integral transformer (100/110, 115, 120, 200/220, 230, 240, 380, 400/440, 480V)</p>																																																					
 File No. E68961  File No. LR21451  Certificate No. 2030010305027380  Registration No. J9551802 (E-Stops) Registration No. J9551803 (All other switches) Registration No. J9551804 (Pilot lights)																																																							
Specifications		<p>Operating temperature: Operation: -25 to +50°C (without freezing), Storage: -40 to +80 °C (without freezing)</p> <p>Vibration resistance: 5 to 55Hz, 100m/sec (10g) conforming to IEC6068-2-6</p> <p>Shock resistance: 1000m/sec (100g) conforming to IEC6068-2-7</p> <p>Electric shock protection: Class 2 conforming to IEC60664-7</p> <p>Degree of protection (conforming to IEC60529) (conforming to NEMA ICS6-110): IP65 from front of the panel; (IP54 for key switches) IP20 (Type HW-U contact block) Type 1, 2, 3, 3R, 3S, 4, 4X, 5, 12, 13 (Type 1, 2, 3R, 5, 12, 13 for key switches)</p> <p>Mechanical life: Momentary pushbuttons: 5,000,000 (1800 operations per hour) All other switches: 500,000</p> <p>Pollution degree (conforming to IEC60947-1): 3</p> <p>Rated operational characteristics: AC-15: A600 or Ue = 250 V, Ie = 3A (NO, NC, NO-EM, NC-LB) DC-13: P600 or Ue = 125 V, Ie = 1.1A (NO, NC) DC-13: O600 or Ue = 125 V, Ie = 0.9A (NO-EM, NC-LB)</p> <p>Rated insulation voltage: 600V</p> <p>Rated switching over r-voltage: Less than 4k V, conforming to IEC60947-1</p> <p>Rated impulse withstanding voltage: 4kV for contact circuit, 2.5kV for lamp circuit</p> <p>Rated thermal current: 10 Amp</p> <p>Minimum switching capacity: 5 mA at 3V AC/DC</p> <p>Contact operation: Slow break NC or slow make NO, self-cleaning</p>																																																					
		<table border="1"> <thead> <tr> <th>Unit</th> <th>Wire</th> <th>Number of Wires</th> <th>Recommended Tightening Torque (Nm)</th> <th>Terminal Screw</th> </tr> </thead> <tbody> <tr> <td rowspan="6">HW-U Contact Block</td> <td rowspan="3">Solid Wire</td> <td colspan="2">Crimping Terminal</td> <td rowspan="6">M3.5</td> </tr> <tr> <td>ø0.5 to 1.6 mm (AWG14 to 22)</td> <td>2</td> <td>1.0 to 1.3</td> </tr> <tr> <td>ø1.7 to 2.0 mm (AWG12)</td> <td>2</td> <td>1.0 to 1.3</td> </tr> <tr> <td rowspan="3">Stranded Wire</td> <td>ø1.7 to 2.0 mm (AWG12)</td> <td>1</td> <td>1.2 to 1.3</td> </tr> <tr> <td>ø3.0 to 2.0 mm (AWG14 to 22)</td> <td>2</td> <td>1.0 to 1.3</td> </tr> <tr> <td>2.1 to 3.5 mm (AWG12)</td> <td>1</td> <td>1.2 to 1.3</td> </tr> <tr> <td rowspan="3">Illuminated Unit (*1)</td> <td rowspan="3">Solid Wire</td> <td colspan="2">Crimping Terminal</td> <td rowspan="3">M3.5</td> </tr> <tr> <td>ø0.5 to 1.6 mm (AWG14 to 22)</td> <td>2</td> <td>1.0 to 1.3</td> </tr> <tr> <td>ø3.0 to 2.0 mm (AWG14 to 22)</td> <td>2</td> <td>1.0 to 1.3</td> </tr> <tr> <td rowspan="3">Pilot Light</td> <td rowspan="3">Solid Wire</td> <td colspan="2">Crimping Terminal</td> <td rowspan="3">M3.5</td> </tr> <tr> <td>ø0.5 to 1.6 mm (AWG14 to 22)</td> <td>2</td> <td>0.6 to 1.0 (M3.0)</td> </tr> <tr> <td>ø0.3 to 2.0 mm (AWG14 to 22)</td> <td>2</td> <td>1.0 to 1.3 (M3.5)</td> </tr> </tbody> </table>						Unit	Wire	Number of Wires	Recommended Tightening Torque (Nm)	Terminal Screw	HW-U Contact Block	Solid Wire	Crimping Terminal		M3.5	ø0.5 to 1.6 mm (AWG14 to 22)	2	1.0 to 1.3	ø1.7 to 2.0 mm (AWG12)	2	1.0 to 1.3	Stranded Wire	ø1.7 to 2.0 mm (AWG12)	1	1.2 to 1.3	ø3.0 to 2.0 mm (AWG14 to 22)	2	1.0 to 1.3	2.1 to 3.5 mm (AWG12)	1	1.2 to 1.3	Illuminated Unit (*1)	Solid Wire	Crimping Terminal		M3.5	ø0.5 to 1.6 mm (AWG14 to 22)	2	1.0 to 1.3	ø3.0 to 2.0 mm (AWG14 to 22)	2	1.0 to 1.3	Pilot Light	Solid Wire	Crimping Terminal		M3.5	ø0.5 to 1.6 mm (AWG14 to 22)	2	0.6 to 1.0 (M3.0)	ø0.3 to 2.0 mm (AWG14 to 22)	2	1.0 to 1.3 (M3.5)
Unit	Wire	Number of Wires	Recommended Tightening Torque (Nm)	Terminal Screw																																																			
HW-U Contact Block	Solid Wire	Crimping Terminal		M3.5																																																			
		ø0.5 to 1.6 mm (AWG14 to 22)	2		1.0 to 1.3																																																		
		ø1.7 to 2.0 mm (AWG12)	2		1.0 to 1.3																																																		
	Stranded Wire	ø1.7 to 2.0 mm (AWG12)	1		1.2 to 1.3																																																		
		ø3.0 to 2.0 mm (AWG14 to 22)	2		1.0 to 1.3																																																		
		2.1 to 3.5 mm (AWG12)	1		1.2 to 1.3																																																		
Illuminated Unit (*1)	Solid Wire	Crimping Terminal		M3.5																																																			
		ø0.5 to 1.6 mm (AWG14 to 22)	2		1.0 to 1.3																																																		
		ø3.0 to 2.0 mm (AWG14 to 22)	2		1.0 to 1.3																																																		
Pilot Light	Solid Wire	Crimping Terminal		M3.5																																																			
		ø0.5 to 1.6 mm (AWG14 to 22)	2		0.6 to 1.0 (M3.0)																																																		
		ø0.3 to 2.0 mm (AWG14 to 22)	2		1.0 to 1.3 (M3.5)																																																		
		<p>1. * refers to the lamp terminals of the illuminated push buttons and selector switches.</p>																																																					
		<p>External short-circuit protection: 10A 250V fuse conforming to IEC60269-1</p> <p>Applicable wire size: Minimum 1 x 22 AWG, max. 2 x 14 AWG or 1 x 12 AWG</p> <p>Contact resistance: Initial contact resistance of 50m Ω or less</p> <p>Contact gap: 4mm (NO and NC), 2mm (NO-EM and NC-LB)</p> <p>Electrical reliability: MTBF < 1 fault for 10 million operation cycles (3V DC, 5mA)</p> <p>Lamp ratings: LEDs: 6V: 17mA max, 12/24 V: 11mA max, 120/240 V: 10mA max</p> <p>Horsepower rating: 1/4 HP @ 120V (single-phase, non-reversing motor); 1 HP @ 240V (3 phase, non-reversing motor)</p> <p>Contact material: Silver</p>																																																					
Contact Ratings		Contact block		Type HW-U																																																			
Pushbuttons		Rated insulation voltage		600V																																																			
Illuminated pushbuttons		Rated continuous current		10A																																																			
Selector switches		Contact ratings by utilization category IEC 60947-5-1		AC-15 (A600) DC-13 (P600)																																																			
Illuminated selector switches																																																							
Pushbutton selectors																																																							
Contact Ratings by Utilization Category																																																							
Operational voltage				24V	48V	50V	110V	220V	440V																																														
Operational current	AC50/60Hz	AC-12 Control of resistive loads and solid state load		10A	—	10A	10A	6A	2A																																														
		AC-15 Control of electromagnetic loads (> 72 VA)		10A	—	7A	5A	3A	1A																																														
	DC	DC-12 Control of resistive loads and solid state loads		10A	5A	—	2.2A	1.1A	—																																														
		DC-13 Control of electromagnets		5A	2A	—	1.1A	0.6A	—																																														

Switches and Pilot Devices: IDEC

NON-ILLUMINATED PUSHBUTTONS (ASSEMBLED)



To be used for interpreting part numbers only, not for part number development.

AROMAT DS MINIATURE RELAYS

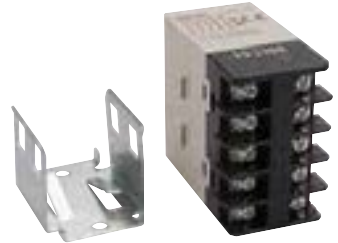
Part #	Description
DS2E-D-DC12V	Miniature relay DPDT 2 amp w/12VDC coil
DS2E-S-DC12V	Miniature relay DPDT 2 amp w/12VDC coil
DS2E-S-DC24V	Miniature relay DPDT 2 amp w/24VDC coil
DS2E-S-DC48V	Miniature relay DPDT 2 amp w/48VDC coil
DS4E-M-DC12V	Miniature relay 4PDT 3 amp w/12VDC coil



VC15-2A2B-AC120VNH8

AROMAT/OMRON CONTROL RELAYS

Part #	Description
VC15-2A1B-AC24VK	BW5152185K Relay 3PDT 2NO/1NC 20 amp w/24VAC coil
VC15-2A2B-AC120VNH8	BW2252185K-H8 Relay 4PDT 2NO/2NC 20 amp w/120VAC coil
VC15-3A1B-AC120VN	BW2253185K Relay 4PDT 2NO/1NC 20 amp w/120VAC coil. Otis #P613AP9
G7J-3A1B-BW-1-AC120V	BW2213185K Relay 4PDT 2NO/1NC 20 amp w/120VAC coil and screw terminals. MCE #27-01-0035



G7J-3A1B-BW-1-AC120V

LINE ELECTRIC

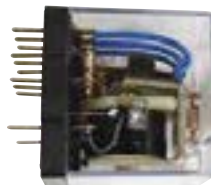
Part #	Description
LER1222D110	Relay DPDT w/110VDC coil. Replacement for the Guardian 1225-2C-110D
LER1223A240	Relay 3PDT with 240VAC coil. Replacement for Guardian 1220-3C-240A
LER1223D110	Relay 3PDT with 110VDC coil. Replacement for Guardian 1225-3C-110D
ORM11PB	Socket for AH5871 and AH5873 relays



LER1222D110



LER1223A240



LER1223A240



ORM11PB

Relays: Aromat, Aromat/Omron, Line Electric



2961105



2961118

MISC. RELAYS

Part #	Description
2961105	Relay, E-Mech; power; SPDT; curr. rtg 6A; ctrl-V 24DC; vol-rtg 250AC/DC; PCB Mnt
2961118	Relay, E-Mech; power; SPDT; curr. rtg 6A; ctrl-V 60DC; vol-rtg 250AC/DC; PCB mnt; 5 pin
2961192	Power relay, DPDT, 24VDC, 8 A, REL-MR series, through hole, non-latching
40.52.8.120.0000	General purpose relay, 40 series, power, DPDT, 24VDC, 8 A
40.52.7.024.0000	General purpose relay, 40 series, power, DPDT, 24VDC, 8 A
W389ACX-14	Relay, 3PDT, 20A, 120VAC w/flange
782XDX3C-120A	Control relay, E-Mech 4PDT 3A 120VAC; 782 Power Series
T84S17D414-48	Relay, 4PDT, 1A, 24VDC RES. Hi Dielectric
56.0W11.1131N	Safety relay, 110VDC
RTE24615	General purpose relays. DPDT 8 A 115VAC
1225-2C-110D	Guardian relay, DPDT, 110VDC

OMRON RELAYS

Part #	Description
G2R-1-S-DC12(S)	Power relay, SPDT, 12VDC, 10A, G2RS series, socket, non-latching
G2RL-1-DC5	Low profile power relay, SPDT 5VDC 12A
G2RL-1-E 24VDC	Non-latching relay, SPDT PCB mount, PC pin; 16A; 24VDC
G5Q-1A4-DC24	Relay, E-Mech; gen purp; SPST-NO; cur-rtg 10; 3; 5A; ctrl-V 24DC; PCB Mnt; 4 pin
G5RL-1-E-115/120VAC	Power relay, SPDT, 120VAC, 16A, G5RL series, through hole, non-latching
G5V-2-48VDC	Relay, Low signal; 24VDC; 2A; 62.5/60 VA/W; 1000VAC @ 50/60 Hz; 8 pin
G5V-2-DC12	Signal relay, 12VDC, DPDT, 2A, G5V-2 series, through hole, non-latching
MY4-DC24(S)	4PDT, Ctrl-V 24VDC; 5A; 250VAC/4PDT; ctrl-V 24VAC; 5A; 250VAC/30VDC; socket mnt; blade term; MY series
LY2F-AC110-120V	Relay, E-MECH; gen purp; DPDT; cur-rtg 10A; ctrl-V 110/120AC; vol-rtg 250/125AC/DC



333242RLS



186685LRLS



9710292DRLS

RELAY LOGIC IBM REPLACEMENT RELAYS

Part #	Description
159941	Socket for 4 pole IBM relay
159942	Socket for 6 pole IBM relay
159943	Socket for 12 pole IBM relay
186685LRLS	IBM relay replacement 4PDT latching w/48VDC coil
333242RLS	IBM relay replacement 4PDT w/100/120VDC coil
769009RLS	IBM relay replacement 4PDT w/24/32VDC coil
769019RLS	IBM relay replacement 6PDT w/48VDC coil
769488RLS	IBM relay replacement 12PDT w/48VDC coil
769489RLS	IBM relay replacement 4PDT w/48VDC coil
9710292DRLS	IBM relay replacement 4PDT w/48VDC coil and diode



769019RLS



769488RLS

SIEMENS 3TX SERIES—HEAVY DUTY POWER RELAYS

- Contact rating 30 and 40 amps, DPDT and SPDT
- Magnetic blowouts available for increased arc suppression

Part #	Description	Notes
3TX7130-0CC03	DPST-NO, 40A, 24VDC	PRD7DY0-24VDC/ PRD7DH0-24VDC
3TX7130-0CD03	DPST-NO, 40 Amp, 48VDC	PRD7DY0-48VDC/ PRD7DH0-48VDC
3TX7130-0CF03	DPST-NO,110VDC	PRD7DY0-110VDC/ PRD7DH0-110VDC
3TX7130-0CF13	DPST-NO, 40A, 120VAC	PRD7AY0-120VAC
3TX7130-0CH13	DPST-NO, 40A, 240VAC	PRD7AY0-240VAC
3TX7130-0DB03	DPDT, 40 amp, 12VDC	PRD11DY0-12VDC
3TX7130-0DC03	DPDT, 40 amp, 24VDC	PRD11DY0-24VDC
3TX7130-0DC13	DPDT, 40 amp, 24VAC	PRD11AY0-24VAC
3TX7130-0DD03	DPDT, 40 amp, 48VDC	PRD11DY0-48VDC
3TX7130-0DF03	DPDT, 40 amp, 110VDC	PRD11DY0-110VDC
3TX7130-0DF13	DPDT, 40 amp, 120VAC	PRD11AY0-120VAC
3TX7130-0DH13	DPDT, 40 amp, 240VAC	PRD11AY0-240VAC
3TX7130-0RB03	DPST, 40 amp, 12VDC mag blowout	PRD11DH0-12VDC
3TX7130-0RC03	DPST, 40 amp, 24VDC mag blowout	PRD11DH0-24VDC
3TX7130-0RD03	DPST, 40 amp, 48VDC mag blowout	PRD11DH0-48VDC
3TX7130-0RF03	DPDT, 40 amp, 110VDC mag blowout	PRD11DH0-110VDC
3TX7130-0RF13	DPDT, 30 amp, 120VAC, no LED	PRD11AH0-120VAC



3TX7130-0DC13



3TX7130-0RC03

STRUTHERS-DUNN

- Contact rating 25 amps 4PDT

Part #	Description
PM17AY-120VAC	4PDT 25 amp w/120VAC coil
PM17AY-240VAC	4PDT 25 amp w/240VAC coil
PM17AY-24VAC	4PDT 25 amp w/24VAC coil
PM17DY-110VDC	4PDT 25 amp w/110VDC coil



PM17AY-24VAC



R10E1X2-V15.0K



R10E1Y4-V2.5K



R10E1Z6-V1.5K

TYCO ELECTRONICS

Part #	Description
R10E1X2-V15.0K	DPDT 5 amp w/115VDC coil
R10E1X4-V15.0K	4PDT 5 amp w/115VDC coil
R10E1X6-V9.0K	6PDT 5 amp w/115VDC coil
R10E1Y2-V2.5K	DPDT 3 amp w/48VDC coil
R10E1Y2-V15.0K	DPDT 3 amp w/115VDC coil
R10E1Y2-V700	DPDT 3 amp w/24VDC coil
R10E1Y4-V2.5K	4PDT 3 amp w/48VDC coil
R10E1Y4-V700	4PDT 3 amp w/24VDC coil
R10E1Y6-V1.5K	6PDT 3 amp w/48VDC coil
R10E1Y6-V9.0K	6PDT 3 amp w/115VDC coil
R10E1Y6-V430	6PDT 3 amp w/24VDC coil
R10E1Z4-V2.5K	4PDT 2 amp bifurcated w/48VDC coil
R10E1Z6-V1.5K	6PDT 2 amp bifurcated w/48VDC coil
R10E1Z6-V9.0K	6PDT 2 amp bifurcated w/115VDC coil

TYCO/SCHRACK A17 SAFETY RELAY

Part #	Description
V23047-A1024-A501	Schrack relay 24VDC 8230hm 6A DPDT 29 x 12.6 x 25.5mm
V23047-A1110-A501	Schrack relay, DPDT 6A PCB w/110VDC coil
V23050-A1012-A542	Schrack relay, safety, 4NO, DPST-NC, 250VAC, 8A, 12VDC
V23050-A1110-A533	SR960001/SR6A4110 safety relay 6PST 3NO/3NC positively guided 8 amp contacts w/110VDC coil. Used with A17controllers



V23050-A1110-A533



V23047-A1024-A501
Schrack Relay 24VDC 8230hm
6A DPDT
29 x 12.6 x 25.5mm



V23050-A1012-A542
Schrack Relay 12VDC,
Safety, 4NO, DPST-NC,
250VAC, 8A

LIMIT SWITCHES

Part #	Description
CD4B-3111N	Omron limit switch lever, nylon roller, 0.69" diameter DPST, 1NO/1NC
CD4B-3113N	Adjustable lever, rubber roller, 1.97" diameter DPST, 1NO, 1NC
CD4B-3A13N	Omron limit switch, adjustable lever, rubber roller, 1.97" diameter DPST, 2NC
DW19	EECO LS1B limit switch. Specifically for use in the elevator hatchway as zoning, normal and final limits. One set of NO and NC closed contacts
DW19-D	EECO LS1B limit switch double contact switch
DW7	EECO MV-4C magnetic switch 1NO contact
DW7D	EECO MV-4C magnetic switch 2NO contact
ZE-N-25	Switch, enclosed, limit, 15A 125/250VAC, 2.8"H, 800 operating force



DW19



DW19-D



DW7



DW7D



CD4B-3111N



CD4B-3A13N



ZE-N-25

ARTISAN



2410SA-8



438U



438UP



438USA



438A-115-1



438A-115-1

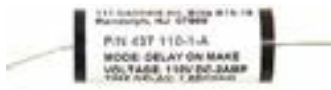


438A-115-5



PP-1038

Part #	Description	Extended Description
2410SA-8	Microprocessor Delay on Make DPDT Timer rated 12A resistive at 125VAC, 7A resistive at 250VAC/30VDC. Terminations: Octal plug-in type. Replaces Freedom 10-octal	A microprocessor time delay on make timer, controlling a DPDT set of relay contacts. Available on both AC and DC voltage models.
438U	Solid-state delay on Make Universal Timer rated 19 – 288VAC/DC, 1 amp, adjustable from 1 – 1,000 seconds	Model 438U (Universal Time Capsule) is an all solid-state timer providing Delay on Make control to any load operating from 19 – 288VAC/DC. Time delay is adjustable from 1 – 1000 seconds and is obtained by connecting a fixed resistor or potentiometer across the middle terminals (10K per second). Remains in off state when power is applied. After preset period has elapsed, timer switches on, energizing the load.
438UP	Solid-state delay on Make Universal Potentiometer Timer rated 19 – 288VAC/DC, 1 amp, adjustable from 1 second – 8 minutes	Model 438UP (Universal Potentiometer Adjustable Time Capsule) is an all solid-state timer providing Delay on Make control to any load operating from 19 – 288VAC/DC. Remains in off state when power is applied. Switches on when preset time period has elapsed, allowing load to energize. Load remains energized as long as power is applied. Power must be removed for at least 50 milliseconds to reset timer. Timing adjustment is made via potentiometer located between load terminals.
438USA	Solid-state delay on Make Universal Timer rated 19 – 288VAC/DC, 1 amp, adjustable from 1 – 1,024 seconds	Model 438USA (universal switch Adjustable Time Capsule) is an all solid-state timer providing Delay on Make control.
438USA-3	Solid-state delay on Make Universal Timer rated 100 – 288VAC/DC, 1 amp, adjustable from 0.1 – 102.4 seconds	Timing is set via a binary coded dip switch and is adjustable. Remains in off state when power is applied. Switches on when preset time period has elapsed, allowing load to energize. Load remains energized as long as power is applied.
438A-115-1	Solid-state delay on Make Timer rated 115VAC/DC, 1 amp, adjustable from 10.1 – 30 seconds	Model 438 Time Capsule is an all solid-state timer providing Delay on Make control to any 1 ampere AC or DC load such as a relay, solenoid or lamp. Timing adjustment is made by way of an external resistor. Consult instruction sheet for resistor selection.
438A-115-5	Solid-state delay on Make Timer rated 115VAC/DC, 1 amp, adjustable from 30 – 8,000 seconds	After choosing a timing resistor, connect the timer in series with the load. Polarity need not be observed. Remains in off state when power is applied. Switches on when preset time period has elapsed, allowing load to energize. Load remains energized as long as power is applied.
PP-1038	Bracket for mounting any Artisan Time Capsule device to DIN rail	
437-110-1-A	Solid-state delay on Make Timer rated 110VDC, 2 amp, 1 second	
5400-E-000	3.5" diagonal color display	Includes two relay contact outputs, two DC outputs for driving solid state relays, two switch inputs, and a USB port for importing and exporting the controller configurations.



437-110-1-A



5400-E-000

IDEC RTE SERIES – ANALOG

- 20 time ranges and 10 timing functions
- Time delays up to 600 hours
- ON and timing OUT LED indicators
- Standard 8- or 11-pin and 11-blade termination
- 2 form C delayed output contacts
- 10A Contact Rating

Specifications			
Operating System		Solid-state CMOS circuit	
Operation Type		Multi-mode	
Time Range		0.1 sec to 600 hours	
Rated Operational Voltage	AF20	100 – 240VAC	
	AD24	24VAC, 24VDC	
	D12	12V DC	
Reset Time		100 msec maximum	
Dimensions (mm)	RTE-P1, P2	40h x 36w x 77.9d	
	RTE-B1, B2	40h x 36w x 74.9d	
Contact Configuration		2 Form C, DPDT (Delay output)	
Allowable Voltage/Allowable Current		240VAC, 30VDC/10A	
Rated Load	Resistive	10A 240VAC, 30VDC	
	Inductive	7A 240VAC, 30VDC	

Part #	Voltage	Terminals	Socket
RTE-B1AF20	100 – 240VAC	Blade	SR3B-05
RTE-B2AF20	100 – 240VAC	Blade	SR3B-05
RTE-P1AF20	100 – 240VAC	8 pin	SR2P-06
RTE-P2AD24	24VAC	11 pin	SR3P-05
RTE-P2AF20	100 – 240VAC	11 pin	SR3P-05

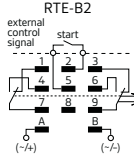
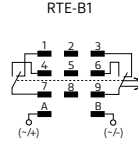
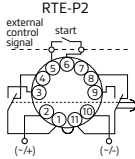
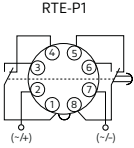


RTE-P1AF20



RTE-B1AF20

RTE Timing: P1+2 – B1+2



1. RTE-P2: Do not apply voltage to terminals 5, 6 & 7.
2. RTE-B1, B2: Do not apply voltage to terminals 2, 5 & 8.
3. IDEC sockets are as follows: RTE-P2: SR3P-05* pin type socket, RTE-B2: SR3B-05* blade type socket (*may be followed by suffix letter A,B,C or U).

A: ON-Delay 1 (power start)

Set timer for desired delay, apply power to coil. Contacts transfer after preset time has elapsed, and remain in transferred position until timer is reset. Reset occurs with removal of power.

Item	Terminal Number	Operation
Power	(1) 2 - 7 (2) A - B	[Timing diagram showing power pulse]
Delayed Contact	(1) 1 - 4, 5 - 8 (NC)	[Timing diagram showing NC contact closing after delay T]
	(2) 1 - 7, 3 - 9 (NO)	[Timing diagram showing NO contact closing after delay T]
Indicator	PWR	[Timing diagram showing PWR pulse]
	OUT	[Timing diagram showing OUT pulse]
Set Time		T

C: Cycle 1 (power start, OFF fi rst)

Set timer for desired delay, apply power to coil. First transfer of contacts occurs after preset delay has elapsed, after the next elapse of preset delay contacts return to original position. The timer now cycles between on and off as long as power is applied (duty ratio 1:1).

Item	Terminal Number	Operation
Power	(1) 2 - 7 (2) A - B	[Timing diagram showing power pulse]
Delayed Contact	(1) 1 - 4, 5 - 8 (NC)	[Timing diagram showing NC contact cycling]
	(2) 1 - 7, 3 - 9 (NO)	[Timing diagram showing NO contact cycling]
Indicator	PWR	[Timing diagram showing PWR pulse]
	OUT	[Timing diagram showing OUT pulse]
Set Time		T

A: ON-Delay 2 (signal start)

When a preset time has elapsed after the start input turned on while power is on, the NO output contact goes on.

Item	Terminal Number	Operation
Power	(A) 2 - 10 (B) A - B	[Timing diagram showing power pulse]
Start	(A) 5 - 6 (B) 2 - 5	[Timing diagram showing start pulse]
Delayed Contact	(A) 1 - 4, 8 - 11 (NC)	[Timing diagram showing NC contact closing after delay T]
	(B) 1 - 7, 3 - 9 (NO)	[Timing diagram showing NO contact closing after delay T]
Indicator	PWR	[Timing diagram showing PWR pulse]
	OUT	[Timing diagram showing OUT pulse]
Set Time		T

C: Cycle 4 (signal start, ON fi rst)

When the start input turns on while power is on, the NO output oscillates at a preset cycle (duty ratio 1:1).

Item	Terminal Number	Operation
Power	(A) 2 - 10 (B) A - B	[Timing diagram showing power pulse]
Start	(A) 5 - 6 (B) 2 - 5	[Timing diagram showing start pulse]
Delayed Contact	(A) 1 - 4, 8 - 11 (NC)	[Timing diagram showing NC contact cycling]
	(B) 1 - 7, 3 - 9 (NO)	[Timing diagram showing NO contact cycling]
Indicator	PWR	[Timing diagram showing PWR pulse]
	OUT	[Timing diagram showing OUT pulse]
Set Time		T, Ta

B: Interval (power start)

Set timer for desired delay, apply power to coil. Contacts transfer immediately, and return to original position after preset time has elapsed. Reset occurs with removal of power.

Item	Terminal Number	Operation
Power	(1) 2 - 7 (2) A - B	[Timing diagram showing power pulse]
Delayed Contact	(1) 1 - 4, 5 - 8 (NC)	[Timing diagram showing NC contact closing immediately]
	(2) 1 - 7, 3 - 9 (NO)	[Timing diagram showing NO contact closing immediately]
Indicator	PWR	[Timing diagram showing PWR pulse]
	OUT	[Timing diagram showing OUT pulse]
Set Time		T

C: Cycle 3 (power start, ON fi rst)

Functions in same manner as Mode C, with the exception that fi rst transfer of contacts occurs as soon as power is applied. The ratio is 1:1. Time On = Time Off

Item	Terminal Number	Operation
Power	(1) 2 - 7 (2) A - B	[Timing diagram showing power pulse]
Delayed Contact	(1) 1 - 4, 5 - 8 (NC)	[Timing diagram showing NC contact cycling]
	(2) 1 - 7, 3 - 9 (NO)	[Timing diagram showing NO contact cycling]
Indicator	PWR	[Timing diagram showing PWR pulse]
	OUT	[Timing diagram showing OUT pulse]
Set Time		T

B: Cycle 2 (signal start, OFF fi rst)

When the start input turns on while power is on, the output oscillates at a preset cycle (duty ratio 1:1), starting while the NO contact off.

Item	Terminal Number	Operation
Power	(A) 2 - 10 (B) A - B	[Timing diagram showing power pulse]
Start	(A) 5 - 6 (B) 2 - 5	[Timing diagram showing start pulse]
Delayed Contact	(A) 1 - 4, 8 - 11 (NC)	[Timing diagram showing NC contact cycling]
	(B) 1 - 7, 3 - 9 (NO)	[Timing diagram showing NO contact cycling]
Indicator	PWR	[Timing diagram showing PWR pulse]
	OUT	[Timing diagram showing OUT pulse]
Set Time		T, Ta

D: Signal ON/OFF-Delay

When the start input turns on while power is on, the NO output contact goes on. When a preset time has elapsed while the start input remains on, the output contact goes off. When the start input turns off, the NO contact goes on again. When a preset time has elapsed after the start input turned off, the NO contact goes off.

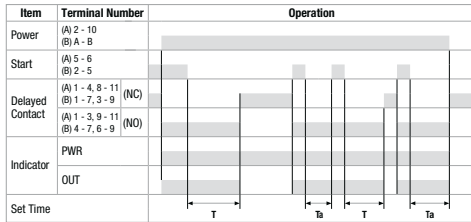
Item	Terminal Number	Operation
Power	(A) 2 - 10 (B) A - B	[Timing diagram showing power pulse]
Start	(A) 5 - 6 (B) 2 - 5	[Timing diagram showing start pulse]
Delayed Contact	(A) 1 - 4, 8 - 11 (NC)	[Timing diagram showing NC contact cycling]
	(B) 1 - 7, 3 - 9 (NO)	[Timing diagram showing NO contact cycling]
Indicator	PWR	[Timing diagram showing PWR pulse]
	OUT	[Timing diagram showing OUT pulse]
Set Time		T, Ta

IDEC RTE SERIES continued

RTE Timing: P1+2 – B1+2 continued

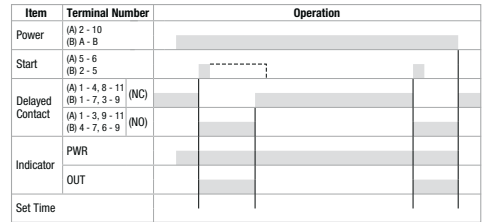
E: Signal OFF-Delay

When power is turned on while the start input is on, the NO output contact goes on. When a preset time has elapsed after the start input turned off, the NO output contact goes off.



F: One-Shot (signal start)

When the start input turns on while power is on, the NO output contact goes on. When a preset time has elapsed, the NO output contact goes off.



IDEC GT3A SERIES – ANALOG

Timer, On Delay (delay on make),
100-240VAC - 8 pin octal base
0.05s to 180 hours multi-mode

Key features

- 4 selectable operations modes on each model
- External start, reset and pause prints
- Panel mount or socket mount
- Large variety of timing functions
- Power and outputs status indicating LEDs

Specifications: GT3A-3AF20	
Time Range	0.05 sec - 180 hours
Rated Voltage	100 - 240VAC, 12VDC, 24VAC, 24VDC
Reset Time	60 msec maximum
Contact Ratings	125VAC/250VAC, 5A; 30VDC, 5A (resistive load)

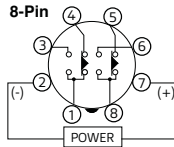


GT3A-3AF20

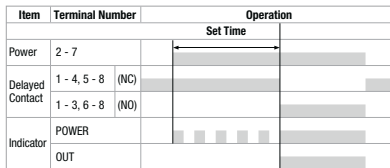
Mode of Operation	Rated Voltage Code	Time Range	Output	Contact	Complete Part #
A: ON-delay 1	AF20: 100 - 240VAC (50/60Hz)	0.05s - 180 hours	240VAC, 5A,	Delayed	GT3A-3AF20
B: Interval 1	D12: 12V DC		24VDC, 5A	DPDT	
C: Cycle 1	AD24: 24VAC (50/60Hz) 24VDC		(resistive load)		
D: Cycle 3					

**GT3A-3 Timing:
Delayed DPDT**

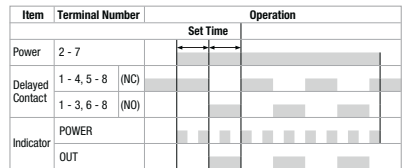
Operation
Mode
Selection



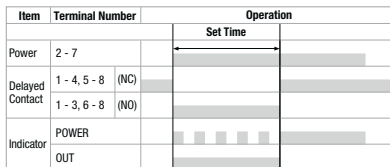
ON-Delay 1



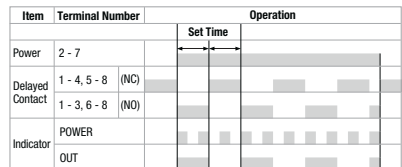
**Cycle 1
(OFF first)**



Interval 1



**Cycle 3
(ON first)**





GT3F-2AF20

IDEC GT3F SERIES – TRUE OFF DELAY

Timer, TRUE Off Delay (delay on break)
100-240VAC, 24VAC/DC - 8 pin octal base.
No external control switch is necessary.
0.5s to 600s, 3A resistive contact rating.

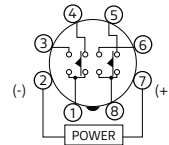
Key features

- Mountable in sockets or flush panel
- "True" power OFF-delay up to 10 minutes
- No external control switch necessary
- Available with reset inputs

Specifications: GT3F-2AF20

Operation	True power OFF-delay
Time Range	0.05 sec – 600 secs
Rated Voltage	100 – 240VAC, 24VAC, VDC
Contact Rating	250VAC/30VDC, 3A (resistive load)
Contact Form	DPDT
Minimum Power Application Time	1 sec

GT3F-2 (8-pin) Timing: Delayed DPDT



Item	Terminal Number	Operation
Power	2 - 7	[Timing diagram showing power pulse]
Delayed Contact	1 - 4 (NC)	[Timing diagram showing NO contact closing]
	1 - 3 (NO)	[Timing diagram showing NC contact opening]
Indicator	POWER	[Timing diagram showing indicator pulse]
Set Time		[Timing diagram showing set time T and minimum power application time Tr]

T = Set time

Tr = Minimum Power Application Time

When power is applied, the NO contact closes. When power is removed, the timing period begins. When time has elapsed, the NO contact opens. Optional reset input will return contacts to original state before time elapses.



GTSY-4SN6A100

IDEC GTSY SERIES – ON DELAY

- 4PDT, 3A or DPDT, 5A contacts
- 4 time ranges
- Control settings by hand or screwdriver
- Power ON and timing out LED indicators
- Uses the same sockets and hold-down clips as IDEC's RY4S and RU series relays

Specifications

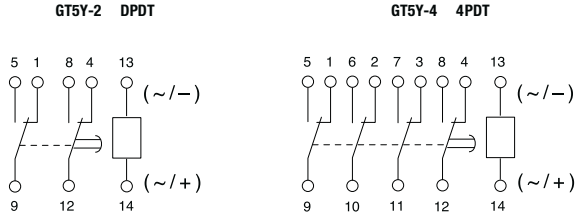
GTSY-4

Rated Operating Voltage	100 – 120VAC	24VDC
	200 – 240VAC	24VAC
Contact Form	4PDT	
Rated Load	Resistive Load	220VAC, 3A 30VDC, 3A
	Inductive Load	220VAC, 0.8A 30VDC, 1.5A
Allowable Contact Power	Resistive Load	660VA AC 90W DC
	Inductive Load	176VA AC 45W DC
	Cos ϕ = 0.3	
	L/r = 7 msec	
Allowable Voltage	250VAC, 125VDC	
Allowable Current	3A	
Reset Time	When turning power off after time up: 0.1 sec maximum When turning power off before time up: 1 sec maximum	

Mode of Operation	Contact	Output	Rated Voltage	Time Range	Complete Part #
ON-delay	DPDT	220VAC/ 30VDC, 5A	100 – 120VAC	1S/10S/1M/10M	GTSY-2SN1A100
				3S/30S/3M/30M	GTSY-2SN3A100
			100 – 120VAC	1S/10S/1M/10M	GTSY-4SN1A100
	4PDT	220VAC/ 30VDC, 3A	100 – 120VAC	3S/30S/3M/30M	GTSY-4SN3A100
				6S/60S/6M/60M	GTSY-4SN6A100
			200 – 240VAC	1S/10S/1M/10M	GTSY-4SN1A200
			24VDC	1S/10S/1M/10M	GTSY-4SN1D24
			24VAC	1S/10S/1M/10M	GTSY-4SN1A24

GT5Y Timing/Schematics/Electrical Life Curves

Internal Connections
(bottom view)



Operation Mode:
ON-Delay

Item	Terminal Number	Operation
Set Time		
Power	13 - 14	
Delayed Contact	1 - 9, 2 - 10	(NC)
	3 - 11, 4 - 12	
	5 - 9, 6 - 10	(NO)
Indicator	POWER	
	OUT	

SPRECHER+SCHUH

Part #	Description
CZA7-30	Off-delay pneumatic timer attachment for S+S CA7 contactors, 0.3–30 secs
CZA7-180	Off-delay pneumatic timer attachment for S+S CA7 contactors, 1.8–180 secs
CZE7-30	Timer attachment, on delay, pneumatic 0.3–30 secs



CZA7-180

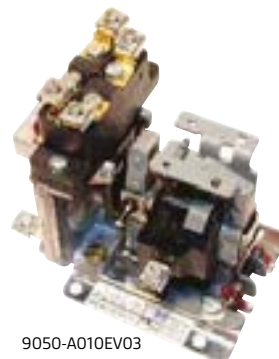


CZA7-30

SQUARE D PNEUMATIC

- On or Off delay (convertible)
- SPDT timed contacts rated 15 amps continuous
- Timing range 0.15 – 60 seconds
- Repeat accuracy +/- 10%
- Operating temperature range 68° – 104°F

Part #	Description
9050-A010EV02	120VAC
9050-A010EV03	230VAC



9050-A010EV03



TIME MARK CORPORATION 3-Phase Power Monitors

Detect phase loss, low voltage, phase reversal



Time-Mark Three Phase Power Monitors continuously monitor 3-phase power lines for abnormal conditions. When properly adjusted, they will detect phase loss on a loaded motor even when regenerated voltage is present.

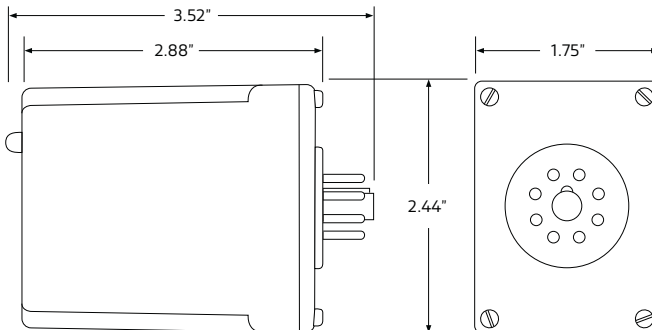
These devices consist of a solid-state voltage and phase-angle sensing circuit, driving an electromechanical relay. When correct voltage and phase rotation are applied, the internal relay energizes. A fault condition de-energizes the relay. When the fault is corrected, the monitors automatically reset.

The monitors do not require a neutral connection and can be used with Wye or Delta systems. Voltage ranges are sufficiently wide to allow for proper adjustment to existing conditions. Both TRIP and NORM condition indicators are provided to aid in adjustment and system troubleshooting.

Specifications

Auto Reset	B257B	257B	A257B
Nominal AC Voltage (phase to phase)	120VAC	208/240VAC	480VAC
Case Color	Gray	Red	Yellow
Adjustment Range	85 – 120VAC	160 – 240VAC	380 – 480VAC
Response Time	50 msec (set or reset)		
Output Contacts	SPDT 10 amps at 240VAC resistive		
Expected Relay Life	Mechanical: 10 million operations Electrical: 100,000 operations at rated load		
Mounting	8-pin socket Cat. #51X120		

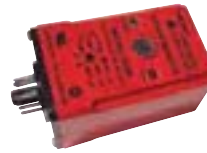
Dimensions



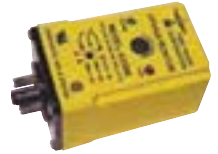
3-Phase Power Monitors

Part #	Description
18-120	3-phase monitor w/trip and restart delays 85-120VAC SPDT 10 amps
18-208/240	3-phase monitor w/trip and restart delays 160-240VAC SPDT 10 amps
18-480	3-phase monitor w/trip and restart delays 380-480VAC SPDT 10 amps
253	SPDT 10A 208-480VAC (phase to phase) Reverse phase relay, socket mounted, senses phase reversal, low power consumption
257B	3-phase power monitor 208/240VAC side adjust
258B	3-phase power monitor 208/240VAC top adjust
98A00110-01	3-phase power monitor 45-60VAC side adjust, Otis special
A257B	3-phase power monitor 480VAC top adjust
A258B	3-phase power monitor 480VAC side adjust
B257B	3-phase power monitor 120VAC top adjust
B258B	3-phase power monitor 120VAC side adjust

Accessories	Description
51X120	Socket for 3-phase power monitor, 600V rated
98A53-5	Hold down clamp



258B



A258B

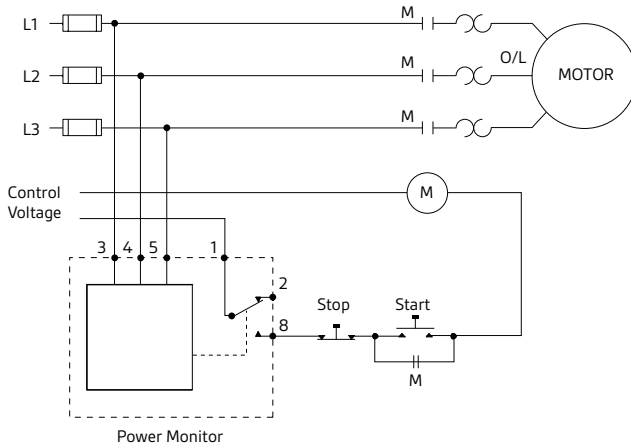


98A00110-01



A257B

Typical Application



18-120



18-208/240



18-480



DPA01CM60



DPA53CM23



DPA53CM48

CARLO GAVAZZI

Part #	Description
DPA01CM60	Relay; E-Mech; 3-phase monitor
DPA53CM23	Relay; E-Mech; 3-phase monitor
DPA53CM48	Power monitor, Carlo Gavazzi 3



A50-30



A75-30



A145-30

ABB/ASEA BROWN BOVERI

For a complete listing of ABB DC Contactors and replacement parts, see the DC Contactor section starting on page 182.

For a complete listing of ABB contact kits, see the Contact Kit section starting on page 189.

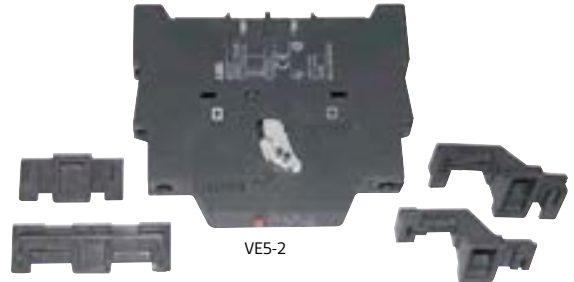
AC IEC Contactors

Part #	Max Motor Amps	HP@ 200V	HP@ 230V	HP@ 460V	Notes
A9-30-01-84	9	2	2	5	Includes 1NC built-in aux, 120VAC coil
A9-30-10-84	9	2	2	5	Includes 1NO built-in aux, 120VAC coil
A9-30-11-84	9	2	2	5	Includes 1NO/1NC built in aux, 120VAC coil
A12-30-01-84	11	3	3	7.5	Includes 1NC built-in aux, 120VAC coil
A12-30-10-84	11	3	3	7.5	Includes 1NO built-in aux, 120VAC coil
A16-30-01-84	17	5	5	10	Includes 1NC built-in aux, 120VAC coil
A16-30-10-84	17	5	5	10	Includes 1NO built-in aux, 120VAC coil
A26-30-01-84	28	7.5	10	20	Includes 1NC built-in aux, 120VAC coil
A26-30-10-84	28	7.5	10	20	Includes 1NO built-in aux, 120VAC coil
A26-30-11-84	28	7.5	10	20	Includes 1NO/1NC built in aux, 120VAC coil
A30-30-01-84	34	10	10	25	Includes 1NC built-in aux, 120VAC coil
A30-30-10-84	34	10	10	25	Includes 1NO built-in aux, 120VAC coil
A40-30-01-84	42	10	15	30	Includes 1NC built-in aux, 120VAC coil
A40-30-10-81	42	10	15	30	Includes 1NO built in aux, 24VAC coil
A40-30-10-84	42	10	15	30	Includes 1NO built-in aux, 120VAC coil
A40-30-11-84	42	10	15	30	Includes 1NO/1NC built in aux, 120VAC coil
A50-30-11-84	54	15	20	40	Includes 1NO/1NC built-in aux, 120VAC coil
A63-30-11-84	65	20	25	50	Includes 1NO/1NC built-in aux, 120VAC coil
A75-30-11-84	80	25	30	60	Includes 1NO/1NC built-in aux, 120VAC coil
A95-30-11-80	95	30	30	60	Includes 1NO/1NC built in aux, 240VAC coil
A95-30-11-84	95	30	30	60	Includes 1NO/1NC built-in aux, 120VAC coil
A145-30-11-84	130	40	50	100	Includes 1NO/1NC built-in aux, 120VAC coil
A210-30-11-84	192	60	75	150	Includes 1NO/1NC built-in aux, 120VAC coil

This product is being phased out and replaced the the AF series.

Mechanical Interlocks

Part #	Description	Notes
VE5-2	Includes 2 NC aux contacts	For use with A45-A110 contactors
VM4	Mech interlock AF09-AF38	
VM5-1	Mech interlock A9-A40	



Aux Contacts

Part #	Description	Notes
CA5-22E	Aux contact, top mount 2NO/2NC	For use with A30-A110 contactors
CAL5-11	Aux contact, side mount 1NO/1NC	For use with A9-A110 contactors
CAL18-11	Aux contact, side mount 1NO/1NC	For use with AA145-300 and AF145-AF2050 contactors
CA5-10	Aux contact 1NO	Front mounting A9-A40
CA5-01	Aux contact 1NC	Front mounting A-line
CA5-04E	Aux contact 4NC	Front mounting A-line
CA5-22E	Aux contact 2NO/2NC	Front mounting A-line
CA5-31E	Aux contact 3NO/1NC	Front mounting A-line
CA5-40E	Aux contact 4NO	Front mounting A-line
CAL16-11A	Aux contact 1NO/1NC	Leftside mounting A-line
CAL16-11B	Aux contact 1NO/1NC	Rightside mounting A-line
CAL16-11C	Aux contact 1NO/1NC	Left/rightside mounting A-line
CCL16-11E	Aux contact 1NO/1NC	Late break EHDB220-280
CAL16-11N	Aux contact 1NO/1NC	Leftside mounting EHDB220-280
CAL18-11	Aux contact 1NO/1NC	AA145-300 anf AF145-AF2050



ALLEN-BRADLEY

Bulletin 100-C Contactors and Starters, IEC Contactors



Allen-Bradley 100-C60 and Sprecher+Schuh CA7-60 Contactors



Part #	Sprecher+Schuh Part #	Max Motor Amps	HP@ 200V	HP@ 230V	HP@ 460V	Notes
100-C09-01-	CA7-09-01-*	9	2	2	5	Includes 1NC built-in aux
100-C09-10-	CA7-09-10-*	9	2	2	5	Includes 1NO built-in aux
100-C12-01-	CA7-12-01	12	3	3	7.5	Includes 1NC built-in aux
100-C12-10-	CA7-12-10-*	12	3	3	7.5	Includes 1NO built-in aux
100-C12-M40-	CA7-12E-10	12	3	3	7.5	4NO power poles
100-C16-01-	CA7-16-01-*	16	5	5	10	Includes 1NC built-in aux
100-C16-10-	CA7-16-10-*	16	5	5	10	Includes 1NO built-in aux
100-C16-M31-	CA7-16-M31	16	5	5	10	3NO/1NC power poles
100-C23-01-	CA7-23-01-*	23	5	7.5	15	Includes 1NC built-in aux
100-C23-10-	CA7-23-10-*	23	5	7.5	15	Includes 1NO built-in aux
100-C23-M22-	CA7-23-M22	23	5	7.5	15	2NO/2NC power poles
100-C23-M31-	CA7-23-M31	23	5	7.5	15	3NO/1NC power poles
100-C23-M40-	CA7-23-M40	23	5	7.5	15	4NO power poles
100-C30-00-*	CA7-23-00-*	30	7.5	10	20	Specify aux contacts
100-C37-00-*	CA7-37-00-*	37	10	10	25	Specify aux contacts
100-C43-00-*	CA7-43-00-*	43	10	15	30	Specify aux contacts
100-C60-00-*	CA7-60-00-*	60	15	20	40	Specify aux contacts
100-C72-00-*	CA7-72-00-*	72	20	25	50	Specify aux contacts
100-C85-00-*	CA7-85-00-*	85	25	30	60	Specify aux contacts
100-C97-00-*	CA7-97-10-*	97	30	30	75	Specify aux contacts
100-D115-00-*	CA6-115-11	115	40	40	75	Specify aux contacts
100-D140-00-*	CA6-140-00-*	140	40	50	100	Specify aux contacts
100-D180-00-*	CA6-180-00-*	180	50	60	150	Specify aux contacts

Available AC coil voltages: 24, 120, 208, 240, 480, 600

Available DC coil voltages: 12, 24, 48, 110, 125, 220

*These contactors have replaceable contacts.

Access Elevator Supply is not a franchised distributor for Allen-Bradley products, but we are for Sprecher+Schuh.

Replacement Contact Kits for 100-C and 100-D Contactors

All 3-pole kits

Part #	Contact Kit
100-C30	CA7-C30
100-C37	CA7-C37
100-C43	CA7-C43
100-C60	CA7-C60
100-C72	CA7-C72
100-C85	CA7-C85
100-D95	CA6-C95



CA7-C30



CA7-C37



CA7-C43



CA7-C60



CA7-C72



CA7-C85

100-B Replacement Contactors and Parts



3RT1054-6AF36-PEM Replacement Contactor for 100-B110ND3

Baseplate mounting holes match those of the 100-B110ND3. Order in pairs when using in an MCE 12 Pulse Drive.

Also order mounting kit 3RT1054-SVCKIT, one per contactor.



40780-800-01 Contact Kit for 100-B110ND3 Contactor



195-GA10 1NO aux contact Used with 100-B110ND3 Contactor

Starters and Contactors Allen-Bradley



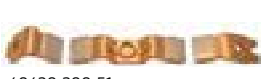
40410-331-51



40410-331-52



40420-322-51



40430-300-51



40440-300-51



42450-805-01



Z34037



Z34038



Z34039



Z34040



Z34041



Z34043



X-33977



X-35162



X-33553



X-33519



X-35163



X-36702



X-36670



X-36703



X-36671



X-67541



X-119624

ALLEN-BRADLEY continued

500 Line NEMA Starters and Contact Kits

All 1-pole kits

Part #	NEMA Size	Contact Kit, 1-pole
509-A0D	0	40410-331-51
509-B0D	1	40410-331-52
509-C0D	2	40420-322-51
509-D0D	3	40430-300-51
509-E0D	4	40440-300-51
509-F09	5	40450-805-01

Series K Contact Kits

All 1-pole kits

Part #	Size	Notes
Z34037	0	
Z34038	1	
Z34039	2	
Z34040	3	
Z34041	4	
Z34043	5	Accommodates terminal mounted current transformers

Series A Contact Kits

Part #	Size	Description
X-33977	0	Stationary, short, 1 piece
X-35162	0	Stationary, long, 1 piece
X-33553	0	Movable, 1 piece
X-33519	1	Stationary, short, 1 piece
X-35163	1	Stationary, long, 1 piece
X-36702	2	Stationary, 1 piece
X-36670	2	Movable, 1 piece
X-36703	3	Stationary, 1 piece
X-36671	3	Movable, 1 piece
X-67541	4	Stationary, 1 piece
X-119624	4	Movable, 1 piece

FUJI

Electric Parts

Part #	Description
4SH4221Y	SH-4Y 2NO/2NC 110 - 120V/60HZ
4SH4401Y	SH-4Y 4NO 110-120V/60HZ
4SH4311Y	SH-4Y 3NO/1NC AC110 - 120V/60hz
4NCOH0102Y	SC-5-1Y 110-120V60HZ 2NC
4NCOH0111Y	SC-5-1Y AC110 - 120V 60HZ AC110 1NO/1NC
SZ-A22Y	2NO/ 2NC aux for SC-5
SZ-Z5	Surge suppressor 100 - 250V AC, DC



4SH4221Y



4SH4401Y



4SH4311Y



4NCOH0102Y



4NCOH0111Y



SZ-A22Y



SZ-Z5



CL04



CL02



CL06



CK75



CL04



CL10



BCLF10



BCLF01



BCLL11



BCLL20



BRLL11

GE

C2000 IEC Contactors

Part #	Max Motor Amps	200V HP	230V HP	460V HP
CL00A310T	10	3	3	5
CL01A310T	13.8	3	3	7.5
CL02A310T	17.5	5	5	10
CL25A310T	22	5	7.5	15
CL04A310M*	32	10	10	20
CL45A310M	34	10	10	25
CL06A300M*	48	15	15	30
CL07A300M*	62	20	20	40
CL08A300M*	68	20	25	50
CL09A300M*	80	25	30	60
CL10A300M*	96	30	40	75
CK75CE11W100-250	150	40	50	100
CK08CE311W100-250	156	50	60	125

To complete catalog number, specify AC or DC coil voltage.

*Replacement contacts available. See following page for available contact kits.

C2000 IEC Starters

Part #	Max Motor Amps	200V HP	230V HP	460V HP
CL00A310T	10	3	3	5
CL01A310T	13.8	3	3	7.5
CL02A310T	17.5	5	5	10
CL25A310T	22	5	7.5	15
CL04A310M	32	10	10	20
CL45A310M	34	10	10	25
CL06A300M*	48	15	15	30
CL07A300MJ*	62	20	20	40
CL08A300MJ*	68	20	25	50
CL09A300MJ*	80	25	30	60
CL10A300MJ*	96	30	40	75

To complete catalog number, specify AC or DC coil voltage, and overload relay amps.

*Replacement contacts available. See following page for available contact kits.

Aux Contacts

Part #	Contacts	Mounting
BCLF10	1NO	Aux contact, front mounting CL00-CL10/CK
BCLF01	1NC	Aux contact, front mounting CL00-CL10/CK
BCLL11	1NO/1NC	Aux contact, side mounting CL00-CL10/CK
BCLL20	2NO	Aux contact, side mounting CL00-CL10/CK
BRLL11	1NO/1NC	Aux contact, side mounting CL00-CL10/CK

Mechanical Interlock #	Notes
BELA02	Mechanical interlock w/2NC aux contacts, CL contactors
BEKH	Mechanical interlock, CK contactors



BELA02



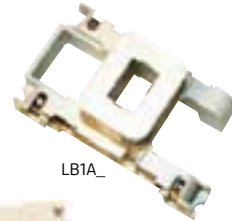
BEKH

Replacement Coils

Part #	Contactors/Starter
LB1A_	CL00/01/02/25
LB3A_	CL04/45
LB4A_	CL06/07/08/09/10

To complete replacement coil part number, specify coil voltage.

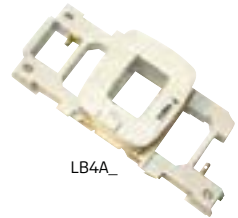
- 120V = J
- 240V = S
- 208V = L
- 24V = D
- 277V = N



LB1A_



LB3A_



LB4A_

Replacement Starter-mounted Overload Relays for CL00, CL01, CL02, CL25, CL04 and CL45

Auto/Manual Reset

Part #	Amp Range
RT1H	1.3 – 1.9
RT1L	4 – 6.3
RT1M	5.5 – 8.5
RT1T	17.5 – 22
RT1U	21 – 26
RT12W	30 – 40

Replacement Starter-mounted Overload Relays for CL06, CL07, CL08, CL09 and CL10

Auto/Manual Reset

Part #	Amp Range
RT2D	24 – 32
RT2E	30 – 43
RT2G	42 – 55
RT2H	54 – 65
RT2J	64 – 82
RT2L	78 – 97
RT2M	90 – 110



RT2E



RT2L

GE continued

300 Line NEMA Starters

- Heavy-duty NEMA industrial design
- Easy to replace coils and contacts
- NEMA Type 1, 3R, and 12 enclosures readily available



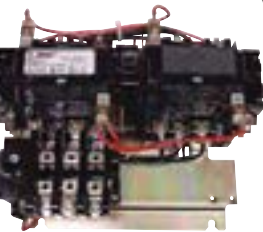
CR306A/B/C (CR306C shown)



CR306D



CR306E/F (CR306E shown)



CR309C002



CR309C002BAA

200V HP	230V HP	460V HP	Max Motor Amps	NEMA Size	Part #	Std. Aux Contacts		Height	Width	Depth
						NO	NC			
1-1/2	1-1/2	2	9	00	CR306A00	1	—	7"	3.7"	5.5"
3	3	5	18	0	CR306B00	1	—	7"	3.7"	5.5"
7-1/2	7-1/2	10	27	1	CR306C00	1	—	7"	3.7"	5.5"
10	15	25	45	2	CR306D00	1	—	9"	4.6"	5.5"
25	30	50	90	3	CR306E00	1	—	11.6"	6.6"	6.5"
40	50	100	135	4	CR306F00	1	—	11.6"	6.6"	6.5"
75	100	200	270	5	CR306G00	1	—	14"	11.5"	9"

To complete catalog number, specify AC coil voltage and overload relay amps.

NEMA Reversing/Wye-Delta Contactors

Part #	Size	Amps	Height	NEMA Width	Max Depth
CR309A0 --BAA	00	9	4.5"	8.9"	5"
CR309B0 --BAA	0	18	4.5"	8.9"	5"
CR309C0 --BAA	1	27	4.5"	8.9"	5"
CR309D0 --BAA	2	45	7"	10.4"	6.2"
CR309E0 --BAA	3	90	9"	15"	7.2"
CR309F0 --BAA	4	135	9"	15"	7.2"

To complete catalog number, specify AC coil voltage.

NEMA Reversing/Wye-Delta Starters

Part #	Size	Amps	Height	NEMA Width	Max Depth
CR309A0 --	00	9	7"	8.9"	5"
CR309B0 --	0	18	7"	8.9"	5"
CR309C0 --	1	27	7"	8.9"	5"
CR309D0 --	2	45	9"	10.4"	6.2"
CR309E0 --	3	90	15"	15"	7.2"
CR309F0 --	4	135	15"	15"	7.2"

To complete catalog number, specify AC coil voltage and overload relay amps.

Mechanical Interlocks

Part #	Contactors/ Starter Size	Notes
CR309X300B	3-4	For use with CR200 and CR300 line
CR305X146C	0-6	Surge suppressor; connected in parallel with 120V coil



CR309X300B



CR305X146C

Replacement T-bars

Replacement T-bar Contact Carrier	Contactors/ Starter Size	Notes
187D350P001	00-1	2, 3 and 4 pole/CR200 and CR300 line
55-750320P007	3-4	2 and 3 pole/CR300 line only
55-154607G010	5	2 and 3 pole/CR200 line only



187D350P001



55-750320P007

Replacement Coils

Part #	Contactors/ Starter Size	Notes
15D21G___	00-1	For use with CR200 and CR300 line
15D22G___	2	For use with CR200 and CR300 line
55-501336G___	3	For use with CR200 and CR300 line
55-501463G___	4	For use with CR200 and CR300 line
55-530249G___	5	For use with CR300 only
55-501493G___	5	For use with CR200 only
55-536548G___	6	For use with CR200 and CR300 line

To complete catalog number, specify coil voltage.



55-154607G010



15D21G002



15D22G003



55-501336G004



55-501463G002



55-530249G004



55-501493G004



55-536548G004

Starters and Contactors: GE

GE continued

Aux Contacts

Part #	Contacts	Contactor/ Starter Size	Notes
CR305X100A	1NO	0-1	Base block. Mounts directly to side of starter
CR305X100B	1NC	0-1	Base block. Mounts directly to side of starter
CR305X100C	1NO/1NC	0-1	Base block. Mounts directly to side of starter
CR305X200A	1NO	2	Base block. Mounts directly to side of starter
CR305X200B	1NC	2	Base block. Mounts directly to side of starter
CR305X200C	1NO/1NC	2	Base block. Mounts directly to side of starter
CR305X300A	1NO	3-4	Base block. Mounts directly to side of starter
CR305X300B	1NC	3-4	Base block. Mounts directly to side of starter
CR305X500A	1NO	5-6	Base block. Mounts directly to side of starter
CR305X100E	1NC	0-6	Adder block. Mounts to base or another adder block



CR305X100A



CR305X100C



CR305X200C



CR305X300A



CR305X100E



CR324D310F



CR324E360F

Replacement Starter-mounted
Overload Relays – 3 Phase

Size	CR200 Line	CR300 Line
00 - 1	CR224C310F/F9X2	CR324C310F/C360F
2	CR224D310F/FX	CR324D310F/D360F
3	CR224E310F/FX	CR324E310F/E360F
4	CR224F310F/FX	CR324F310F/F360F

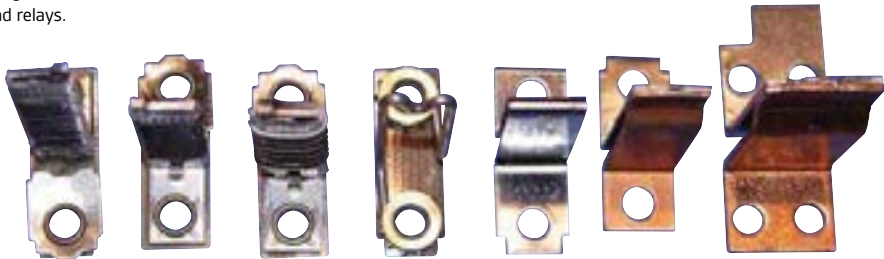
Replacement Panel-mounted Overload Relays – 3 Phase

Size	Max Amps	Contacts	Part # for Manual Reset	Part # for Auto Reset
00 - 1	27	1NC	CR324C310A/C610A	CR324C310A1/C610A1
00 - 1	27	1NO/1NC	CR324C360A/C660A	
2	45	1NC	CR324D310A/D610A	CR324D310A1/D610A1
2	45	1NO/1NC	CR324D360A/D660A	
3	90	1NC	CR324E310A/E610A	CR324E310A1/E610A1
3	90	1NO/1NC	CR324E360A/E660A	
4	135	1NC	CR324F310A/F610A	CR324F310A1/F610A1
4	135	1NO/1NC	CR324F360A/F660A	



CR324C610A1

Don't forget to order new CR123C/CR123F heaters with all overload relays.



MS-T Series Introduction

Standardization

NEW INTEGRATED TERMINAL COVERS

The perennial issues of remembering to order the terminal covers, fitting them correctly or losing them in the process are challenges of the past. The integrated terminal cover system means they are always there, on the Magnetic Contactor or its Auxiliary contact, ready to be used.

REDUCE YOUR COIL INVENTORY BY UP TO 50%

The 14 types of operation coil ratings available with the SN Series have been halved to 8 types with that increasing the applicable voltage range. Users can reduce their inventory, and by integrating the types of coils manufactured, a shorter delivery can be realized.

Coil Designation	Rated Voltage (V):		Coil Designation	Rated Voltage (V): 50Hz/60Hz
	50Hz	60Hz		
AC12V	12	24	AC12V	12
AC24V	24	12	AC24V	24
AC48V	48 – 50	48 – 50	AC48V	48 – 50
AC100V	100	100 – 110	AC100V	100 – 127
AC120V	110 – 120	115 – 120	AC200V	200 – 240
AC127V	125 – 127	127	AC300V	260 – 300
AC200V	200	200 – 220	AC400V	380 – 440
AC220V	208 – 220	220	AC500V	460 – 500
AC230V	220 – 240	230 – 240		
AC260V	240 – 260	260 – 280		
AC380V	346 – 380	380		
AC400V	380 – 415	400 – 440		
AC440V	415 – 440	460 – 480		
AC500V	500	500 – 550		

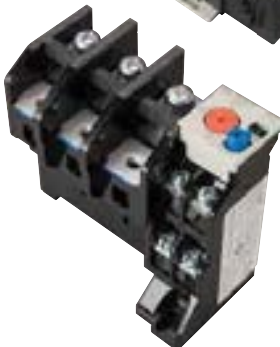
CAPABLE OF DIRECT DRIVE WITH TRANSISTOR OUTPUT OF PLC, ETC

The adopted high-efficiency polarized electromagnet greatly reduces the coil power consumption, and enables all models to be directly driven with a DC24V, 0.1A rating transistor output. (DC24V coil).

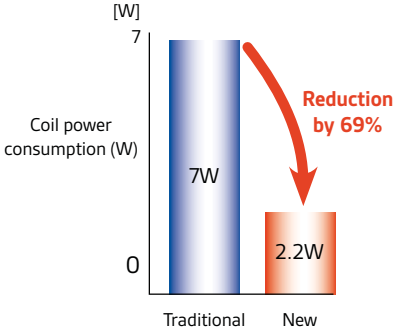
	Conventional Model	New Model	Lowering Rate
13A Frame (Coil: DC12/24V)	7W	2.2W	69%
20A Frame (Coil: DC12/24V)	9W	2.2W	76%
32A Frame (Coil: DC12/24V)	—	2.2W	—

DC48V to 220V:3.3W

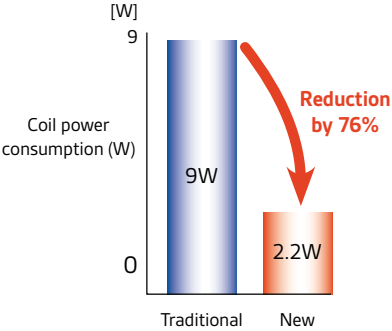
See page 122 for a complete part list.



**Reduced power consumption
13A Frame**



**Reduced power consumption
20A Frame**



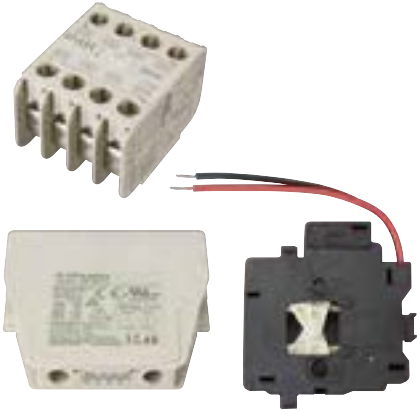
Small

10A FRAME MODEL IS OVER 16% SMALLER WITH A WIDTH OF JUST 36MM

There is a saying that “every bit helps” and now with the industries smallest* general purpose Magnetic Contactor in its class, customers are able to more easily down-size their boards than ever before.

For AC-operated 10A frame class general-purpose Magnetic Contactor (based on survey conducted by Mitsubishi dated September 2015)

The optimized high-temperature gas discharge structure and arc runner shape streamline the outline dimensions.



Starters and Contactors: Mitsubishi

Making and Breaking Capacities

	Frame	T10	T12	T20	T21	T25	T32	T35	T50	T65	T80	T100
Making capacity Category AC-3 [A]	220 to 240VAC	110	130	180	250	300	320	400	550	650	850	1050
	380 to 440VAC	90	120	180	230	300	320	400	500	650	850	1050
	500VAC	70	90	170	170	240	240	320	380	600	750	850
Breaking capacity Category AC-4 [A]	220 to 240VAC	88	104	144	200	240	256	320	440	520	680	840
	380 to 440VAC	72	96	144	184	240	256	320	400	520	680	840
	500VAC	56	72	136	136	192	192	256	304	480	600	680

Coordination with Short-circuit Protective Devices

Magnetic Contactors Model		T10	T12	T20	T21	T25	T32	T35	T50	T65	T80	T100	SR-T5/T9
Type1	Short-circuit protective device rating *Fuse gG (IEC60269-1/2)	Main circuit	40A			80A			100A		125A	160A	—
		Auxiliary circuit	10A										



S-T50AC1002A2B



S-T65AC200V2A2B



TH-T50KP35A



TH-T65KP42A

MITSUBISHI continued

MS-T Series

Part #	Description
S-T35AC100V2A2B	Contactors 60A 100–127V coil
S-T35AC200V2A2B	Contactors 60A 200–240V coil
S-T50AC1002A2B	Contactors 80A 100V coil
S-T50AC2002A2B	Contactors 80A 200V coil
S-T65AC100V2A2B	Contactors 100A 100V coil
S-T65AC200V2A2B	Contactors 100A 200V coil
S-T80AC24V2A2B	Contactors 120A 24V coil
S-T80AC100V2A2B	Contactors 120A 100V coil
S-T80AC200V2A2B	Contactors 120A 200V coil

Overload Relays

Part #	Description
TH-T50KP29A	Overload relay 24–34 A
TH-T50KP35A	Overload relay 30–40 A
TH-T50KP42A	Overload relay 34–50 A
TH-T65KP22A	Overload relay 18–26 A
TH-T65KP35A	Overload relay 30–40 A
TH-T65KP29A	Overload relay 24–34 A
TH-T65KP42A	Overload relay 34–50 A
TH-T65KP54A	Overload relay 43–65 A

Accessories

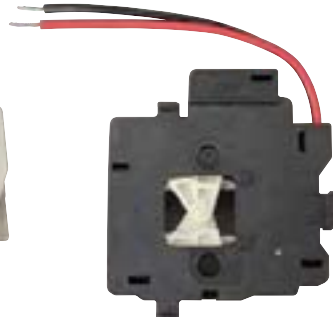
Part #	Description
UT-ML11	S-T series mechanical interlock
UT-AX42A2B	Auxiliary block 2NO/2NC
UT-AX111A1B	Auxiliary block 1NO/1NC side M
UT-TH50	OLR Connector for TH-T50 to the S-T50-65



UT-AX42A2B



UT-AX111A1B

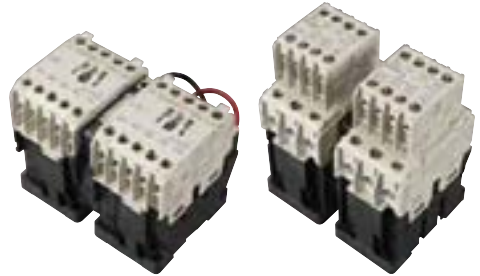


UT-ML11

Wye-Delta (Reversing) Contactors

Part #	Description
S-2XT20AC100V2A2B	18A, coil, 100 – 127V
S-2XT20AC200V2A2B	18A, coil, 200 – 240V
S-2XT32AC100V4A4B	32A, coil, 100 – 127V
S-2XT32AC200V4A4B	32A, coil, 200 – 240V

Note: Access has a limited supply of these in stock, but all items can be special ordered.



S-2XT20AC200V2A2B

S-2XT32AC100V4A4B

S-N Series

- High performance at lower cost
- Compact size (compared with full-size NEMA contactors)
- Comparable in size, performance and price to Aromat Green Power
- Includes built-in set of 2NO/2NC aux contacts at no extra charge
- Easy to check and replace contacts



Easy to check and replace contacts

Contactors

Part #	HP Rating at			AC-3 FLA	Included Aux	Height	Width	Depth
	208V	240V	480V					
S-N50AC-	15	15	30	50	2NO/2NC	4.2"	3.5"	4.2"
S-N65AC-	15	20	40	65	2NO/2NC	4.2"	3.5"	4.2"
S-N80AC-	20	25	50	85	2NO/2NC	5.3"	4"	5"
S-N95AC-	25	30	60	105	2NO/2NC	5.3"	4"	5"
S-N125AC-	40	40	75	120	2NO/2NC	6"	4"	5.4"

Specify AC coil voltage when ordering. See page 126 for a listing of available AC coil voltages.



S-N125AC

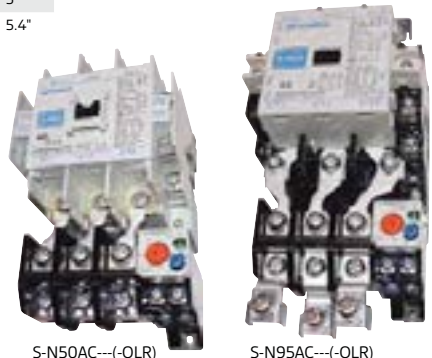
Starters

Part #	HP Rating at			AC-3 FLA	Included Aux	Height	Width	Depth
	208V	240V	480V					
S-N50AC--(-OLR)	15	15	30	50	2NO/2NC	6.7"	3.5"	4.2"
S-N65AC--(-OLR)	15	20	40	65	2NO/2NC	6.7"	3.5"	4.2"
S-N80AC--(-OLR)	20	25	50	85	2NO/2NC	8.3"	4"	5"
S-N95AC--(-OLR)	25	30	60	105	2NO/2NC	8.3"	4"	5"
S-N125AC--(-OLR)	40	40	75	120	2NO/2NC	9.5"	4"	5.4"

Specify AC coil voltage when ordering. See page 124 for a listing of available AC coil voltages.

Specify FLA of motor so that the overload relay may be properly sized.

S-N series is being phased out and replaced by S-T series. See page 122 for more information.



S-N50AC--(-OLR)

S-N95AC--(-OLR)

Starters and Contactors: Mitsubishi



S-2XN80AC



S-2XN95AC



S-2XN95AC (-OLR)

MITSUBISHI continued

Wye-Delta (Reversing) Contactors

Part #	HP Rating at			AC-3 FLA	Included Aux	Height	Width	Depth
	208V	240V	480V					
S-2XN80AC-	20	25	50	85	2NO/2NC	5.5"	10.6"	5.2"
S-2XN95AC-	25	30	60	105	2NO/2NC	5.5"	10.6"	5.2"

Specify AC coil voltage when ordering. See page 126 for a listing of available AC coil voltages.

Wye-Delta (Reversing) Starters

Part #	HP Rating at			AC-3 FLA	Included Aux	Height	Width	Depth
	208V	240V	480V					
S-2XN80AC- (-OLR)	20	25	50	85	2NO/2NC	8.5"	10.6"	5.2"
S-2XN95AC- (-OLR)	25	30	60	105	2NO/2NC	8.5"	10.6"	5.2"

Specify AC coil voltage when ordering. See page 126 for a listing of available AC coil voltages.

Specify FLA of motor so that the overload relay may be properly sized. OLR sized at FLA x .58.

Overload Relays for S-N Series Starters

- No heaters required. Simple adjustment via front mounted dial
- Selectable reset mode. Manual or automatic
- Includes test button and trip indicator. Easy to troubleshoot
- A connector kit is required to attach the OLR to the contactor

Part #	Amp Range	Contactors
TH-N60KP15A	12 – 18	S-N50 – S-N95
TH-N60KP22A	18 – 26	S-N50 – S-N95
TH-N60KP29A	24 – 34	S-N50 – S-N95
TH-N60KP35A	30 – 40	S-N50 – S-N95
TH-N60KP42A	34 – 50	S-N50 – S-N95
TH-N60KP54A	43 – 65	S-N50 – S-N95
TH-N60TAKP67A	54 – 80	S-N80 – S-N95
TH-N60TAKP82A	65 – 100	S-N80 – S-N95
TH-N120TAKPUL105A	85 – 125	S-N125 – S-N150
TH-N220HZKPUL105A	85 – 125	S-N180 – S-N220



TH-N60KP29A



TH-N60KP35A



TH-N60KP42A



TH-N60KP54A



TH-N60TAKP67A



TH-N60TAKP82A



TH-N120TAKPUL105A

Aux Contacts

Part #	Contacts	Mtg.	Contactors
UN-AX202(CX)	2NC	Top	S-N10 – S-N65
UN-AX220(CX)	2NO	Top	S-N10 – S-N65
UN-AX431(CX)	3NO/1NC	Top	S-N10 – S-N65
UN-AX440(CX)	4NO	Top	S-N10 – S-N65
UN-AX11(CX)	1NO/1NC	Side	S-N10 – S-N65
UN-AX150	NO/1NC	Side	S-N150 – S-N400, DU-K180 – DU-K260
UN-AX80	1NO/1NC	Side	S-N80 – S-N125



UN-AX220(CX)



UN-AX431(CX)



UN-AX440(CX)



UN-AX11(CX)



UN-AX150

Starters and Contactors: Mitsubishi

MITSUBISHI continued

Replacement Coils

Part #	Contactors
S-N35-COILAC120V	S-N10 – S-N48
S-N50-COILAC400V	S-N50 – S-N65
S-N50-COILAC500V	S-N50 – S-N65
S-N80-COILAC100V	S-N80 – S-N95 & S-K80 – S-K95
S-N80-COILAC200V	S-N80 – S-N95 & S-K80 – S-K95
S-N80-COILAC24V	S-N80 – S-N95 & S-K80 – S-K95
S-N125-COILAC100V	S-N125 – S-N150 & S-D125 – S-D150



S-N50-COILAC-100V



S-N-80COILAC-24V



S-N125-COILAC-200V



UN-ML21



UN-ML80

Mechanical Interlocks

Part #	Contactors
UN-ML21	S-N18 – S-N65
UN-ML80	S-N80 – S-N125
UN-ML220	SK/N: 180/220/300/400

SIEMENS/FURNAS

NEMA Starters

- Rugged NEMA industrial design
- ESP electronic overload relay is adjustable over a wide range and provides phase-loss protection
- Easy to replace contacts or coil
- Large contacts and encapsulated coil
- Best electromechanical choice for heavy duty-cycle elevator applications



14CUD32AA



14DUD32AA



14EUE32AA



14FUF32AA



14GUG32AA



14HUG32AA



14JUH32AA

Part #	NEMA Size	Max Motor Amps	200V HP	230V HP	460V HP	OLR Range	Height	Width	Depth
14CUD32AA	0	18	3	3	—	5.5-22	7.5"	3.5"	3.75"
14DUD32AA	1	27	3	3	10	5.5-22	7.5"	3.5"	3.75"
14DUE32AA	1	27	7.5	7.5	—	5.5-22	7.5"	3.5"	3.75"
14EUE32AA	1.75	40	10	10	15	10-40	7.5"	3.5"	3.75"
14FUF32AA	2	45	10	15	25	13-52	8.1"	3.5"	4"
14GUG32AA	2.5	60	15	20	30	25-100	8.1"	3.5"	4"
14HUG32AA	3	90	25	30	50	25-100	9.75"	4.5"	5.2"
14IUH32AA	3.5	115	30	40	75	50-200	9.75"	4.5"	5.2"
14JUH32AA	4	135	40	50	100	50-200	11"	4.5"	5.75"

To complete catalog number, please specify AC coil voltage.
 All starters come with 1NO aux contact.
 120/240V dual voltage coil is standard. Other AC coil voltages are available.

NEMA Contactors

- Rugged NEMA industrial design
- Easy to replace contacts or coil
- Large contacts and encapsulated coil
- Best electromechanical choice for heavy duty-cycle applications such as elevators

Part #	NEMA Size	Max Motor Amps	200V HP	230V HP	460V HP	Standard NO	Aux Contacts NC	Height	Width	Depth
40CP32A	0	18	3	3	5	1	0	4.31"	4.25"	3.75"
40DP32A	1	27	7-1/2	7-1/2	10	1	0	4.31"	4.25"	3.75"
40EP32A	1-3/4	40	10	10	15	1	0	4.31"	4.25"	3.75"
40FP32A	2	45	10	15	25	1	0	4.88"	4.25"	4"
40GP32A	2-1/2	60	15	20	30	1	0	4.88"	4.25"	4"
40HP32A	3	90	20	30	50	1	0	6.13"	5.5"	5.25"
40IP32A	3-1/2	115	30	40	75	1	0	6.13"	5.5"	5.25"
40JG32A	4	135	40	50	100	1	0	7.81"	5.5"	5.75"



40HP/IP
(40HP32A shown)

*To complete catalog number, please specify AC coil voltage.

Starters and Contactors: Siemens/Furnas



49AB10



49AB01



49AB11



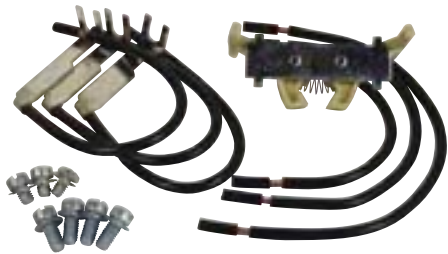
49AB20



49AB40



49AB31



SIEMENS/FURNAS continued

Aux Contacts

Part #	Contacts	Contactors/ Starter Size	Notes
49AB10	1NO	00 - 4	Side mounted/not stackable
49AB01	1NC	00 - 4	Side mounted/not stackable
49AB11	1NO/1NC	00 - 4	Side mounted/not stackable
49AB20	2NO	00 - 4	Side mounted/not stackable
49AB40	4NO	00 - 4	Side mounted/not stackable
49AB31	3NO/1NC	00 - 4	Side mounted/not stackable
49AB22	2NO/2NC	00 - 4	Side mounted/not stackable
49D54682NO	NO	00 - 3-1/2	Special aux for older model "F" Innova, where the 4th character of the contactor/starter is "F". Example: 14GF32AA



49AB22



49D54682NO

Mechanical Interlocks

Part #	Contactors/Starter Size
49CCF22H	00 - 1
49EEF22H	1-3/4
49GGF22HP	2
49HHP22HP	3 - 3-1/2

ESP200 Electronic 3 Phase Overload Relays

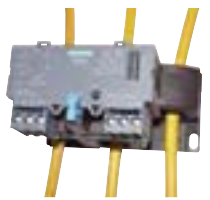
Part #	Adjustment Range	European Part #
48ATC3500	3 - 12 amps	3UB81234CW2
48ATE3500	10 - 40 amps	3UB81234EW2
48BTG3500	25 - 100 amps	3UB81334GW2
48BTH3500	50 - 200 amps	3UB81334HW2



48ATC3500



48ATE3500



48BTG3500



48BTH3500

SIEMENS SIRIUS IEC

Contactors

Part #	Max Motor Amps	200V HP	230V HP	460V HP	Direct Replacement
3RT1025	17	5	5	10	3RT2025
3RT1026	25	7-1/2	7-1/2	15	3RT2026
3RT1033	28	7-1/2	10	20	3RT2026
3RT1034*	32	10	10	25	3RT2027
3RT1035*	40	10	15	30	3RT2028
3RT1036*	50	15	15	40	3RT2036
3RT1044*	65	20	25	50	3RT2037
3RT1045*	80	25	30	60	3RT2038
3RT1046*	95	30	30	75	3RT2046
3RT1054*	115	40	50	100	
3RT1055*	150	50	60	125	
3RT1056*	185	60	75	150	
3RT1064*	225	60	75	150	
3RT1065*	265	75	100	200	
3RT1066*	300	100	125	250	

To complete catalog number, please specify AC or DC coil voltage.

*These have replaceable contacts.



3RT1034

3RT1045



3RT1054

Starters

Part #	Max Motor Amps	200V HP	230V HP	460V HP	Direct Replacement
3RT1025	17	5	5	10	3RT2025
3RT1026	25	7-1/2	7-1/2	15	3RT2026
3RT1033	28	7-1/2	10	20	3RT2026
3RT1034*	32	10	10	25	3RT2027
3RT1035*	40	10	15	30	3RT2028
3RT1036*	50	15	15	40	3RT2036
3RT1044*	65	20	25	50	3RT2037
3RT1045*	80	25	30	60	3RT2038
3RT1046*	95	30	30	75	3RT2046
3RT1054*	115	40	50	100	
3RT1055*	150	50	60	125	
3RT1056*	185	60	75	150	
3RT1064*	225	60	75	150	
3RT1065*	265	75	100	200	
3RT1066*	300	100	125	250	

To complete catalog number, please specify AC or DC coil voltage and overload relay amps.

*These starters have replaceable contacts.

Note: Some of these items will be obsolete.



3RT1026



3RT1034



3RT1035



3RT1045



3RT1054



3RT-30-YD

SIEMENS SIRIUS IEC continued

Wye-Delta Contactors

Part #	Wye-Delta HP Rating @ Max				Height	Width	Depth	Contactor
	200V	230V	460V	FLA				
3RT-30-YD*	20	25	50	71	6"	6"	5.3"	3RT1044-1AK60
3RT-40-YD*	25	30	60	90	6"	6"	5.3"	3RT1045-1AK60
3RT-50-YD*	30	40	75	107	6"	6"	5.3"	3RT1046-1AK60
3RT-75-YD*	40	50	100	179	6.5"	9.8"	6.5"	3RT1054-6AF36
3RT-125-YD*	75	75	150	269	6.5"	9.8"	6.5"	3RT1056-6AF36

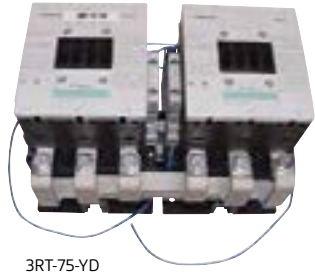
*These have replaceable contacts.
All contactors come with 120VAC coils.



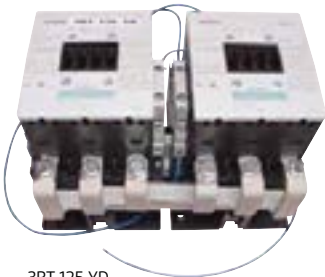
3RT-40-YD



3RT-50-YD



3RT-75-YD



3RT-125-YD



3RT-40-YD-3RB2046



3RT-50-YD-3RB2046



3RT-30-YD-3RB2046

Wye-Delta Starters

Part #	Wye-Delta HP Rating @ Max				Height	Width	Depth	Contactor
	200V	230V	460V	FLA				
3RT-30-YD-3RB2046*	20	25	50	71	9"	6"	5.3"	3RT1044-1AK60
3RT-40-YD-3RB2046*	25	30	60	90	9"	6"	5.3"	3RT1045-1AK60
3RT-50-YD-3RB2046*	30	40	75	107	9"	6"	5.3"	3RT1046-1AK60
3RT-75-YD-1FC2*	40	50	100	179	11"	9.8"	6.5"	3RT1054-6AF36
3RT-125-YD-1FC2*	75	75	150	269	11"	9.8"	6.5"	3RT1056-6AF36

Aux Contacts

Part #	Mounting	Contacts	Contactors	Notes
3RH1921-1CA01	Front	1NC	3RT1023-3RT1056	
3RH1921-1CA10	Front	1NO	3RT1023-3RT1056	
3RH1921-1DA11	Side	1NO/1NC	3RT1023 – 3RT1056	
3RH1921-2DA11	Side	1NO/1NC	3RT1023 – 3RT1056	Uses cage clamp terminals
3RH1921-1EA02	Side	2NC	3RT1023 – 3RT1056	
3RH1921-1EA11	Side	1NO/1NC	3RT1023 – 3RT1056	Different term markings than -1DA11
3RH1921-1EA20	Side	2NO	3RT1023 – 3RT1056	
3RH1921-1FA22	Front	2NO/2NC	3RT1023 – 3RT1046	
3RH1921-1FA31	Front	3NO/1NC	3RT1023 – 3RT1046	
3RH1921-1FA40	Front	4NO	3RT1023 – 3RT1046	
3RH1921-1JA11	Side	1NO/1NC	3RT1044 – 3RT1056	Second level aux

*Low level, gold plated aux contacts are used with electronic circuits with rated operational currents of 1 to 300 mA at 3 to 60V.



3RH1921-1DA11



3RH1921-2DA11



3RH1921-1EA02



3RH1921-1EA11



3RH1921-1EA20



3RH1921-1FA22



3RH1921-1FA31



3RH1921-1FA40



3RH1921-1FE13



3RH1921-1JA11

SIEMENS SIRIUS IEC continued

Overload Relays

Part #	Description
3RB2026-1QB0	Range 6 – 25 amps. For use with 3RT1023 – 3RT1026 contactor
3RB2036-1QB0	Range 6 – 25 amps. For use with 3RT1033 – 3RT1036 contactors
3RB2036-1UB0	Range 12.5 – 50 amps. For use with 3RT1033 – 3RT1036 contactors
3RB2046-1UB0	Range 12.5 – 50 amps. For use with 3RT1044 – 3RT1046 contactors
3RB2046-1EB0	Range 25 – 100 amps. For use with 3RT1044 – 3RT1046 contactors
3RB2056-1FC2	Range 50 – 200 amps. For use with 3RT1054 – 3RT1056 contactors

Starters and Contactors: Siemens SIRIUS IEC



3RB2026-1QB0



3RB2036-1QB0



3RB2036-1UB0



3RB2046-1UB0



3RB2046-1EB0



3RB2056-1FC2



3RA1954-2A



3RA1924-2B



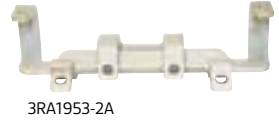
3RA1932-2D

Mechanical Interlocks, Reversing Links and Wye Jumpers

For joining two contactors into a reversing or Wye-Delta configuration

Interlock #	Description
3RA1924-2B	Use with 3RT1025 – 3RT1046 contactors. Includes 2 NC contacts. Qty 2 3RA1932-2D dovetails required
3RA1954-2A	Use with 3RT1054 – 3RT1076 contactors. No Aux included. Qty 2 3RA1932-2D dovetails required
3RA1932-2D	Dovetail connectors for use with above mechanical interlocks

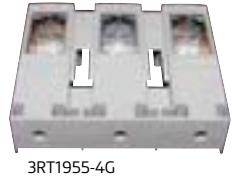
Reversing Link #	Description
3RA1933-3E	For use with 3RT1033 – 3RT1036 contactors
3RA1943-3E	For use with 3RT1044 – 3RT1046 contactors
3RA1953-2A	For use with 3RT1054 – 3RT1056 contactors



Wye Jumper #	Description
3RT1936-4BA31	For use with 3RT1033 – 3RT1036 contactors
3RT1946-4BA31	For use with 3RT1044 – 3RT1046 contactors
3RT1956-4BA31	For use with 3RT1054 – 3RT1056 contactors



Box Lug Block	Description
3RT1955-4G	For use with 3RT1033 – 3RT1036 contactors



Surge Suppressors

Part #	Description
3RT1916-1BD00	Varistor type. Rated 127 – 240VAC for 3RT1015 – 3RT1017 contactors and type 3RH relays
3RT1916-1CD00	RC element type. Rated 127 – 240VAC for 3RT1015 – 3RT1017 contactors and type 3RH relays
3RT1926-1CD00	RC element type. Rated 127 – 240VAC for 3RT1023 – 3RT1026 contactors
3RT1936-1CD00	RC element type. Rated 127 – 240VAC for 3RT1033 – 3RT1046 contactors



Replacement Coils for 3RT Contactors

Part #	Description
3RT1935-5AK61	120V coil for use with 3RT1035 – 3RT1036 contactors
3RT1944-5AK61	120V coil for use with 3RT1044 contactors
3RT1945-5AK61	120V coil for use with 3RT1045 – 3RT1046 contactors
3RT1955-5AF31	120V coil for use with 3RT1054 – 3RT1056 contactors
3RT1955-5AM31	200 – 220V coil for use with 3RT1054 – 3RT1056 contactors





SIEMENS/FURNAS

Class 42/16 DP Replacement Parts

49D70035001 Mechanical Interlock for 42AF - 42EF DP Contactors

Part #	Contacts	Contactors	Notes
49ACR0	1NO	42AF - 42EF	Side mounted
49ACRC	1NC	42AF - 42EF	Side mounted
49ACR6	1NO/1NC	42AF - 42EF	Side mounted
49ACR7	2NO	42AF - 42EF	Side mounted
49ACR8	2NC	42AF - 42EF	Side mounted
49D22125001	1NO	42FE - 42GE	Side mounted
49D22125002	1NC	42FE - 42GE	Side mounted
49CE42SPDT	SPDT	42FE - 42GE	Side mounted
49D54682NO	1NO	42HF - 42IF	Side mounted

Part #	AC Voltage	Contactors
75D54760F	120	41NB
75D54760G	208 - 240	41NB
75D54760J	24	41NB
75D56630F	120	42BE - 42EE
75D56630G	208 - 240	42BE - 42EE
75D56630J	24	42BE - 42EE
75D54772F	120	42FE, 42GE
75D54772G	208 - 240	42FE, 42GE
75D54772J	24	42FE, 42GE
75D70152F	120	42AF - 42EF
75D70233F		
75D70545F		
75D70550F		
75D70152G	208 - 240	42AF - 42EF
75D70233G		
75D70545G		
75D70550G		
75D70152J	24	42AF - 42EF
75D70233J		
75D70545J		
75D70233L	277	42AF - 42EF
75D70233H	480	42AF - 42EF
75D73251F	120	42HF, 42IF
75D73251A	120/240	42HF, 42IF
75D73251D	208	42HF, 42IF
75D73251C	240/480	42HF, 42IF
75D73251L	277	42HF, 42IF

SPRECHER+SCHUH

IEC Contactors



Part #	Max Motor Amps	HP@ 200V	HP@ 230V	HP@ 460V	Notes
CA7-9-01-	9	2	2	5	Includes 1NC built-in aux, specify AC coil voltage
CA7-9-10-	9	2	2	5	Includes 1NO built-in aux, specify AC coil voltage
CA7-9E-01-	9	2	2	5	Includes 1NC built-in aux, specify DC coil voltage
CA7-9E-10-	9	2	2	5	Includes 1NO built-in aux, specify DC coil voltage
CA7-12-01-	12	3	3	7.5	Includes 1NC built-in aux, specify AC coil voltage
CA7-12-10-	12	3	3	7.5	Includes 1NO built-in aux, specify AC coil voltage
CA7-12E-01-	12	3	3	7.5	Includes 1NC built-in aux, specify DC coil voltage
CA7-12E-10-	12	3	3	7.5	Includes 1NO built-in aux, specify DC coil voltage
CA7-12-M40-	12	3	3	7.5	4NO power poles, specify AC coil voltage
CA7-16-01-	16	5	5	10	Includes 1NC built-in aux, specify AC coil voltage
CA7-16-10-	16	5	5	10	Includes 1NO built-in aux, specify AC coil voltage
CA7-16E-01-	16	5	5	10	Includes 1NC built-in aux, specify DC coil voltage
CA7-16E-10-	16	5	5	10	Includes 1NO built-in aux, specify DC coil voltage
CA7-16-M31-	16	5	5	10	3NO/1NC power poles, specify AC coil voltage
CA7-16E-M31-	16	5	5	10	3NO/1NC power poles, specify DC coil voltage
CA7-16E-M40-	16	5	5	10	4NO power poles, specify DC coil voltage
CA7-23-01-	23	5	7.5	15	Includes 1NC built-in aux, specify AC coil voltage
CA7-23-10-	23	5	7.5	15	Includes 1NO built-in aux, specify AC coil voltage
CA7-23E-01-	23	5	7.5	15	Includes 1NC built-in aux, specify DC coil voltage
CA7-23E-10-	23	5	7.5	15	Includes 1NO built-in aux, specify DC coil voltage
CA7-23-M22-	23	5	7.5	15	2NO/2NC power poles, specify AC coil voltage
CA7-23-M31-	23	5	7.5	15	3NO/1NC power poles, specify AC coil voltage
CA7-23-M40-	23	5	7.5	15	4NO power poles, specify AC coil voltage
CA7-23C-M40-	23	5	7.5	15	4NO power poles, specify DC coil voltage
CA7-30-00-*	30	7.5	10	20	Specify AC coil voltage, aux contacts
CA7-30C-00-*	30	7.5	10	20	Specify DC coil voltage, aux contacts
CA7-37-00-*	37	10	10	25	Specify AC coil voltage, aux contacts
CA7-37C-00-*	37	10	10	25	Specify DC coil voltage, aux contacts
CA7-43-00-*	43	10	15	30	Specify AC coil voltage, aux contacts
CA7-43C-00-*	43	10	15	30	Specify DC coil voltage, aux contacts
CA7-60-00-*	60	15	20	40	Specify AC coil voltage, aux contacts
CA7-60D-00-*	60	15	20	40	Specify DC coil voltage, aux contacts
CA7-72-00-*	72	20	25	50	Specify AC coil voltage, aux contacts
CA7-72D-00-*	72	20	25	50	Specify DC coil voltage, aux contacts
CA7-85-00-*	85	25	30	60	Specify AC coil voltage, aux contacts
CA7-85D-00-*	85	25	30	60	Specify DC coil voltage, aux contacts
CA7-97-00-*	97	25	30	60	Specify AC coil voltage, aux contacts
CA9-116-11-*	116	30	40	75	Specify coil voltage/ Coils are universal AC/DC
CA9-146-11-*	146	40	50	100	Specify coil voltage/ Coils are universal AC/DC
CA9-190-11-*	190	50	60	125	Specify coil voltage/ Coils are universal AC/DC
CA9-205-11	205	60	75	150	Specify coil voltage/ Coils are universal AC/DC
CA9-265-11	265	75	100	200	Specify coil voltage/ Coils are universal AC/DC



CA7-12-10-220W



CA7-12E-01-110E



CA7-23-01-24Z



CA7-23-M31-120



CA7-43-00-120

Starters and Contactors: Sprecher+Schuh

*These contactors have replaceable contacts.

Available AC coil voltages: 24, 120, 208, 240, 480, 600

Available DC coil voltages: 12, 24, 48, 110, 125, 220



CAT7-12



CAT7-12E



CAT7-23



CAT7-43



CAT7-60

SPRECHER+SCHUH continued

IEC Starters

Part #	Max Motor Amps	HP@ 200V	HP@ 230V	HP@ 460V	Notes
CAT7-9-01-	9	2	2	5	Includes 1NC built-in aux, specify AC coil voltage and motor amps
CAT7-9-10-	9	2	2	5	Includes 1NO built-in aux, specify AC coil voltage and motor amps
CAT7-9E-01-	9	2	2	5	Includes 1NC built-in aux, specify DC coil voltage and motor amps
CAT7-9E-10-	9	2	2	5	Includes 1NO built-in aux, specify DC coil voltage and motor amps
CAT7-12-01-	12	3	3	7.5	Includes 1NC built-in aux, specify AC coil voltage and motor amps
CAT7-12-10-	12	3	3	7.5	Includes 1NO built-in aux, specify AC coil voltage and motor amps
CAT7-12E-01-	12	3	3	7.5	Includes 1NC built-in aux, specify DC coil voltage and motor amps
CAT7-12E-10-	12	3	3	7.5	Includes 1NO built-in aux, specify DC coil voltage and motor amps
CAT7-16-01-	16	5	5	10	Includes 1NC built-in aux, specify AC coil voltage and motor amps
CAT7-16-10-	16	5	5	10	Includes 1NO built-in aux, specify AC coil voltage and motor amps
CAT7-16E-01-	16	5	5	10	Includes 1NC built-in aux, specify DC coil voltage and motor amps
CAT7-16E-10-	16	5	5	10	Includes 1NO built-in aux, specify DC coil voltage and motor amps
CAT7-23-01-	23	5	7.5	15	Includes 1NC built-in aux, specify AC coil voltage and motor amps
CAT7-23-10-	23	5	7.5	15	Includes 1NO built-in aux, specify AC coil voltage and motor amps
CAT7-23E-01-	23	5	7.5	15	Includes 1NC built-in aux, specify DC coil voltage and motor amps
CAT7-23E-10-	23	5	7.5	15	Includes 1NO built-in aux, specify DC coil voltage and motor amps
CAT7-30-00-*	30	7.5	10	20	Specify AC coil voltage, aux contacts and motor amps
CAT7-30E-00-*	30	7.5	10	20	Specify DC coil voltage, aux contacts and motor amps
CAT7-37-00-*	37	10	10	25	Specify AC coil voltage, aux contacts and motor amps
CAT7-37E-00-*	37	10	10	25	Specify DC coil voltage, aux contacts and motor amps
CAT7-43-00-*	43	10	15	30	Specify AC coil voltage, aux contacts and motor amps
CAT7-43E-00-*	43	10	15	30	Specify DC coil voltage, aux contacts and motor amps
CAT7-60-00-*	60	15	20	40	Specify AC coil voltage, aux contacts and motor amps
CAT7-60E-00-*	60	15	20	40	Specify DC coil voltage, aux contacts and motor amps
CAT7-72-00-*	72	20	25	50	Specify AC coil voltage, aux contacts and motor amps
CAT7-72E-00-*	72	20	25	50	Specify DC coil voltage, aux contacts and motor amps
CAT7-85-00-*	85	25	30	60	Specify AC coil voltage, aux contacts and motor amps
CAT7-85E-00-*	85	25	30	60	Specify DC coil voltage, aux contacts and motor amps
CAT7-97-00-*	97	25	30	60	Specify AC coil voltage, aux contacts and motor amps
CAT9-116-00-	116	30	40	75	Specify coil voltage, aux contacts and motor amps
CAT9-190-00-	190	50	60	125	Specify coil voltage, aux contacts and motor amps

*These starters have replaceable contacts.

Available AC coil voltages: 24, 120, 208, 240, 480, 600

Available DC coil voltages: 12, 24, 48, 110, 125, 220

IEC Reversing/Wye-Delta Contactors

Part #	Max Motor Amps	HP@ 200V	HP@ 230V	HP@ 460V	Notes
CAU7-9-22-	9	2	2	5	Includes 2NO/2NC aux, specify additional aux and AC coil voltage
CAU7-9E-22-	9	2	2	5	Includes 2NO/2NC aux, specify additional aux and DC coil voltage
CAU7-12-22-	12	3	3	7.5	Includes 2NO/2NC aux, specify additional aux and AC coil voltage
CAU7-12E-22-	12	3	3	7.5	Includes 2NO/2NC aux, specify additional aux and DC coil voltage
CAU7-16-22-	16	5	5	10	Includes 2NO/2NC aux, specify additional aux and AC coil voltage
CAU7-16E-22-	16	5	5	10	Includes 2NO/2NC aux, specify additional aux and DC coil voltage
CAU7-23-22-	23	5	7.5	15	Includes 2NO/2NC aux, specify additional aux and AC coil voltage
CAU7-23E-22-	23	5	7.5	15	Includes 2NO/2NC aux, specify additional aux and DC coil voltage
CAU7-30-22-*	30	7.5	10	20	Includes 2NO/2NC aux, specify additional aux and AC coil voltage
CAU7-30E-22-*	30	7.5	10	20	Includes 2NO/2NC aux, specify additional aux and DC coil voltage
CAU7-37-22-*	37	10	10	25	Includes 2NO/2NC aux, specify additional aux and AC coil voltage
CAU7-37E-22-*	37	10	10	25	Includes 2NO/2NC aux, specify additional aux and DC coil voltage
CAU7-43-22-*	43	10	15	30	Includes 2NO/2NC aux, specify additional aux and AC coil voltage
CAU7-43E-22-*	43	10	15	30	Includes 2NO/2NC aux, specify additional aux and DC coil voltage
CAU7-60-22-*	60	15	20	40	Includes 2NO/2NC aux, specify additional aux and AC coil voltage
CAU7-60D-22-*	60	15	20	40	Includes 2NO/2NC aux, specify additional aux and DC coil voltage
CAU7-72-22-*	72	20	25	50	Includes 2NO/2NC aux, specify additional aux and AC coil voltage
CAU7-72D-22-*	72	20	25	50	Includes 2NO/2NC aux, specify additional aux and DC coil voltage
CAU7-85-22-*	85	25	30	60	Includes 2NO/2NC aux, specify additional aux and AC coil voltage
CAU7-85D-22-*	85	25	30	60	Includes 2NO/2NC aux, specify additional aux and DC coil voltage
CAU7-97-22-*	97	25	30	60	Includes 2NO/2NC aux, specify additional aux and AC coil voltage
CAU9-116-22-	116	30	40	75	Includes 2NO/2NC aux, specify additional aux and coil voltage
CAU9-146-22-	146	40	50	100	Includes 2NO/2NC aux, specify additional aux and coil voltage
CAU9-190-22-	190	50	60	125	Includes 2NO/2NC aux, specify additional aux and coil voltage

*These contactors have replaceable contacts.

Available AC coil voltages: 24, 48, 120, 208, 240, 480, 600

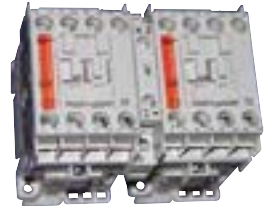
Available DC coil voltages: 12, 24, 48, 110, 220



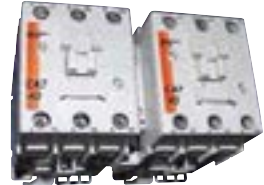
CAU7-12



CAU7-12C



CAU7-23



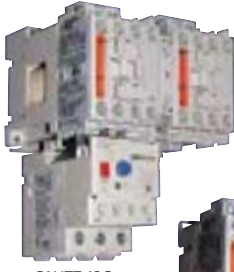
CAU7-43



CAU7-60



CAUT7-12



CAUT7-12C



CAUT7-23



CAUT7-43



CAUT7-60

SPRECHER+SCHUH continued

IEC Reversing/Wye-Delta Starters

Part #	Max Motor Amps	HP@ 200V	HP@ 230V	HP@ 460V	Notes
CAUT7-9-22-	9	2	2	5	Includes 2NO/2NC aux, specify additional aux, AC coil voltage and motor amps
CAUT7-9E-22-	9	2	2	5	Includes 2NO/2NC aux, specify additional aux, DC coil voltage and motor amps
CAUT7-12-22-	12	3	3	7.5	Includes 2NO/2NC aux, specify additional aux, AC coil voltage and motor amps
CAUT7-12E-22-	12	3	3	7.5	Includes 2NO/2NC aux, specify additional aux, DC coil voltage and motor amps
CAUT7-16-22-	16	5	5	10	Includes 2NO/2NC aux, specify additional aux, AC coil voltage and motor amps
CAUT7-16E-22-	16	5	5	10	Includes 2NO/2NC aux, specify additional aux, AC coil voltage and motor amps
CAUT7-23-22-	23	5	7.5	15	Includes 2NO/2NC aux, specify additional aux, AC coil voltage and motor amps
CAUT7-23E-22-	23	5	7.5	15	Includes 2NO/2NC aux, specify additional aux, DC coil voltage and motor amps
CAUT7-30-22-*	30	7.5	10	20	Includes 2NO/2NC aux, specify additional aux, AC coil voltage and motor amps
CAUT7-30E-22-*	30	7.5	10	20	Includes 2NO/2NC aux, specify additional aux, DC coil voltage and motor amps
CAUT7-37-22-*	37	10	10	25	Includes 2NO/2NC aux, specify additional aux, AC coil voltage and motor amps
CAUT7-37E-22-*	37	10	10	25	Includes 2NO/2NC aux, specify additional aux, DC coil voltage and motor amps
CAUT7-43-22-*	43	10	15	30	Includes 2NO/2NC aux, specify additional aux, AC coil voltage and motor amps
CAUT7-43E-22-*	43	10	15	30	Includes 2NO/2NC aux, specify additional aux, DC coil voltage and motor amps
CAUT7-60-22-*	60	15	20	40	Includes 2NO/2NC aux, specify additional aux, AC coil voltage and motor amps
CAUT7-60D-22-*	60	15	20	40	Includes 2NO/2NC aux, specify additional aux, DC coil voltage and motor amps
CAUT7-72-22-*	72	20	25	50	Includes 2NO/2NC aux, specify additional aux, AC coil voltage and motor amps
CAUT7-72D-22-*	72	20	25	50	Includes 2NO/2NC aux, specify additional aux, DC coil voltage and motor amps
CAUT7-85-22-*	85	25	30	60	Includes 2NO/2NC aux, specify additional aux, AC coil voltage and motor amps
CAUT7-85D-22-*	85	25	30	60	Includes 2NO/2NC aux, specify additional aux, DC coil voltage and motor amps
CAUT7-97-22-*	97	25	30	60	Includes 2NO/2NC aux, specify additional aux, AC coil voltage and motor amps
CAUT9-116-22-	116	30	40	75	Includes 2NO/2NC aux, specify additional aux and coil voltage
CAUT9-146-22-	146	40	50	100	Includes 2NO/2NC aux, specify additional aux, coil voltage and motor amps
CAUT9-190-22-*	190	50	60	125	Includes 2NO/2NC aux, specify additional aux, coil voltage and motor amps

*These starters have replaceable contacts.

Available AC coil voltages: 24, 48, 120, 208, 240, 480, 600

Available DC coil voltages: 12, 24, 48, 110, 220

Overload Relays for CA6 and CA7 Contactors and Starters

Part #	Use with Contactors	Amp Range
CEP7-EEEB	CA7-9 – CA7-23	5.4 – 27
CEP7-EEFD	CA7-30 – CA7-43	9 – 45
CEP7-EEGE	CA7-60 – CA7-97	18 – 90

Note: Some CT3 and CTA3 Overload Relays for CA3 contactors are still available.



CEP7-EEEB



CEP7-EEFD



CEP7-EEGE

Overload Relay Panel Mount Adapters

Part #	Use with Overload Relay
CEP7-EPB	CEP7-ED1CB & CEP7-EEEB
CEP7-EPD	CEP7-EEFD
CEP7-EPE	CEP7-EEGE



CEP7-EPD

Aux Contacts for CA7 Devices

Part #	Description
CA7-PA-01	1NC side mounted
CA7-PA-02	2NC side mounted
CA7-PA-10	1NO side mounted
CA7-PA-11	1NO/1NC side mounted
CA7-PA-20	2NO side mounted contact
CA7-PV-02	2NC top mounted
CA7-PV-11	1NO/1NC top mounted
CA7-PV-20	2NO top mounted
CA7-PV-22	2NO/2NC top mounted
CA7-PV-L11	Late breaking NO/NC top mounted
CA7-PV-S11	1NO/1NC top mounted
CA7-PV-S22	2NO/2NC top mounted



CA7-PA-10



CA7-PA-11



CA7-PA-20



CA7-PA-L11



CA7-PV-11



CA7-PV-S11



CA7-PV-22



CA7-PV-S22



CA7-PV-20



CA7-PV-L11



CS7-22E-120



CS7C-40E-24D



CS7-PV-11



CS7-PV-40



CA7-PA-20



CZE7-30



CM7-02



CS8-22Z-120



CS8-P40E

SPRECHER+SCHUH continued

Industrial Control Relays

Part #	Description
CS7-22E-*	2NO/2NC contacts w/AC coil
CS7-31E-*	3NO/1NC contacts w/AC coil
CS7-40E-*	4NO contacts w/AC coil
CS7C-22E-**	2NO/2NC contacts w/DC coil
CS7C-31E-**	3NO/1NC contacts w/DC coil
CS7C-40E-**	4NO contacts w/DC coil
CM7	Mechanical interlock side mounted
CM7-02	Mechanical interlock side mounted with 2 built-in NC contacts

* Specify AC coil voltage. ** Specify DC coil voltage.

Available AC coil voltages: 24V, 48V, 120V, 208 – 240V, 277V, 480V

Available DC coil voltages: 24V, 48V, 110V, 220V

Timers

Part #	Description
CZA7-30	Pneumatic timing module off-delay 0.3 – 30 seconds, front mounted
CZA7-180	Pneumatic timing module off-delay 1.8 – 180 seconds, front mounted
CZE7-30	Pneumatic timing module on-delay 0.3 – 30 seconds, front mounted
CZE7-180	Pneumatic timing module on-delay 1.8 – 180 seconds, front mounted

Miniature Industrial Control Relays

Only 45mm wide

Part #	Description
CS8-22Z-120	2NO/2NC w/120VAC coil
CS8-22Z-240	2NO/2NC w/240VAC coil
CS8-31Z-120	3NO/1NC w/120VAC coil
CS8-31Z-240	3NO/1NC w/240VAC coil
CS8-40E-120	4NO w/120VAC coil
CS8-40E-240	4NO w/240VAC coil
CS8C-22Z-110D	2NO/2NC w/110VDC coil
CS8C-22Z-48D	2NO/2NC w/48VDC coil
CS8C-31Z-110D	3NO/1NC w/110VDC coil
CS8C-31Z-48D	3NO/1NC w/48VDC coil
CS8C-40E-110D	4NO w/110VDC coil
CS8C-40E-48D	4NO w/48VDC coil
CS8-P11E	1NO/1NC aux front mounted
CS8-P22Z	2NO/2NC aux front mounted
CS8-P40E	4NO aux front mounted
CS8-P04E	4NC aux front mounted

Series CA8 Contactors and CAT8 Starters

An ingenious miniature contactor and starter system

Sprecher + Schuh's CA8 Series of miniature contactors and starters provide an extremely compact and reliable method of controlling motors of 7.5 HP or less (@460V). The CA8 is an economical choice for applications where space is limited or where a minimal enclosure is desired.



SMALL BUT RUGGED

Even though their contacts and coils are not replaceable, Sprecher + Schuh has subjected this series of contactors to monitored endurance tests that demonstrate their ruggedness. At full load, under 3-phase power, the contacts in the CA8 have an electrical life of 700,000 operations, while the AC magnet system has a mechanical life of 15,000,000 operations.

THE CAT8 STARTER – EFFICIENT AND RELIABLE

This miniature starter features the new CT8 Thermal Overload Relay. A complex current limiting calibration procedure performed after each unit ensures the consistent high quality of Sprecher + Schuh's thermal overload relay. Today's Class 10 T-frame design, like the CT8 Series, has been recognized by many motor manufacturers as the ideal type to assure optimum motor protection due to less use of copper and iron.

ACCESSORIES REQUIRE NO ADDITIONAL PANEL SPACE

The entire CA8 System is logically engineered. Modular accessories like auxiliary contact blocks snap-on without increasing the CA8's original width of 45mm. Also, due to its horizontal switching movement, the basic contactor has the same low profile whether an AC or DC operating magnet is used. This permits the use of enclosures with shallow mounting depths. Once the CA8 is installed, all auxiliary contact blocks can be snapped-on or removed without changing any existing power wiring. Other accessories include a snap-on RC Link (surge suppressor), mechanical interlocks and space saving adaptors for connecting auxiliary components.

EFFORTLESS INSTALLATION

Both the CA8 Contactor and the CAT8 Starter are DIN-rail mountable for instant installation and modification. Fittings are also included on the CA8 for base mounting. All terminals are clearly marked and shipped in the open position for installation with either manual or power screwdrivers.



CA8 starters feature the CT8 thermal overload



94
128



SPRECHER+SCHUH continued

Miniature Contactors Series CA8

Series CA8 Miniature Contactors, Starters, Overloads and Industrial Relays

- Rated 690V
- RoHs compliant
- Conforming to U.S., Canadian, and IEC standards
- Same dimensions for AC and DC

Pluggable Surge Suppressor Modules

- Suppressor modules are simply plugged on the front of the contactors, next to the auxiliary contact blocks.
- No wiring required
- Fast and easy installation

Auxiliary Contact Reliability

- Bifurcated, AgNi (silver/nickel) plated contacts for high contact reliability for 2mA/15V electronic signals.
- H-shaped self cleaning auxiliary contacts provide a 4-way current path ensure high contact reliability for low energy switching.

Auxiliary Contacts

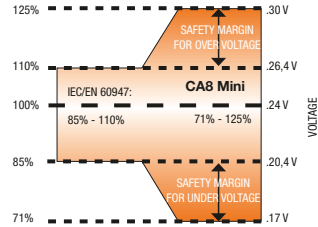
Top/front mount for use with CA8 contactors

Part #	Description
CA8-P02	2NC
CA8-P04	4NC
CA8-P11	1NO/1NC
CA8-P13	1NO/3NC
CA8-P20	2NO
CA8-P22	2NO/2NC
CA8-P31	3NO/1NC
CA8-P40	4NO

MINIATURE STARTERS SERIES CAB

High performance AC and DC coils

- Wide range DC coils can provide reliability in case of over- and under-voltage, a common issue with battery-fed control power supply systems.
- The low coil consumption allows the contactors to be directly controlled via a PLC.
- Optional, integral factory-installed surge suppressor modules for AC and DC for limiting coil switching transients.



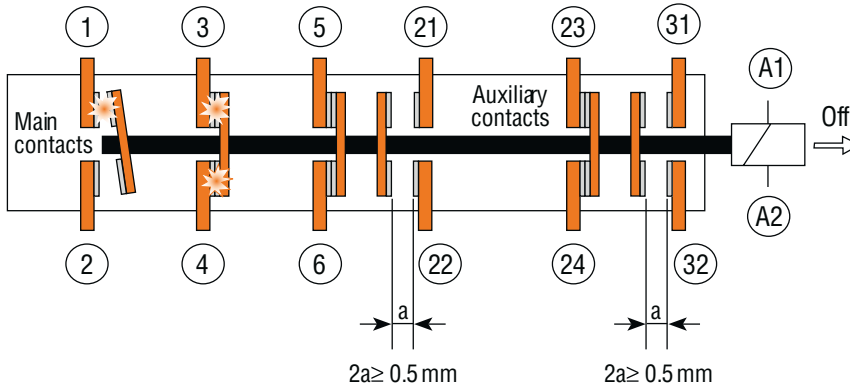
CAB: mechanically linked performance between main contacts and internal auxiliary contacts as per IEC 60947-5-1. This feature provides status feedback in the event of a contact weld.

All around safety

CAB/Auxiliary contacts: mechanically linked performance between main contacts and auxiliary contacts as per IEC 60947-5-1 for CAB models with DC coils. Mechanically linked provides status feedback in the event of a contact weld. Mirror contact between main and auxiliary contacts as per IEC 60947-4-1 for CAB models with AC coils. Mirror contacts prevent any unclear status indications if a N.O. power pole welds.



Mirror and Mechanically Linked Design



Starters and Contactors: Sprecher+Schuh

MINIATURE CONTACTORS – AC AND DC COIL, SERIES CA8



CA8-09-10 contactor

Non-Reversing, Three Pole Contactors With AC Coil, Series CA8 (Open type only) ❶

I _e [A]	Ratings for Switching AC Motors (AC2 / AC3 / AC4)										Auxiliary Contacts per Contactor		Open Type
	3 Ø kW (50 Hz)				UL/CSA HP (60 Hz)								
					1 Ø		3 Ø				NO	NC	
40°C													
AC-1	230V	400V 415V	500V	690V	115V	230V	200V	230V	460V	575V			
20	3	4	4	4	1/2	1-1/2	2	2	5	5	1	0	CA8-09-10-*
											0	1	CA8-09-01-*
20	3	5.5	5.5	5.5	3/4	2	3	3	7-1/2	7-1/2	1	0	CA8-12-10-*
											0	1	CA8-12-01-*

Non-Reversing, Three Pole Contactors With DC Coil, Series CA8 (Open type only) ❷❸

I _e [A]	Ratings for Switching AC Motors (AC2 / AC3 / AC4)										Auxiliary Contacts per Contactor		Open Type
	3 Ø kW (50 Hz)				UL/CSA HP (60 Hz)								
					1 Ø		3 Ø				NO	NC	
40°C													
AC-1	230V	400V 415V	500V	690V	115V	230V	200V	230V	460V	575V			
20	3	4	4	4	1/2	1-1/2	2	2	5	5	1	0	CA8-09C-10-*
											0	1	CA8-09C-01-*
20	3	5.5	5.5	5.5	3/4	2	3	3	7-1/2	7-1/2	1	0	CA8-12C-10-*
											0	1	CA8-12C-01-*

AC Coil Codes ❹❺

AC Coil Code	Voltage Range	
	50 Hz	60 Hz
12	12V	12V
24Z	24V	24V
48Z	48V	48V
120	110V	120V
208	200V-220V	208V-220V
240	240V	240V
380 ❻	Use Coil Code 400	
400 ❻	400V	400V
480	440V	480V
575 ❼	Use Coil Code 600	
600 ❼	525V	600V

DC Coil Codes ❶❸

DC Coil Code	Voltage
12D	12V
24D	24V ❹
110D	110V
125D	125V
220D	220V

Ordering Instructions

Specify Catalog Number	
Replace (*) with Coil Code	See Coil Codes on this page

- ❶ CA8 not available without coil. Coils and contacts not replaceable.
- ❷ Select Coil Code from DC Coil Code table only.
- ❸ The coil codes shown are the most commonly stocked items. Contact ACCESS Elevator & Electric Supply to determine if other voltages are available.
- ❹ Integrated diode surge suppressor coils available. Order coil code 24DD.
Example: CA8-09C-10-24D becomes CA8-09C-10-24DD.
- ❺ The European Community has agreed that 400V is the nominal voltage in lieu of 380V. Use this code when 380V is required.
- ❻ Use this code for 575V applications.

SERIES CDP2 DEFINITE PURPOSE CONTACTORS

High-performance Economical Contactors for Commercial Applications up to 90A

Sprecher+Schuh's Definite Purpose contactors are ideal for commercial applications including air conditioning, refrigeration, resistive heating and many other installations where a low cost, high performance contactor is needed. These devices offer flexibility and are designed to meet or exceed electrical and mechanical requirements as defined by definite purpose contactor standards.

Popular Sizes for Most Applications

The CDP2 series consists of one, two, three and four pole contactors rated to 600V AC. Three pole devices range up to 90A, while the one and two pole models are rated to 40A. Four pole contactors are also available ranging from 25A to 40A.

Flexibility and Convenience Make Installation Easy

CDP2 contactors are compact in size and offer three convenient methods of wire connection: quick connect terminals, screws or box lugs. Box lugs are standard on 40A and larger contactors. Other models come standard with combination quick connect terminals and screws that accept hex, slotted or phillips screwdrivers.

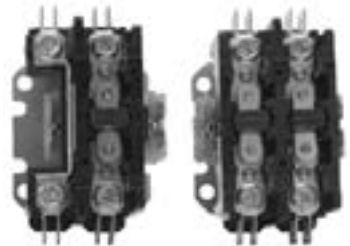


Standard Features

- Universal mounting plate
- 25A and 30A have screw power terminals that will accept ring-tongue terminals
- 40A and larger have box power terminals
- Dual quick-connect power terminals on all sizes
- Dual quick-connect coil terminals on all sizes
- Double break power contact design with feed-thru wiring
- Class B (130°C) coil insulation
- Double E magnet assembly

Optional Features

- SPDT auxiliary contacts optional on 3- and 4-pole contactors (max of two)
- Optional covers for 1- and 2-pole contactors
- Mechanical interlock for 3-pole contactors



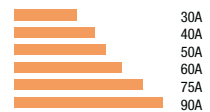
One Pole

Two Pole



Two Pole

Three Pole

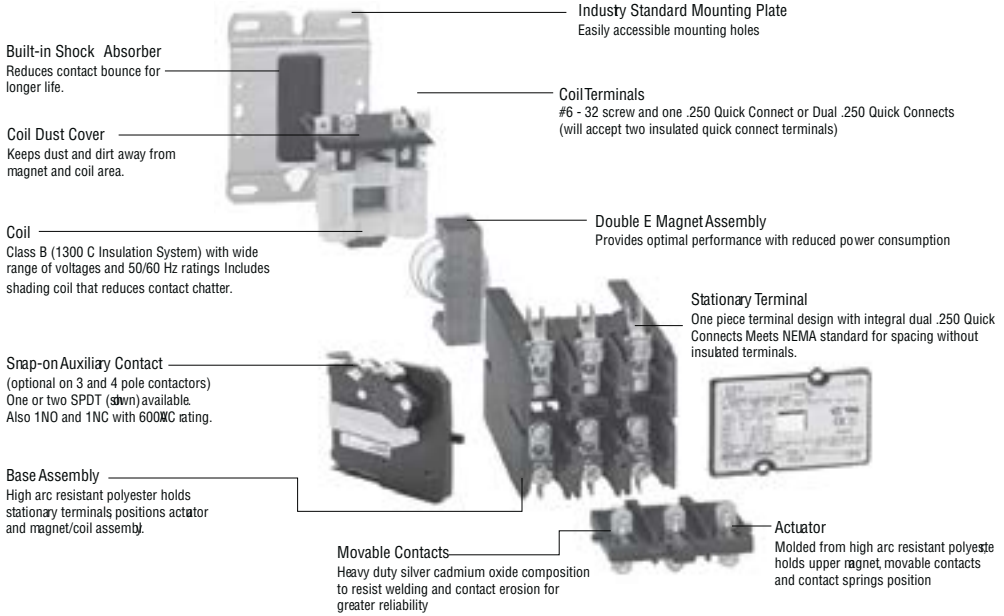


Four Pole



Starters and Contactors: Sprecher+Schuh

Compare These Features



Quick Selection Guide

1 and 2 Pole Definite Purpose Contactors with AC Coil					
CDP2 ①	A	1P	30A	24	
Type	Frame Size	Poles	Amp Rating	Coil Voltage	
Definite Purpose	A = 30 & 40A	1P = 1 pole 2P = 2 pole	30A = 30 amps 40A = 40 amps	24	= 24 volts 120 = 120 volts 220W = 208-240 volts 277 = 277 volts

3 Pole Definite Purpose Contactors with AC Coil					
CDP2 ①②	B	3P	30A	24	
Type	Frame Size	Poles	Amp Rating	Coil Voltage	
Definite Purpose	B = 30 & 40A C = 50 & 60A D = 75 & 90A	3P = 3 poles	30A = 30 amps 40A = 40 amps 50A = 50 amps 60A = 60 amps 75A = 75 amps 90A = 90 amps	24	= 24 volts 120 = 120 volts 220W = 208-240 volts 277 = 277 volts 480 = 480 volts

4 Pole Definite Purpose Contactors with AC Coil					
CDP2 ①②	E	4P	25A	24	
Type	Frame Size	Poles	Amp Rating	Coil Voltage	
Definite Purpose	E = 25..40A	4P = 4 poles	25A = 25 amps 30A = 30 amps 40A = 40 amps	120	= 120 volts 220W = 208-240 volts 277 = 277 volts 480 = 480 volts

- ① Screw power terminals standard on 30A. Box lug power terminals standard for 40A and larger.
- ② Box lugs on 30A available with volume special order only.

DEFINITE PURPOSE CONTACTORS, 1 AND 2 POLE – SERIES CDP2

One- and Two-Pole Definite Purpose Contactors with AC Coil (Open type only) ④

Full Load Amps	Poles	Locked Rotor Amps			Resistive Amps ②	Maximum HP:		Catalog Number	Std. Pkg.
		240V ②	480V	600V		1Ø			
						120V	240V ②		
30 ①	1 ⑤	150	75	50	40	1	2	CDP2-A1P30A* ③	50
30 ①	2	150	125	100	40	2	3	CDP2-A2P30A* ③	50
40	1 ⑤	200	150	120	50	2	3	CDP2-A1P40A* ③	50
40	2	200	150	120	50	2	3	CDP2-A2P40A* ③	50




Series CDP2 1-pole contactor



Series CDP2 2-pole contactor (with optional cover)

Accessories

Accessory	Description	For use with	Catalog Number
	Contactor Cover - Prevents foreign particles from entering contactor. Covers current carrying parts.	CDP2-A1P30A... CDP2-A2P30A...	CDP2-A1P-C CDP2-A2P-C ⑦

AC Coil Codes

AC Coil Code	Voltage Range
	60 Hz
24	24V
120	120V
220W	208-240V
277	277V

- ① 25A contactors only available by special order. Contact ACCESS Elevator & Electric Supply.
- ② 240V rating also applies to 277V applications.
- ③ Box power lugs are supplied as standard. Screw terminals are available on the power connections by special order only in quantity.
- ④ 1- and 2-pole, 25 and 30A contactors supplied without cover.
- ⑤ Screw power terminals are supplied standard on 25 and 30A contactors. Box lugs available by special order only in quantity.
- ⑥ 1-pole (1-pole plus) contactors include a shunt for termination and feed-thru of neutral.
- ⑦ 40 amp contactors are supplied with cover as standard.

DEFINITE PURPOSE CONTACTORS, 3 POLE – SERIES CDP2


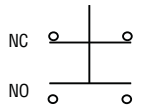

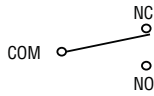


Series CDP2 3-pole contactor

Three Pole Definite Purpose Contactors with AC Coil (Type only)

Full Load Amps	Locked Rotor Amps			Resistive Amps ②	Maximum Horsepower ②								Catalog Number	Std. Pkg.
					1Ø				3Ø					
	240V ④	480V	600V		120V	200	240V	200V	240V	480V	600V			
30 ①	180	150	120	40	2	~	5	10	10	15	20	CDP2-B3P30A* ④	25	
40	240	200	160	50	3	~	7-1/2	10	10	20	25	CDP2-B3P40A* ⑤	25	
50	300	250	200	65	3	7-1/2	10	15	15	25	25	CDP2-C3P50A*	15	
60	360	300	240	75	5	7-1/2	10	25	25	30	30	CDP2-C3P60A*	15	
75	450	375	300	93	5	10	15	20	25	40	40	CDP2-D3P75A*	1	
90	540	450	360	120	7-1/2	15	20	25	30	50	50	CDP2-D3P90A*	1	

Auxiliary Contacts for 3 Pole Contactors

Auxiliary	Description	Circuit Diagram	Catalog Number
	Two pole Auxiliary Contact Block (1-NO / 1-NC) - Side mount with quick connect stabs for 25...40A 3 pole contactors for 50...90A 3 pole contactors		CDP2-BE-11 ⑥ CDP2-CD-11 ⑥
	One pole Auxiliary Contact Block (SPDT) - Side mount with quick connect stabs for 25...40A 3 or 4 pole contactors		CDP2-BE-1SPDT ⑤

AC Coil Codes

AC Coil Code	Voltage Range 60 Hz
24	24V
120	120V
220W	208-240V
277	277V
480	480V

- ① 25A contactors available by special order. Contact ACCESS Elevator & Electric Supply. 240V rating also applies to 277V applications.
- ② Box lugs are supplied as standard. Screw terminals are available on the power connections by special order only in quantity.
- ③ Screw power terminals are supplied standard on 25 and 30A contactors. Box lugs available by special order only in quantity.
- ④ Meets NEMA Standard B600.
- ⑤ Meets NEMA Standard B600 except has 10A continuous current rating.

DEFINITE PURPOSE CONTACTORS, 4 POLE – SERIES CDP2


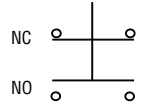

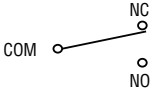
Four Pole Definite Purpose Contactors With AC Coil (Only)

Full Load Amps	Locked Rotor Amps			Resistive Amps ②	Maximum Horsepower ②					Catalog Number	Std. Pkg
	240V ②	480V	600V		1Ø		3Ø				
					120V	240V	200V	240V	480V		
30 ①	180	150	120	40	2	5	10	10	15	CDP2-E4P30A* ④	20
40	240	200	160	50	3	7-1/2	10	10	20	CDP2-E4P40A* ④	20



Series CDP2 4-pole contactor

Auxiliary Contacts for 4 Pole Contactors

Auxiliary	Description	Circuit Diagram	Catalog Number
	Two pole Auxiliary Contact Block (1-NO / 1-NC) Side mount with quick connect stabs for all 4 pole contactors		CDP2-BE-11
	One pole Auxiliary Contact Block (SPDT) Side mount with quick connect stabs for all 4 pole contactors		CDP2-BE-1SPDT

A.C. Coil Codes

AC Coil Code	Voltage Range
24	24V
120	120V
220W	208-240V
277	277V
480	480V

- ① 25A contactors available by special order. Contact ACCESS Elevator & Electric Supply.
- ② 240V rating also applies to 277V applications.
- ③ Box Power Lugs are supplied as standard. Screw terminals are available on the power connections by special order only in quantity.
- ④ Screw per terminals are supplied standard on 25 and 30A contactors. Box Lugs available by special order only in quantity.

For a complete listing of Telemecanique Contact Kits, see page XXX (Type LC1/CN1/CN2).

Starters and Contactors: Telemecanique



LC1D25-G7



LADN02



LADN11



LADN31

TELEMECANIQUE/SCHNEIDER

Contactors

Part #	Description
LC1D09G7	3 pole, 9 amp w/1NO/1NC aux, 120VAV coil
LC1D09LE7	3 pole, 9 amp w/1NO/1NC aux, 208VAC coil
LC1D09U7	3 pole, 9 amp w/1NO/1NC aux, 240VAC coil
LC1D12G7	3 pole, 12 amp w/1NO/1NC aux, 120VAC coil
LC1D12U7	3 pole, 12 amp w/ 1NO/1NC aux, 240VAC coil
LC1D25G7	3 pole, 25 amp contactor w/1NO/1NC aux, 120VAC coil
LC1D25G7	3 pole, 25 amp w/1NO/1NC aux, 120VAC coil (repl LC1D2510)
LC1D25M7	3 pole, 25 amp w/1NO/1NC aux, 220VAC coil
LC1D32G7	3 pole, 32 amp, w/1NO/1NC aux, 120VAC coil
LC1D50G7	3 pole, 50 amp w/1NO/1NC aux, 120VAC coil
LC1D65AG7	3 pole, 65 amp w/1NO/1NC aux, 120VAC coil
LC1D80G7	3 pole, 80 amp w/1NO/1NC aux, 120VAC coil

Accessories

Part #	Description
LADN02	Aux contact. Front mount 2NC LC1D09-LC1D150
LADN04	Aux contact. Front mount 4NC
LADN11	Aux contact. Front mount 1NO/1NC LC1D09-LC1D150
LADN13	Aux contact. Front mount 1NO/3NC
LADN20	Aux contact. Front mount 2NO
LADN22	Aux contact. Front mount 2NO/2NC LC1D09-LC1D150
LADN31	Aux contact. Front mount 3NO/NC LC1D09-LC1D150
LADN40	Aux contact. Front mount 2NO/2NC

SIRIUS Innovations Modular System

Pure Functionality

The SIRIUS Innovations Modular System combines digital planning and compliance to industry standards while meeting your needs for any application. The new SIRIUS Innovations line is fast, cost effective and has a wide range of different applications.

BENEFITS

- Two sizes up to 30 HP
- 45 mm width for both S00 and S0 sizes—saves space in the cabinet
- Efficient. Easy and rapid mounting of starters by means of connection modules
- Flexible. Modular system for motor starters with motor starter protectors, contactors, overload relays, and current monitoring relays
- Connected. Reduce system downtime, increase diagnostics and simplify connection to the automation network through IO-Link and AS-Interface snap-on-modules. Screw-type, spring-loaded and ring-lug terminal connection systems available.
- Comprehensive range of accessories

COMPACT SWITCHING AND PROTECTING

Equipped with the functions of a motor starter protector, a contactor, and an electronic overload relay, the 3RA6 compact starter as a direct-on-line or reversing starter up to 32 A offers maximum reliability with minimum variance. There is reduced wiring in the main circuit thanks to the ingeniously simple infeed system, including PE connection. Thanks to the optional AS-Interface or integrated IO-Link interface, 3RA6 compact starters are integrated into the Totally Integrated Automation design concept.

The 3RM1 direct-on-line or reversing starters up to 7 A reduce width even further to one half the previous size, and are thus master space-savers. Fail-safe design versions offer the greatest possible economizing on switching device deployment in safety-related applications.

FASTER WIRING

Thanks to integrated spring-loaded terminals

All products with 45-mm widths (S00- and S0-size series) in the main as well as auxiliary and control circuits are available with spring-loaded terminals in addition to the conventional screw terminals. This accelerates device connection, and offers maximum operational safety and reliability.

The extremely simple wiring guarantees fast installation. Another advantage is that the gas-tight terminal connection is resistant to shaking and vibration. In addition, you benefit from maximum contact reliability—even under the harshest of conditions. There's no need to subsequently re-tighten the connection terminals (often the usual practice).

continued



The SIRIUS Modular System combines digital planning and standard-compliant implementation of your requirements.

SIRIUS Innovations Modular System continued

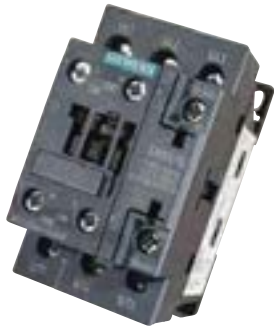
One particular advantage is that the link modules for direct-on-line, reversing and star-delta (wye-delta) starting are also available with spring-loaded terminals. This enables you to install feeders entirely without tools.

Spring-loaded terminals in the auxiliary circuit are optionally available in sizes S2 and S3.

MAXIMUM FLEXIBILITY

When it comes to connections

All the components of the SIRIUS Modular System are, of course, also available with screw terminals for special requirements such as mechanical engineering in the semiconductor industry. In sizes with design widths of 70 mm and larger (i.e. as of size S3), additional possible connection options are available such as for connecting cable terminal lugs to device connection bars, or connecting cables with large cross sections to box terminals.



3RT2028-1AK60



3RT2026-1AK60



3RT2027-1AK60

3RT2 Contactors

Part #	Amps	Aux	Coil	Poles	Frame Size
3RT2015-1AK61	7	1NO	120VAC	3	S00
3RT2015-1AK62	7	1NC	120VAC	3	S00
3RT2015-1AP01	7	1NO	240VAC	3	S00
3RT2015-1AP02	7	1NC	240VAC	3	S00
3RT2015-1BB41	7	1NO	24VDC	3	S00
3RT2015-1BB42	7	1NC	24VDC	3	S00
3RT2016-1AK61	9	1NO	120VAC	3	S00
3RT2016-1BB41	9	1NO	24VDC	3	S00
3RT2016-1BB42	9	1NC	24VDC	3	S00
3RT2017-1AK62	12	1NC	120VAC	3	S00
3RT2017-1AP01	12	1NO	240VAC	3	S00
3RT2018-1AK61	16	1NO	120VAC	3	S00
3RT2018-1AK62	16	1NC	120VAC	3	S00
3RT2024-1AK60	12	1NO	120VAC	3	S0
3RT2025-1AK60	17	1NO	120VAC	3	S0
3RT2026-1AK60	25	1NO/1NC	120VAC	3	S0
3RT2026-1AP60	25	1NO/1NC	240VAC	3	S0
3RT2027-1AK60	32	1NO/1NC	120VAC	3	S0
3RT2027-1BB40	32	1NO/1NC	24VDC	3	S0
3RT2028-1AK60	38	1NO/1NC	120VAC	3	S0
3RT2035-1AK60	40	1NO/1NC	120VAC	3	S2
3RT2035-1AP60	40	1NO/1NC	240VAC	3	S2
3RT2036-1AK60	50	1NO/1NC	120VAC	3	S2
3RT2036-1KB40	50	1NO/1NC	24VDC	3	S2
3RT2037-1AK60	65	1NO/1NC	120VAC	3	S2
3RT2045-1AK60	80	1NO/1NC	120VAC	3	S3
3RT2046-1AK60	95	1NO/1NC	120VAC	3	S3
3RT2516-1AK60	9	2NO/2NC	120VAC	4	S00
3RT2517-1AK60	12	2NO/2NC	120VAC	4	S00
3RT2517-1BB40	12	2NO/2NC	24VDC	4	S00
3RT2517-1BG40	12	2NO/2NC	110VDC	4	S00
3RT2535-1AK60	55	2NO/2NC	120VAC	4	S2
3RT2336-1AK60	60	1NO/1NC	120VAC	4	S2

Aux Contacts

Part #	Description
3RH2911-1FA22	Aux. switch on the front, 2NO+2NC curr. path 1NO, 1NC, 1NC, 1NO, for 3RH and 3RT. ,3/4, ,1/2, ,1/2, ,3/4, screw
3RH2911-1HA11	Aux. switch on the front, 1NO+1NC curr. path 1NC, 1NO, for 3RH and 3RT. ,1/2, ,3/4, screw
3RH2911-1HA22	Aux. switch on the front, 2NO/2NC curr. path 1 NC, 1 NC, 1 NO, 1 NO for 3RH and 3RT screw terminal. ,1/2, ,1/2, ,3/4, ,3/4
3RH2911-1HA31	Aux. switch on the front, 3NO+1NC curr. path 1 NC, 1NO, 1NO, 1NO, for 3RH and 3RT. ,1/2, ,1/2, ,3/4, ,3/4, screw
3RH2911-1NF11	Electron. contr. auxiliary switch 1NO+1NC, curr. path 1NO,--,--, 1NC, front-side for 3RH and 3RT. ,3/4, --/--, --/--, ,1/2, screw
3RH2911-2GA04	Aux. switch on the front, 4NC curr. path 1NC, 1NC, 1NC, 1NC for contactor relays, 51/52, 61/62, 71/72, 81/82, spring-loaded
3RH2911-2GA22	Aux. switch block, front, 2NO/2NC, curr. path 1NO, 1NC, 1NC, 1NO, for contactor relays, 53 / 54, 61 / 62, 71 / 72, 83 / 84, spring-loaded
3RH2911-2HA22	Aux. switch block, front, 2NO/2NC, curr. path 1NC, 1NC, 1NO, 1NO, for contactor relays A. motor cont., ,1 / ,2, ,1 / ,2, ,3 / 4, ,3 / 4, spring-loaded
3RH2911-2HA31	Aux. switch on the front, 3NO+1NC curr. path 1NC, 1NO, 1NO, 1NO, for 3RH and 3RT. ,1/2, ,3/4, ,3/4, ,3/4, spring-loaded
3RH2921-1DA11	Lateral aux. switch block, side, 1NO/1NC, curr. path 1NC, 1NO, for motor contactors, R: 31/32, 43/44 L: 51/52, 63/64, screw
3RH2921-2DA02	Aux. switch lateral, 2NC curr. path 1NC, 1 NC for 3RH and 3RT, R: 31/32, 41/42 L: 51/52, 61/62, screw
3RH2921-2DA11	Lateral aux. switch block, side, 2NO/2NC, curr. path 1NC, 1NO, for motor contactors, R: 31/32, 43/44 L: 51/52, 63/64, spring-loaded
3RH2921-2DA20	Aux. switch lateral, 2NO curr. path 1NO, 1NO, for 3RH and 3RT, R: 33/34, 43/44 L: 53/54, 63/64, spring-loaded



3RH2921-2DA11

Overload Relays

Part #	Description	Size
3RU2116-4AB0	Overload relay 11...16 A for motor protection, class 10, for mounting onto contactor main circuit: screw terminal aux. circuit: screw terminal, manual-automatic-reset	S00
3RB3016-1SBO	Overload relay 3...12 A for motor protection, class 10 contactor ass. main circuit: screw conn. aux. circuit: screw conn., manual-automatic-reset	S00
3RB3016-1TB0	Overload relay 4...16 A for motor protection	S00
3RB3026-1QB0	Overload relay A for motor protection, class 10 contactor ass. main circuit: aux. circuit: screw conn., manual-automatic-reset	S0
3RU2116-1KB0	Overload relay 9.0...12.5 A for motor protection bgr	S00
3RU2116-1HB0	Overload relay 5.5...8.0 A thermal for motor protection, class 10 contactor mounting main circuit: screw auxiliary circuit: screw manual-automatic-reset	S00
3RU2126-1GB0	Overload relay 4.5...6.3 A thermal for motor protection, class 10 contactor mounting main circuit: screw auxiliary circuit: screw manual-automatic-reset	S0
3RU2126-4AB0	Overload relay 11...16 A thermal for motor protection, class 10 contactor mounting main circuit: screw auxiliary circuit: screw manual-automatic-reset	S0
3RU2126-4CB1	Overload relay 17...22 A thermal for motor protection, class 10 stand-alone installation main circuit: screw auxiliary circuit: screw manual-automatic-reset	S0
3RU2126-4FB0	Overload relay 34...40 A thermal for motor protection, class 10 contactor mounting main circuit: screw auxiliary circuit: screw manual-automatic-reset	S0
3RU2126-4NB0	Overload relay 23...28 A thermal for motor protection, class 10 contactor mounting main circuit: screw auxiliary circuit: screw manual-automatic-reset	S0

SIRIUS

Protection Equipment: Overload Relays up to 80 A

	3RB30	3RB31
Applications		
• System protection	✓ ¹	✓ ¹
• Motor protection	✓	✓
• Alternating current, three-phase	✓	✓
• Alternating current, single-phase	–	–
• Direct current	–	–
Size Contactor	S00, S0, S2	S00, S0, S2
Rated operational current I_n		
• Size S00	A Up to 16	Up to 16
• Size S0	A Up to 40	Up to 40
• Size S2	A Up to 80	Up to 80
Rated operational voltage U_n	A 690 AC	690 AC
Rated frequency	Hz 50/60	50/60
Trip class	Class 10E, 20E	Class 10E, 20E, 30E (adjustable)
Thermal overload releases	A –	–
	A	
Electronic overload releases	A 0.1 ... 0.4 up to	0.1 ... 0.4 up to
	A 20 ... 80	20 ... 80

Accessories	3RB30			3RB31		
For sizes	S00	S0	S2	S00	S0	S2
Terminal supports for stand-alone installation	✓	✓	✓	✓	✓	✓
Mechanical RESET	✓	✓	✓	✓	✓	✓
Cable releases for RESET	✓	✓	✓	✓	✓	✓
Electrical remote RESET	–	–	–	Integrated in the unit		
Terminal covers						
• Ring terminal lug connections						
• For box terminals						

Soft Starters

Part #	Description	Size
3RW4024-1BB14	SIRIUS soft starter. 12.5A, 5.5Kw/400V, 40 degrees, AC200 – 480V, AC/DC110 – 230V, screw terminals	S0
3RW4026-1BB14	SIRIUS soft starter. 25A, 11Kw/400V, 40 degrees, AC200 – 480V, AC/DC110 – 230V, screw terminals	S0
3RW4027-1BB14	SIRIUS soft starter. 32A, 15Kw/400V, 40 degrees, AC200 – 480V, AC/DC110 – 230V, screw terminals	S0



3RW4024-1BB14
Soft Starter

Power Supply

Part #	Description
6EP1333-2BA20	SITOP, PSU100S 24V/5 A stabilized power supply input: 120-230VAC output: 24V/5 A DC
6EP3330-6SB00-0AY0	Logo!Power. 24V / 0.6 A stabilized power supply input: 100-240VAC output: DC 24V / 0.6 A
6EP3321-6SB10-0AY0	Logo!Power. 15V / 1.9 A stabilized power supply input: 100-240VAC output: DC 15 V / 1.9 A
6EP3311-6SB00-0AY0	Logo!Power. 5V / 6.3 A stabilized power supply input: 100-240VAC output: 5V DC / 6.3 A
6EP13325BA10	SITOP, PSU100C 24 V/4 A stabilized power supply input: 120-230VAC (DC 110-300 V) output: 24V DC/4 A
6EP13321LB00	SITOP, PSU100L 24 V/2.5 A stabilized power supply input: 120/230VAC, output: DC 24V/2,5 A
6EP13331LB00	SITOP, PSU100L 24 V/5 A stabilized power supply input: 120/230VAC, output: 24VDC/5 A



6EP1333-2BA20
Sitop Stabilized Power Supply

Replacement Part Numbers

Standard SIRIUS Contactor Part #	Replaced by Innovations Part #	Standard SIRIUS Contactor Part #	Replaced by Innovations Part #
3RT1024-1AK60	3RT2024-1AK62	3RT1035-1AP60	3RT2035-1AK60
3RT1025-1AK60	3RT2025-1AK60	3RT1036-1AK60	3RT2036-1AK60
3RT1026-1AK60	3RT2026-1AK60	3RT1044-1AK60	3RT2037-1AK60
3RT1026-1AP60	3RT2026-1AK60	3RH1921-1DA11	3RH2921-1DA11
3RT1033-1AK60	3RT2027-1AK60	3RH1921-1EA11	3RH2921-1DA11
3RT1034-1AK60	3RT2034-1AK60	3RH1921-1FA22	3RH2911-1FA22
3RT1035-1AK60	3RT2035-1AK60		



3RH2921-1DA11
Lateral Aux Switch Block



3RH2921-2DA11
Aux Contact



3RT2035-1AK60
Contactor



Soft Starters: Siemens/Nordic

Siemens/Nordic

The Industry Standard for Electronic Soft Starters

Siemens/Nordic elevator starters are specifically designed and manufactured for the elevator industry with over 150,000 units installed and running.

FEATURES

- **Heavy duty, full size, and fully rated @ 80 starts per hour**
Not a light duty uprated miniature electronic starter that has to rely on constant cooling from a fan, the Siemens/Nordic starter has set the industry standard for heavy-duty service.
- **Easy to read self-diagnostics and easy to set starting and overload amps**
All done with the keypad and two-line LCD display. Just follow the prompts.
- **Provides smooth, stepless soft-start of elevator motor**
Reduces or eliminates the problem dimming lights.
Protects sensitive medical and diagnostic equipment and computers.
Reduces wear of motor, pump, valves, seals, and other mechanical components.
- **Built in phase loss/phase reversal protection plus field adjustable electronic overload relay**
Fully protects expensive elevator motors and service components.
- **No moving parts**
Eliminates the expense of replacing contact kits.
- **Significant noise reduction**
No electromechanical contactors closing and opening. Delivers quiet operation.
- **Automatic status monitoring**
Siemens/Nordic starters automatically check for proper motor connections upon initial start-up.
- **Windows-based computer diagnostic software also available**

Call Access today for low prices and same day shipping on all Siemens Soft Starters. We ship from Emeryville, California or Niles, Illinois warehouse.

For a complete troubleshooting guide, contact Access Elevator Supply or visit www.AESupply.com

INSTALLATION AND SET-UP

One of the many reasons that the Siemens/Nordic elevator starter is the industry's preferred product is its ease of set-up.

After making the control power connections (remember, only use 120VAC for the motor run signal on terminal 4), make the line and load connections. The starter is wired at the factory for a Wye-Delta motor, 6 or 12 leads.

If you have a 9-lead motor or a 3- or 6-lead in-line motor, you must reconnect the starter to run across the line. Check to make sure the starter can handle the larger draw of an across-the-line motor. For in-line connections, consult the instruction book.

continued on page 160

Soft-Start Hydraulic Elevator Application Guide*

Table 1: For use with Wye-Delta Wound Motors 200 - 460 Volts	HP @ 200V	HP @ 230V	HP @ 460V	Rated Current (Amps)	Overload Range (Amps)	Current Limit Range (Amps)	Part #
	5	7.5	15	22	7 - 27	26 - 94	72EG34AFP
	7.5	10	25	35	12 - 44	41 - 148	72GG34AFP
	10	15	30	42	14 - 53	49 - 179	72HG34AFP
	15	20	40	55	18 - 69	64 - 234	72JG34AFP
	20	25	50	68	22 - 85	79 - 289	72KG34AFP
	25	30	60	80	26 - 100	93 - 340	72LG34AFP
	30	40	75	105	35 - 131	121 - 447	72MG34AFP
	40	50	100	130	43 - 163	151 - 553	72NG34AFP
	50	60	125	156	52 - 196	181 - 663	72PG34AFP
75	100	—	252	83 - 315	292 - 1071	72RG32AFP	

Table 2: For use with Wye-Delta Wound Motors 575 - 600 Volts (primarily Canada)	HP @ 460V	HP @ 575V	Rated Current (Amps)	Overload Range (Amps)	Current Limit Range (Amps)	Part #
	15	20	22	7 - 27	26 - 94	72EG35AFP
	25	30	35	12 - 44	41 - 148	72GG35AFP
	30	40	42	14 - 53	49 - 179	72HG35AFP
	40	50	55	18 - 69	64 - 234	72JG35AFP
	50	60	68	22 - 85	79 - 289	72KG35AFP
	60	75	80	26 - 100	93 - 340	72LG35AFP
	75	100	105	35 - 131	121 - 447	72MG35AFP
	100	125	130	43 - 163	151 - 553	72NG35AFP
	125	150	156	52 - 196	181 - 663	72PG35AFP

Table 3: For use with Across-the-Line Motors 200 - 460 Volts	HP @ 200V	HP @ 230V	HP @ 460V	Rated Current (Amps)	Overload Range (Amps)	Current Limit Range (Amps)	Part #
	—	5	10	18	6 - 25	24 - 85	72GG34AFP
	5	7.5	15	22	8 - 30	28 - 10	72HG34AFP
	7.5	10	20	28	10 - 39	36 - 135	72JG34AFP
	7.5	10	25	35	13 - 49	45 - 166	72KG34AFP
	10	15	30	42	15 - 57	53 - 196	72LG34AFP
	15	20	40	55	20 - 76	70 - 257	72MG34AFP
	20	25	50	68	24 - 93	87 - 319	72NG34AFP
	25	30	60	80	29 - 112	104 - 382	72PG34AFP
	40	50	—	130	48 - 181	168 - 618	72RG32AFP

Table 4: For use with Across-the-Line Motors 575 - 600 Volts (primarily Canada)	HP @ 460V	HP @ 575V	Rated Current (Amps)	Overload Range (Amps)	Current Limit Range (Amps)	Part #
	10	15	18	6 - 25	24 - 25	72GG35AFP
	15	20	22	8 - 30	28 - 103	72HG35AFP
	20	25	28	10 - 39	36 - 135	72JG35AFP
	25	30	35	13 - 49	45 - 166	72KG35AFP
	30	40	42	15 - 57	53 - 196	72LG35AFP
	40	50	55	20 - 75	70 - 257	72MG35AFP
	50	60	68	24 - 93	87 - 319	72NG35AFP
	60	75	80	29 - 119	104 - 382	72PG35AFP

*For traction elevator applications, call Access.



One of the many reasons that the Siemens/Nordic elevator starter is the industry's preferred product is its ease of set-up.

INSTALLATION AND SET-UP *continued*

After making the power and control connection, set the starting amps and overload amps using the keypad.

Enter the desired settings as indicated below. The factory default settings are shown in the default setting column.

- Use the Up/Down keys to reach the desired parameter.
- Use the right arrow key to enter the edit mode.
- Use the right arrow key to select the digit to edit.
- Use the Up and Down keys to decrease or increase the flashing digit.

When the desired value has been entered, use the left arrow key to exit.

After exiting the editing menu, a screen asking you to accept or reject the changes will appear. The bottom line shows the new parameter.

Menu Choice		Default Setting
Starting amps	This is the level that the elevator starter will hold the current limit to, during the start. Keep in mind that while lower settings reduce the inrush currents, they increase the starting time. This setting should not be less than twice the motor's FLA.	425% of the starter current rating as measured in amps
Overload amps	This setting should be set at or below the FLA of the hydraulic pump motor.	50% of the starter rating in amps
Line rotation	The choices for this are either ABC or CBA. To change the setting from the factory default of ABC rotation, select the right key, which causes the ABC to flash and select the up key. To exit select the left key.	ABC rotation
Off delay	This is the time the starter continues to run after the run signal has been removed. This value is adjustable from 0 to 2500 milliseconds. To change from the factory default of 500 milliseconds, press the right key then select the desired setting the same using the up, down and right keys. Once the desired value is reached, press the left key to exit.	500 milliseconds
On delay	This is the time the starter waits before running after receiving a runsignal. The factory default is 0 milliseconds. This is adjustable from 0 to 2500 milliseconds. It is adjusted the same way the Off delay is adjusted.	0 milliseconds

Model #	In-line FLA	Single Phase Ratings (HP) 200V / 230V
72GG34AFP	18	2 / 3
72HG34AFP	22	3 / 3
72JG34AFP	28	3 / 5
72KG34AFP	35	5 / 5
72LG34AFP	42	5 / 7.5
72MG34AFP	55	7.5 / 10
72LG34AFP	42	5 / 7.5
72MG34AFP	55	7.5 / 10
72NG34AFP	68	10 / 15
72PG34AFP	80	- / 15
72RG32AFP	130	- / 25

SINGLE PHASE HYDRAULIC SYSTEM

- Saves space and reduces cost for the building owner by eliminating the phase converter.
- Simplifies maintenance and reduces service calls, increasing profit for the elevator contractor.
- Same installation and programming as traditional elevator applications for quick, confident commissioning.

THREE PHASE HYDRAULIC SYSTEM

- The industry standard hydraulic controller with 20 years of proven performance.
- Expanded diagnostics and firmware upgrades via communications port.

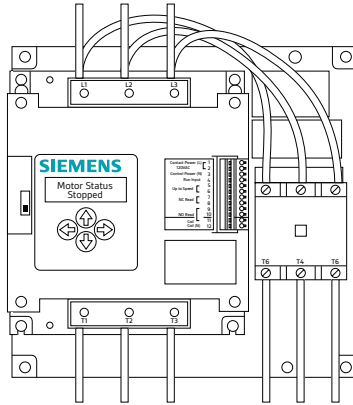
MOTOR GENERATOR TRACTION SYSTEM

- Current limit starting for faster response to car calls.
- Shared spare parts with hydraulic controllers reduces inventory costs.

Elevator Starter Dimensions

Part #	Height	Width	Depth
72EG34AFP-72KG34AFP	11.5"	11"	5.63"
72LG34AFP-72PG34AFP	11.5"	11"	7.13"
72RG32AFP	12"	16.75"	7.16"
72EG35AFP-72KG35AFP	11.5"	11"	5.63"
72LG35AFP	11.5"	11"	7.13"
72MG35AFP-72PG35AFP	12"	16.75"	7.13"

All panel mounting holes are 5/16". Starter and Fault contactors can extend up to 1/4" beyond the width of the mounting panel.



Soft Starter Electrical Specifications

Input Power and Control	
Control power	±15% of 120VAC
Operating frequency	50/60 Hz
Three phase	-15%/+10% 200 – 460VAC -15%/+10% 460 – 575VAC ±5Hz of 50/60 Hz
Motor run input	Pull in: 79VAC max Drop out: 20VAC min Off state leakage: 1.5mA max
Up to speed output	Solid state, AC voltage only
Number of contacts	1 Normally Open
Rated operational current	1 amp @ 120VAC
Make/break VA	1200 VA for 250 mS/120 VA
Ready output	Mechanical relay
Number of contacts	1 Normally Open, 7 & 8 1 Normally Closed 9 & 10, 11
Rated operational current	3.0 amps @ 120VAC
Make/break VA	3600/360 VA

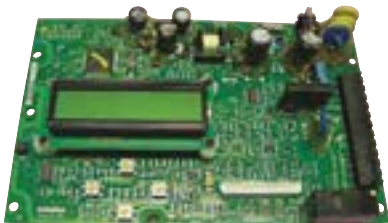
Crossover Siemens Soft Starters

Unitec Part #	Otis Part #	Siemens Part #
AAA21240AD5	72KV34AFP	72KG34AFP
AAA21240AD7	72MV34AFP	72MG34AFP
AAA21240AD8	72NV34AFP	72NG34AFP
AAA21240AD9	72PV34AFP	72PG34AFP
AAA21240A10	72RV32AFP	72RG32AFP
AAA21240AD14	72JV35AFP	72JG35AFP
AAA21240AD15	72KV35AFP	72KG35AFP
AAA21240AD16		72LG34AFP / 72LG35AFP
AAA21240AD17		72MG34AFP / 72MG35AFP

TKE CROSS REFERENCE

ThyssenKrupp	Amps Inside the Delta	Max Volts	Standard Part	ThyssenKrupp	Amps In-line	Max Volts
72DV 787AF1	22A	480VAC	72EG34	72DV 787AF1	N/A	480VAC
72DV 787AF2	22A	575VAC	72EG35	72DV 787AF2	N/A	575VAC
72DV 787AF2SP	22A	575VAC	72EG35	72DV 787AF2SP	N/A	575VAC
72DV 787AF3	55A	480VAC	72JG34	72DV 787AF3	28A	480VAC
72DV 787AF3SP	55A	480VAC	72JG34	72DV 787AF3SP	28A	480VAC
72DV 787AF4	55A	575VAC	72JG35	72DV 787AF4	28A	575VAC
72DV 787AF4SP	55A	575VAC	72JG35	72DV 787AF4SP	28A	575VAC
72DV 787AF5	105A	480VAC	72MG34	72DV 787AF5	55A	480VAC
72DV 787AF5SP	105A	480VAC	72MG34	72DV 787AF5SP	55A	480VAC
72DV 787AF6	105A	575VAC	72MG35	72DV 787AF6	55A	575VAC
72DV 787AF6SP	105A	575VAC	72MG35	72DV 787AF6SP	55A	575VAC
72DV 787AF7	130A	480VAC	72NG34	72DV 787AF7	68A	480VAC
72DV 787AF7SP	130A	480VAC	72NG34	72DV 787AF7SP	68A	480VAC
72DV 787AF8	130A	575VAC	72NG35	72DV 787AF8	68A	575VAC
72DV 787AF9	156A	480VAC	72PG34	72DV 787AF9	80A	480VAC
72DV 787AF9SP	156A	480VAC	72PG34	72DV 787AF9SP	80A	480VAC
72DV 787AF10	156A	575VAC	72PG35	72DV 787AF10	80A	575VAC
72DV 787AF11	68A	480VAC	72KG34	72DV 787AF11	35A	480VAC
72DV 787AF11SP	68A	480VAC	72KG34	72DV 787AF11SP	35A	480VAC
72DV 787AF13	68A	575VAC	72KG35	72DV 787AF13	35A	575VAC
72DV 787AF13SP	68A	575VAC	72KG35	72DV 787AF13SP	35A	575VAC
72DV 787AF12	80A	480VAC	72LG34	72DV 787AF12	42A	480VAC
72DV 787AF12SP	80A	480VAC	72LG34	72DV 787AF12SP	42A	480VAC
72DV 787AF14	252A	240VAC	72RG32	72DV 787AF14	130A	240VAC

REPLACEMENT LOGIC BOARD



72GBD01

This board works in all models of the Siemens Class 72 soft starters and fixes over 90 percent of all starter failures. After installation, simply use the starter keypad to configure the replacement logic board for the particular model of starter.

Part #72GBD01 Universal Logic Board

ENCLOSURES



11MS003
Enclosure
18" H x 18" W x 8" D



11MS005
Enclosure
24" H x 24" W x 8" D



Sprecher + Schuh

PCEC HYDRAULIC ELEVATOR SOFT STARTERS

The PCE Hydraulic Elevator Soft Starter and PCEC Panel Solution by Sprecher+Schuh are designed to simplify installation, set-up and typical operation of motors that drive hydraulic elevators and escalators. This solid state starter solution is designed to operate 3 phase standard squirrel cage induction motors and can be connected to a 6 or 12 lead Wye-Delta (Star-Delta) or standard 3 or 9 lead motors.

Through the use of line or inside-the-delta control, the solid state solution can provide ultimate control of the motor. Advantages of a solid state solution include:

- Provides smooth motor starting
- Decreases current surges on weak electrical systems
- Reduced starting torque of the motor helps to reduce mechanical stress on system components
- Eliminates voltage and current spikes associated with traditional Wye-Delta (Star-Delta) starters
- Maximizes motor life due to reduced electrical strain
- Lowers general system maintenance requirements for improved uptime

The PCEC panel solution provides a standard PCE controller and a factory coordinated fault contactor on a common mounting plate for ease of installation. The PCE controller utilizes software optimized for the elevator industry along with a built-in selectable Class 10, 15 and 20 overload relay and SCR bypass to control all three phases. A pre-wired 3-foot control harness is supplied to simplify wiring into current installations, while the mounting plate holes are the same as many standard Wye-Delta electromechanical starter panels. To insure start up performance both the PCE controller and PCEC panel assembly are factory tested before shipping.

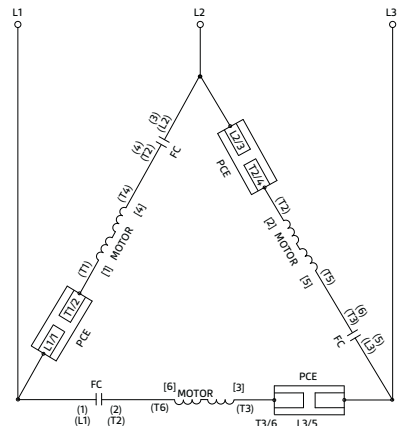
The result is a quick and easy starter solution for the elevator and escalator industries.

LED DIAGNOSTIC DISPLAY

An LED display indicates operating status and fault condition (overload, over temperature, phase reversal/phase loss, phase imbalance, shorted SCR, start fault). This enables speedy diagnosis and quick resolution of problems.

STANDARD FAULT CONTACTOR

The PCEC panel solution is equipped with a standard fault contactor which isolates one side of the motor windings from the line power in case of soft starter fault or motor overload. Current flow is prevented by this mechanical isolation in addition to the solid state SCRs.



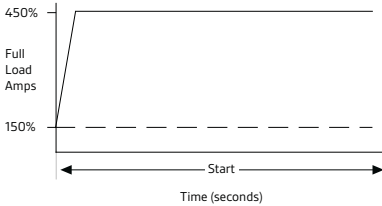
PCEC hydraulic elevator soft starters are wired "inside the delta" for more efficient operation and retrofit

HYDRAULIC ELEVATOR SOFT STARTER – SERIES PCEC

Modes of Operation (Standard)

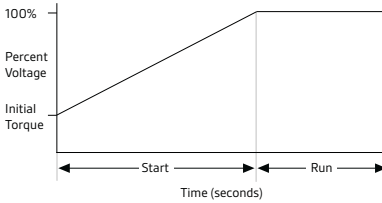
Current Limit Starting

Through the use of internal current sensors, the PCEC will regulate the current level applied to the motor over the programmed period of time. This type of motor control produces a slow start and insures that the current does not exceed the programmed level. This is standard configuration of the device and aligns well with traditional applications.



Soft Start

During soft start, the voltage is ramped from an initial set point to full voltage over the programmed period of time. This type of motor control produces a smooth start in less time than the current limit setting, however the current is not restricted.



DIAGNOSTICS

Overload

The built in motor overload provides protection of the motor for over current conditions. This protection feature offers a user selectable trip class setting, which can be used to accommodate different applications and motor types. When the motor draws more than the nominal value of current for a period of time, the device will fault on a motor overload fault.

Over Temperature

The product includes a built in self monitoring method for detecting a SCR over-temperature condition. If the internal temperature exceeds a design threshold the device will fault on a SCR Overtemp fault.

Phase Reversal

The user can select the phase relationship of the incoming power. If this phase relationship changes, the device will fault indicating a problem.

Phase Loss/Open Load

When any one of the incoming three phases are lost, the controller will fault indicating a phase loss condition has occurred.

Phase Imbalance

When enabled, this motor protection feature will detect if a phase imbalance condition exists and fault the unit. A phase imbalance is defined as a 65 percent differential between the highest and lowest phase for more than three seconds.

Shorted SCR

Each time the PCEC initiates a start, it checks to see if the SCRs are operating correctly. If the controller is unable to properly turn on and off any one of the SCRs, the device will fault on a Shorted SCR fault.

PCEC Controller Panel: 120V Control Voltage

DELTA Connected – 6 Wire					Line Connected – 3 Wire ②					With 120VAC 50/60 Hz ③
Maximum Horsepower					Maximum Horsepower					Control Voltage
200V	240V	480V	575V	Overload Range ①	200V	240V	480V	575V	Overload Range ①	Part #
10	10	20	30	10.9...32.9	5	5	10	15	6.3...19	PCEC-032-600V-120V
15	15	30	40	17...51	7.5	10	20	25	10...30	PCEC-051-600V-120V
20	20	40	60	21.3...64	10	10	25	30	12.3...37	PCEC-064-600V-120V
20	25	50	60	24.7...74	10	15	30	40	14.3...43	PCEC-074-600V-120V
30	40	75	100	34.7...104	15	20	40	50	20...60	PCEC-104-600V-120V
40	50	100	150	49...147	25	30	60	75	28.3...85	PCEC-147-600V-120V
75	75	150	200	59...234	40	50	100	125	34...135	PCEC-234-600V-120V ⑥

PCEC Controller Panel: 208–230V Control Voltage

DELTA Connected – 6 Wire					Line Connected – 3 Wire ②					With 230VAC 50/60 Hz ③
Maximum Horsepower					Maximum Horsepower					Control Voltage
200V	240V	480V	575V	Overload Range ①	200V	240V	480V	575V	Overload Range ①	Part #
10	10	20	30	10.9...32.9	5	5	10	15	6.3...19	PCEC-032-600V-230V
15	15	30	40	17...51	7.5	10	20	25	10...30	PCEC-051-600V-230V
20	20	40	60	21.3...64	10	10	25	30	12.3...37	PCEC-064-600V-230V
20	25	50	60	24.7...74	10	15	30	40	14.3...43	PCEC-074-600V-230V
30	40	75	100	34.7...104	15	20	40	50	20...60	PCEC-104-600V-230V
40	50	100	150	49...147	25	30	60	75	28.3...85	PCEC-147-600V-230V
75	75	150	200	59...234	40	50	100	125	34...135	PCEC-234-600V-230V ⑥

- ① Motor FLA must fall within the specified range to operate correctly.
- ② The PCEC controller panels are shipped in the DELTA connection mode by default. LINE connection requires the power wires to be reconfigured and DIP Switch #15 to be programmed for LINE connection mode by the customer.
- ③ Internal fan is optional for PCEC-032...064. All other PCEC units have internal fan as standard.
- ④ Purchase additional PCE auxiliary contact blocks separately. One auxiliary contact block may be mounted on the right side of the PCE Controller.
- ⑤ Separate 120V or 240V single phase is required for PCEC fan operation.
- ⑥ The PCEC Hydraulic Elevator duty rating is 80 starts per hour at 50% duty cycle (160 calls per hour). Starts per hour are based on when the motor starts, the motor only runs on “up” calls.

Accessories

Part #	Description
PCS-PA-01	1NC aux contact, side mount
PCS-PA-10	1NO aux contact, side mount
PCS-PA11	1 NO/1 NC aux contact kit, right side mount
PSC-PA-20	2NO aux contact, side mount
PCV-064	Fan kit. Recommended for PCEC-032 – PCEC-064. All other PCECs include fan.
PCV-147	PCE fan for 074, 104 and 147

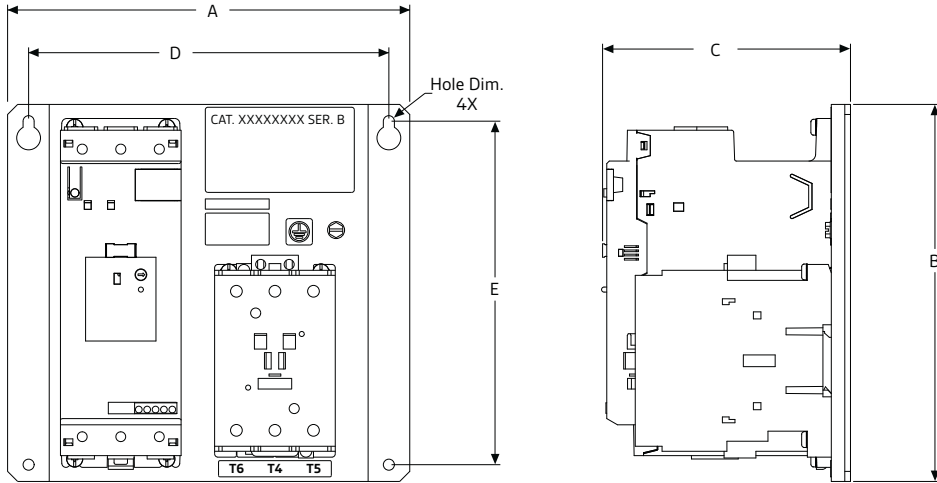


PCV-064



PCS-PA11

Series PCEC D imensions



Controller Size	Units	A (Width)	B (Height)	C (Depth)	D	E	Hole Dim 4x	Approx. Weight
32/51/64	mm	178	144	115.7	165.1	127.0	5.6	4 lbs (2 kg)
	in	7.01	5.67	4.56	6.50	5.00	0.22	
74/104/147	mm	240	225	147.9	215	205	6.6	14 lbs (6 kg)
	in	9.45	8.86	5.82	8.46	8.07	0.260	
234	mm	362	515	216.4	330.2	489.5	8.7	51 lbs (23 kg)
	in	14.25	20.28	8.52	13.00	19.27	0.343	

Motor FLA Adjustments

The front of the PCE controller contains a dial which is used for setting the actual FLA of the motor. The label is designed to accommodate motors connected in the LINE or DELTA mode. To determine the proper setting, look at the motor's nameplate and set the dial accordingly.

The dial setting can be modified depending on the service factor of the motor as shown:

The diagram shows a dial with a pointer and a motor winding diagram. The dial has markings for Delta FLA (Δ) and Line FLA (—). The dial is divided into three sections based on service factor: Service factor < 1.15, Service factor ≥ 1.15, and Maximum Continuous Rated (MCR) motors. The dial settings are: .9 X FLA for Service factor < 1.15, 1 X FLA for Service factor ≥ 1.15, and 1 X FLA for MCR motors.

Service factor __ FLA __

Service factor < 1.15 = .9 X FLA

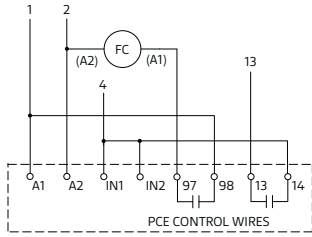
Service factor ≥ 1.15 = 1 X FLA

or

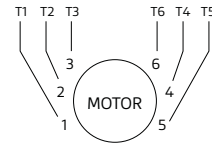
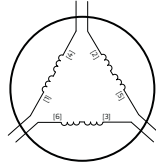
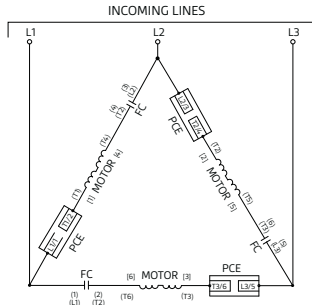
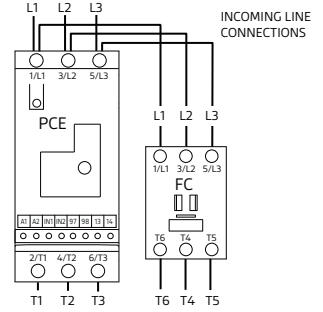
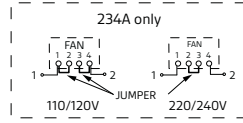
Maximum Continuous Rated (MCR) motors = 1 X FLA

Δ22 — Delta FLA
13 — Line FLA
Δ11 — Delta FLA
7 — Line FLA
Δ32 — Delta FLA
19 — Line FLA

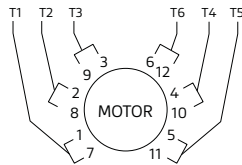
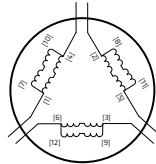
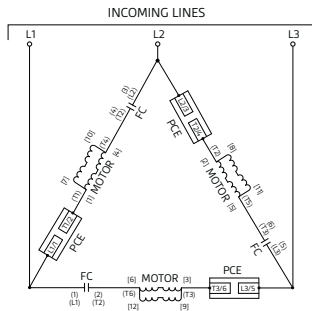
Wiring Diagrams: DELTA Connection Diagrams, Power and Motor Wiring



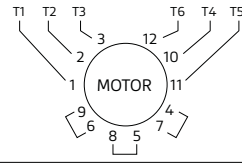
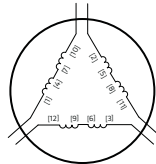
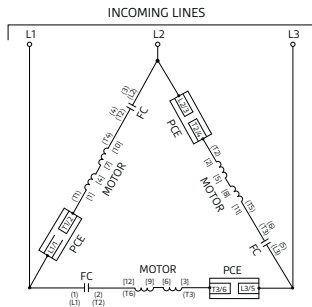
- 1 Control power (L)
- 2 Control common (N)
- 4 Start enable
- 13 Up to speed indication



6 Lead Motor Connections							
Starter Terminals	T1	T2	T3	T6	T4	T5	Jumper
Motor Terminals	1&7	2&8	3&9	6&12	4&10	5&11	N/A



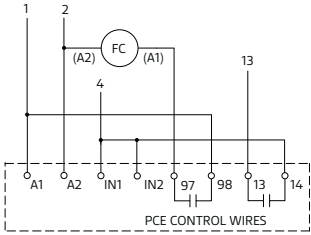
12 Lead 230V Low Voltage Motor Connections							
Starter Terminals	T1	T2	T3	T6	T4	T5	Jumper
Motor Terminals	1&7	2&8	3&9	6&12	4&10	5&11	N/A



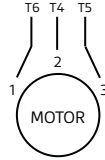
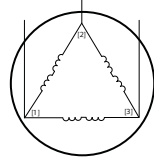
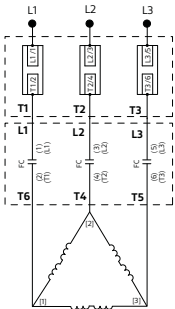
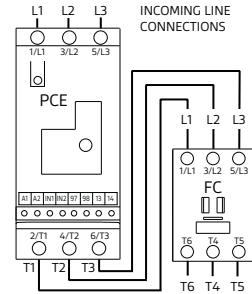
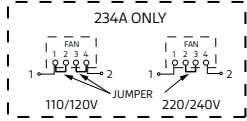
12 Lead 460V High Voltage Motor Connections							
Starter Terminals	T1	T2	T3	T6	T4	T5	Jumper
Motor Terminals	1	2	3	12	10	11	4&7 5&8 6&9

Line Connection Diagrams, Power and Motor Wiring

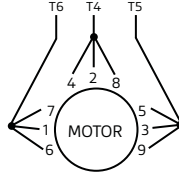
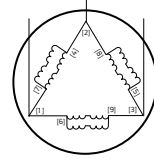
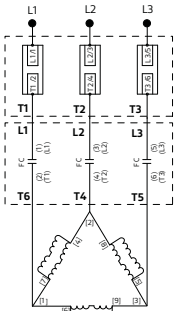
Note: The power wire configuration and dip switch settings must be changed for the line connection method.



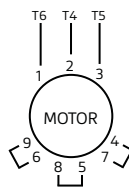
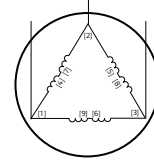
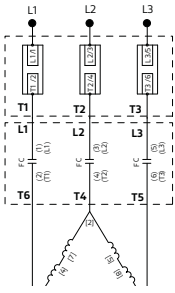
- 1 Control power (L)
- 2 Control common (N)
- 4 Start enable
- 13 Up to speed indication



3 Lead Motor Connections				
Starter Terminals	T6	T4	T5	Jumper
Motor Terminals	1	2	3	N/A



9 Lead 230V Low Voltage Motor Connections				
Starter Terminals	T6	T4	T5	Jumper
Motor Terminals	1,6,7	2,4,8	3,5,9	N/A



9 Lead 460V High Voltage Motor Connections				
Starter Terminals	T6	T4	T5	Jumper
Motor Terminals	1	2	3	4&7 5&8 6&9

PCS Controllers

The PCS Softstarter Controller is Sprecher + Schuh's solid-state controller with rich features at an economical price. This softstarter is specifically designed to start 3-phase motors (up to 400HP@460V / 500HP@575V), but is very compact, easy to use and DIN-rail mountable for models up to 85A. Four standard starting modes are available with the PCS Controller:

- Soft start
- Soft start with selectable kick-start
- Current limit starting
- Soft start with soft stop

All PCS Softstarters are designed to control either a standard 3-phase squirrel-cage induction motor or a wye-delta motor (700HP @ 460V/900HP @ 575V Y-D).



FOR USE ANYWHERE

PCS Softstarters come in three different frame sizes. The smallest frame is from 3A...37A, the middle size is from 43A...85A and the largest frame size is 108A...480A. These units are available from 200V...600V - 50/60 Hz. This assures the devices can be used anywhere in the world.



MANY CONVENIENT FEATURES

Easy Set-up – Digital rotary switches are quickly and easily set to the exact value. LED indication of all faults is standard.

Built-in Overload Protection – PCS Softstarters are equipped with electronic overload protection, accomplished with the use of current transformers on each of the three phases. Protection is programmable, providing total flexibility. Overload trip class selection includes OFF, 10, 15 or 20 seconds. In addition, either manual or automatic trip reset may be selected. Trip rating is 120% of dial setting.

Bypass Contactor – PCS controllers are equipped with a bypass contactor on each phase. Once the motor is up to speed, the load is removed from the SCRs, increasing their life and reducing heat.

Over Temperature Protection – The Softstarter monitors SCR temperature by means of internal thermistors. When the power poles maximum rated temperature is reached, the microcomputer switches off the PCS, a TEMP fault is indicated via LED, and the 97/98 fault contact closes.

Phase Reversal Protection – When enabled via a DIP-switch, 3-phase input power will be verified before starting. If input power phasing is detected to be incorrect, the start will be aborted and a fault indicated.

continued

DIN-rail mounted softstarters up to 85A. Larger softstarter frame sizes up to 480A (400HP @480V)



PCS Controllers continued

Phase Loss / Open Load – The PCS will not attempt to start if there is a single phase condition on the line. This protects from motor burnout during single phase starting.

Phase Imbalance – The unit monitors for imbalance between phase currents. To prevent motor damage, the unit will trip if the difference between the minimum phase current and the maximum phase current exceeds 65% for 3 seconds, and a fault will be indicated.

Shorted SCR – Prior to every start and during starting, the unit will check all SCRs for shorts and unit load connections to the motor. If there is a shorted SCR in the PCS and/or open load, the start will be aborted and a shorted SCR or open load fault will be indicated. This prevents damage from phase imbalance.

Push to Test – The unit with control wiring can be tested for fault conditions by using the Push to Test function. Hold down the Reset button for 7 seconds to activate the fault Aux (97, 98) and shut down the PCS. To clear, either push the Reset button or cycle control power to the device.

LED Description (Number of Flashes)

1. Overload
2. Overtemperature
3. Phase Reversal
4. Phase Loss/Open Load
5. Phase Imbalance
6. Shorted SCR
7. Test

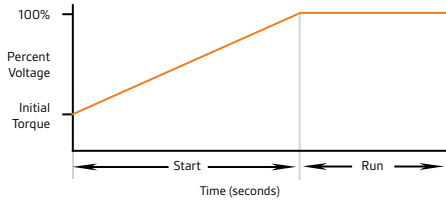
Sprecher + Schuh DIN-rail mounted Controllers can be direct connected to CA7 contactors to provide isolation or to KT7 Motor Circuit Controllers for branch circuit protection (for models up to 37A).

Softstarter Intelligent Controllers

SERIES PCS

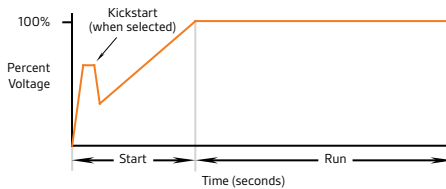
Modes of Operation (Standard)

Soft Start



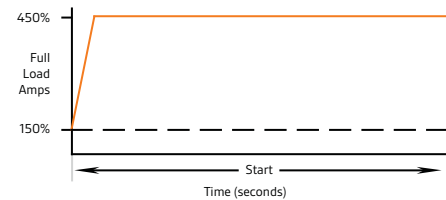
This method has the most general application. The motor is raised from an initial torque value to full voltage. Initial torque is adjustable to 15%, 25%, 35% or 65% locked rotor torque. The motor voltage is gradually increased during the acceleration ramp time, which can be adjusted from 2, 5, 10, 15, 20, 25 or 30 seconds.

Soft Start with Selectable Kickstart



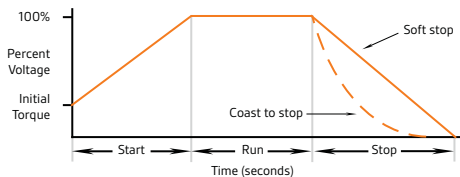
During the Soft Start phase, an initial kickstart or boost can be provided. This supplies a current pulse of 450% of full load current and is adjustable from 0.5 to 1.5 seconds. This allows the motor to develop additional torque for starting high inertia loads.

Current Limit Starting



This starting mode is used when it is desired to limit the maximum starting current (inrush). It can be adjusted for 150%, 250%, 350% or 450% of full load amps. Start times are selectable from 2, 5, 10, 15, 20, 25 or 30 seconds. If the motor is not up to speed after the selected time elapses, the controller transitions to full voltage.

Soft Stop



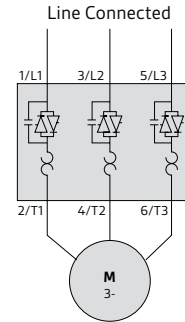
Soft Stop can be used for applications requiring an extended coast-to-rest, such as frictional type loads that tend to stop suddenly when voltage is removed from the motor. When enabled, the voltage ramp down time is equal to one, two or three times the start time selected. The load stops when the motor voltage drops to a point where the load torque is greater than the motor torque.

Softstarter Intelligent Controllers continued

SERIES PCS

Open Type – Line Connected Controllers ② ④

Rated Voltage (VAC)	Current Rating (Amps) ①	Starting Duty		With 100...240V AC Control Voltage	With 24V AC/DC Control Voltage
		kW 50 Hz	Hp 60Hz	Catalog #	Catalog #
200/208	1...3	~	0.5	PCS-003-600V	PCS-003-600V-024
	3...9	~	0.75...2	PCS-009-600V	PCS-009-600V-024
	5.3...16	~	1.5...3	PCS-016-600V	PCS-016-600V-024
	6.3...19	~	1.5...3	PCS-019-600V	PCS-019-600V-024
	9.2...25	~	3...7.5	PCS-025-600V	PCS-025-600V-024
	10...30	~	3...7.5	PCS-030-600V	PCS-030-600V-024
	12.3...37	~	5...10	PCS-037-600V	PCS-037-600V-024
	14.3...43	~	5...10	PCS-043-600V	PCS-043-600V-024
	20...60	~	7.5...15	PCS-060-600V	PCS-060-600V-024
	28.3...85	~	10...25	PCS-085-600V	PCS-085-600V-024
	27...108	~	20...30	PCS-108-600V ③	PCS-108-600V-024 ③
	34...135	~	25...40	PCS-135-600V ③	PCS-135-600V-024 ③
	67...201	~	40...60	PCS-201-600V ③	PCS-201-600V-024 ③
	84...251	~	50...75	PCS-251-600V ③	PCS-251-600V-024 ③
	106...317	~	60...100	PCS-317-600V ③	PCS-317-600V-024 ③
	120...361	~	75...125	PCS-361-600V ③	PCS-361-600V-024 ③
160...480	~	100...150	PCS-480-600V ③	PCS-480-600V-024 ③	
230	1...3	0.55	0.5	PCS-003-600V	PCS-003-600V-024
	3...9	2.2	0.75...2	PCS-009-600V	PCS-009-600V-024
	5.3...16	4	1.5...5	PCS-016-600V	PCS-016-600V-024
	6.3...19	4	2...5	PCS-019-600V	PCS-019-600V-024
	9.2...25	5.5	3...7.5	PCS-025-600V	PCS-025-600V-024
	10...30	7.5	5...10	PCS-030-600V	PCS-030-600V-024
	12.3...37	7.5	5...10	PCS-037-600V	PCS-037-600V-024
	14.3...43	11	5...15	PCS-043-600V	PCS-043-600V-024
	20...60	15	7.5...20	PCS-060-600V	PCS-060-600V-024
	28.3...85	22	15...30	PCS-085-600V	PCS-085-600V-024
	27...108	30	20...40	PCS-108-600V ③	PCS-108-600V-024 ③
	34...135	37	25...50	PCS-135-600V ③	PCS-135-600V-024 ③
	67...201	55	40...75	PCS-201-600V ③	PCS-201-600V-024 ③
	84...251	75	50...100	PCS-251-600V ③	PCS-251-600V-024 ③
	106...317	90	60...125	PCS-317-600V ③	PCS-317-600V-024 ③
	120...361	110	75...150	PCS-361-600V ③	PCS-361-600V-024 ③
160...480	132	100...200	PCS-480-600V ③	PCS-480-600V-024 ③	



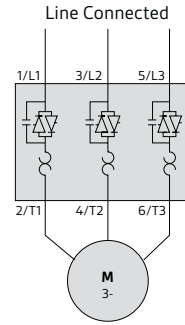
- Motor FLA rating must fall within the specified current range for unit to operate properly. Special consideration should be given when using a motor with a potentially high starting current (greater than ten times motor FLA) with the PCS in the "Full Voltage" starting mode. The overload setting must be set to the motor FLA regardless if the Overload Function is "OFF" (disabled). Contact Sprecher+Schuh technical support for further guidance.
- Prior to the initial start of the motor at the final installation location:
 - The bypass relays on the main circuit may be in an undefined switching state due to handling during shipping. Before connecting the main power source, apply the control voltage to set the bypass relays to a defined switching state. If this step is not performed, inadvertent operation of the motor may occur.
- Separate 120V or 240V single phase is required for PCS fan operation.
- Controllers rated 108A and greater are not equipped with the line and load terminal lugs.

Softstarter Intelligent Controllers

SERIES PCS

Open Type – Line Connected Controllers continued ② ④

Rated Voltage (VAC)	Current Rating (Amps) ①	Starting Duty		With 100...240V AC Control Voltage Catalog #	With 24V AC/DC Control Voltage Catalog #
		kW 50 Hz	Hp 60Hz		
380/400/415/460	1...3	1.1	0.5...1.5	PCS-003-600V	PCS-003-600V-024
	3...9	4	1.5...5	PCS-009-600V	PCS-009-600V-024
	5.3...16	7.5	5...10	PCS-016-600V	PCS-016-600V-024
	6.3...19	7.5	5...10	PCS-019-600V	PCS-019-600V-024
	9.2...25	11	7.5...15	PCS-025-600V	PCS-025-600V-024
	10...30	15	7.5...20	PCS-030-600V	PCS-030-600V-024
	12.3...37	18.5	10...25	PCS-037-600V	PCS-037-600V-024
	14.3...43	22	10...30	PCS-043-600V	PCS-043-600V-024
	20...60	30	15...40	PCS-060-600V	PCS-060-600V-024
	28.3...85	45	25...60	PCS-085-600V	PCS-085-600V-024
	27...108	55	50...75	PCS-108-600V ③	PCS-108-600V-024 ③
	34...135	75	60...100	PCS-135-600V ③	PCS-135-600V-024 ③
	67...201	95...110	75...150	PCS-201-600V ③	PCS-201-600V-024 ③
	84...251	95...132	100...200	PCS-251-600V ③	PCS-251-600V-024 ③
	106...317	95...160	125...250	PCS-317-600V ③	PCS-317-600V-024 ③
	120...361	110...200	250...300	PCS-361-600V ③	PCS-361-600V-024 ③
160...480	160...250	160...250	PCS-480-600V ③	PCS-480-600V-024 ③	
500/575	1...3	1.5	0.75...2	PCS-003-600V	PCS-003-600V-024
	3...9	5.5	3...7.5	PCS-009-600V	PCS-009-600V-024
	5.3...16	7.5	5...10	PCS-016-600V	PCS-016-600V-024
	6.3...19	11	7.5...15	PCS-019-600V	PCS-019-600V-024
	9.2...25	15	7.5...20	PCS-025-600V	PCS-025-600V-024
	10...30	18.5	10...25	PCS-030-600V	PCS-030-600V-024
	12.3...37	22	15...30	PCS-037-600V	PCS-037-600V-024
	14.3...43	22	15...40	PCS-043-600V	PCS-043-600V-024
	20...60	37	20...50	PCS-060-600V	PCS-060-600V-024
	28.3...85	55	30...75	PCS-085-600V	PCS-085-600V-024
	27...108	75	60...100	PCS-108-600V ③	PCS-108-600V-024 ③
	34...135	90	75...125	PCS-135-600V ③	PCS-135-600V-024 ③
	67...201	75...132	100...200	PCS-201-600V ③	PCS-201-600V-024 ③
	84...251	90...160	125...250	PCS-251-600V ③	PCS-251-600V-024 ③
	106...317	100...200	200...300	PCS-317-600V ③	PCS-317-600V-024 ③
	120...361	132...250	200...350	PCS-361-600V ③	PCS-361-600V-024 ③
160...480	200...315	250...500	PCS-480-600V ③	PCS-480-600V-024 ③	

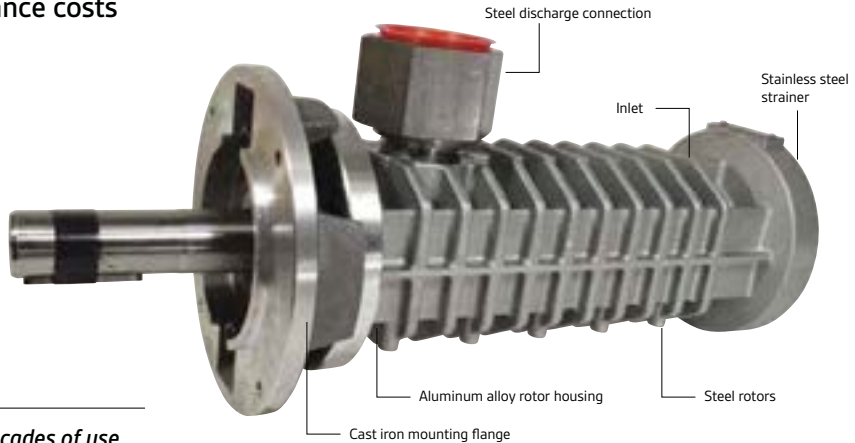


- ① Motor FLA rating must fall within the specified current range for unit to operate properly. Special consideration should be given when using a motor with a potentially high starting current (greater than ten times motor FLA) with the PCS in the “Full Voltage” starting mode. The overload setting must be set to the motor FLA regardless if the Overload Function is “OFF” (disabled). Contact Sprecher+Schuh technical support for further guidance.
- ② Prior to the initial start of the motor at the final installation location:
 - The bypass relays on the main circuit may be in an undefined switching state due to handling during shipping. Before connecting the main power source, apply the control voltage to set the bypass relays to a defined switching state. If this step is not performed, inadvertent operation of the motor may occur.
- ③ Separate 120V or 240V single phase is required for PCS fan operation.
- ④ Controllers rated 108A and greater are not equipped with the line and load terminal lugs.

Soft Starters: Sprecher+Schuh

ALLift®

Fully optimized pump with very low operating and maintenance costs



Proven over decades of use ALLift® guarantees a quiet and uniform delivery and high performance. No maintenance will be required over a long time due to no gasket and other wearing parts. ALLift® provides the highest performance at the best price.

SPECIAL FEATURES

- Nineteen different flow capacities from 8 to 260 GPM
- Aluminum alloy rotor housing with steel discharge connection for extra strength, reliability and superior performance
- Common shaft and mounting dimensions for the most popular sizes, providing flexibility and interchangeabilities with motors
- Pumps can be utilized with any submersible motor
- Light weight for ease of handling

DESIGN AND OPERATION

The ALLWEILER three-rotor screw pump is a positive displacement rotary pump with an axial flow design.

There are only three moving parts. The main screw is the only driven part which extends outside the case. The idler screws act as sealing parts and are turned hydraulically by the fluid being pumped. Thus, the mechanical action between the screws is negligible. There is only a rolling action between the drive screw and the idler screws. The outside diameter of the idler screw is the same as the root diameter of the drive screw. The rolling action eliminates noise and vibration.

The double head screw design provides a continuous non-pulsating flow. An unobstructed axial flow through the pump results in low velocity and excellent suction capabilities. Discharge pressure is spread evenly over the length of the screw from suction to discharge.

The ALLWEILER three-rotor screw pump is balanced both axially and radially. The double lead drive screw results in symmetrical pressure loading which centers the drive screw in the bore, eliminating radial loads. The axial load created by the discharge pressure is balanced by means of microfinished stop faces at the discharge of the pump.

ALLift®

ALLWEILER SUBMERSIBLE ELEVATOR SCREW PUMP

Dimensional Drawing Series SUB

Models 140, 210, 280

Models 20, 40, 80

Model 440

Model	Pump				Shaft				Discharge	
	D ₂	I ₁	K ₂	Q	D	L	T	U		
20-..	3.15	2.28	11.14	2.28	$\frac{.74785}{.74702}$	1.38	.85	$\frac{.2362}{.2350}$	3/4" NPT	2.54
40-..	4.45	2.28	12.40	2.64	$\frac{.74785}{.74702}$	1.38	.85	$\frac{.2362}{.2350}$	1" NPT	2.95
80-..	4.45	2.5625	13.90	2.83	$\frac{1.25955}{1.25856}$	1.38	.85	$\frac{.2362}{.2350}$	1-1/2" NPT	3.03
140-..	5.59	4.25	18.46	3.98	$\frac{1.25955}{1.25856}$	3.15	1.38	$\frac{.3937}{.3923}$	2" NPT	3.94
210-..	6.30	4.25	20.24	4.17	$\frac{1.25955}{1.25856}$	3.15	1.38	$\frac{.3937}{.3923}$	2" NPT	3.74
280-..	6.30	4.25	21.46	4.17	$\frac{1.25955}{1.25856}$	3.15	1.38	$\frac{.3937}{.3923}$	2" NPT	3.94
440-..	7.48	4.02	27.13	5.75	$\frac{1.25955}{1.25856}$	2.56	1.38	$\frac{.3937}{.3923}$	3" NPT	4.84

Model	Pump								Weight (lbs)	
	A ₂	B ₁	C	C ₁	S ₁	Y ₁	Y ₃	Y ₄	NET	SHIP
20-..	$\frac{6.1018}{6.1002}$	4.33	-	5.31	.35	.16	.39	-	11	13
40-..	$\frac{6.1018}{6.1002}$	4.33	4.33	5.31	.35	.55	.39	.08	17	20
80-..	$\frac{6.1018}{6.1002}$	4.33	4.33	5.31	.35	.55	.39	.08	23	26
140-..	7.09	$\frac{4.3744}{4.3736}$	-	6.26	.31	-	.47	.20	38	42
210-..	7.09	$\frac{4.3744}{4.3736}$	-	6.26	.31	-	.47	.20	51	53
280-..	7.09	$\frac{4.3744}{4.3736}$	-	6.26	.31	-	.47	.20	59	63
440-..	11.50	$\frac{8.6614}{8.6603}$	-	10.24	.69	-	.71	.20	90	110

Notes

- Made in metric, shown in decimal equivalents (inches).
- Rotation: clockwise, viewed from drive end.
- Alteration of dimensions reserved.
- Loose hexagon head bolts and flatwashers supplied with pump

Models 20, 40, 80 (2)
5/16-18 x 1 UNC

Models 140, 210, 280 (4)
1/4-20 x 1-1/4 UNC

Model 440 (4) M 16 x 45 DIN 933

ALLWEILER SUBMERSIBLE ELEVATOR SCREW PUMPS continued

**Plunger Speed (feet per minute) for RAM Displacement
3400 RPM, 350 PSI, 150 SSU**

Model	GPM	Pump															
		3-7/8	4	4-3/8	4-7/8	4-1/2	5	5-3/8	5-7/16	6	6-1/2	7	7-1/2	8	8-1/2	9	10
20-38	8.3	14	13	11	10	10	8	7									
20-50	13.2	22	20	17	16	16	13	11	11	9							
20-56	15.6	25	24	20	19	19	15	13	13	11							
40-41	17.7	29	27	23	22	21	17	15	15	12	10						
40-49	24	39	37	31	30	29	24	20	20	16	14	12					
80-36	32	52	49	41	40	39	31	27	27	22	19	16	14				
80-42	38	62	58	49	47	46	37	32	31	26	22	19	17	15			
80-46	46	75	70	59	57	56	45	39	38	31	27	23	20	18	16		
140-39	60	98	92	77	75	73	59	51	50	41	35	30	26	23	20	18	
140-43	68	111	104	87	85	82	67	58	56	46	39	34	30	26	23	21	17
140-46	78	127	119	100	97	94	76	66	65	53	45	39	34	30	26	24	19
210-40	95	155	146	122	118	115	93	81	79	65	55	48	41	36	32	29	23
210-43	103	168	158	132	128	125	101	87	85	70	60	52	45	39	35	31	25
210-46	119	194	182	152	148	144	117	101	99	81	69	60	52	46	40	36	29
280-43	139	227	213	178	173	168	136	118	115	95	81	70	61	53	47	42	34
280-46	159		244	204	198	192	156	135	1324	108	92	80	69	61	54	48	39
280-51	180			230	224	218	176	153	149	123	104	90	78	69	61	54	44
440-40	198				246	240	194	168	164	135	115	99	86	76	67	60	49
440-46	253						248	215	210	172	147	127	110	97	86	77	62



AC Dry Hydraulic Motors

FRAMES 215T THROUGH 365T

Quiet, efficient AC dry hydraulic motors

Designed for use with belted hydraulic pump systems, Imperial Electric AC Dry Hydraulic Motors are exceptionally quiet, highly efficient and built for rugged duty. Totally Enclosed Fan Cooled (TEFC) designs are available for most ratings.

Rated for 80 or 120 starts per hour, the AC Dry Hydraulic Motor is a drop-in replacement for existing motors, making any elevator modernization project more efficient.

The AC Dry Hydraulic Motor is just one of many highly engineered products developed for the elevator industry by Imperial Electric. Imperial Electric has more than 100 years experience in electrodynamic devices. Learn how Imperial Electric can benefit your next project. Call your representative today for more information.

Benefits

- Stock availability
- Drop-in replacement
- Available through 100 HP

Features

- Cast iron construction
- Stock motors dual rated for 80 or 120 starts per hour
- 15 through 100 HP
- 1,800 rpm
- Voltages: 200, 230/460, 575 AC 3-phase, 60 Hz
- Dual ball bearing
- Drip-proof or TEFC enclosure
- Class F insulation standard
- 40° C ambient
- WYE Start, Delta Run

Applications

- Dry hydraulic elevators



AC dry hydraulic motors are available across a wide range of horsepower ratings, including 80 or 120 starts per hour.

Part #	Description
ML20D/200	Motor. Dry hydro, 20HP, 200-3-60, 1750 rpm, 254T frame, 80 starts/hr
ML25D/200	Motor. Dry hydro, 25HP, 200-3-60, 1800 rpm, 256T frame, 80 starts/hr
ML30D	Motor. Dry hydro, 30HP, 230/460-3-60, 1800 rpm, 284T frame, 80 starts/hr
ML30D/200	Motor. Dry hydro, 30HP, 200-3-60, 1800 rpm, 284T frame, 80 starts/hr
ML40D	Motor. Dry hydro, 40HP, 230/460-3-60, 1800 rpm, 286T frame, 80 starts/hr
ML50D	30/460v, 1760 rpm, 324T frame, weighs 475lbs

IMPERIAL ELECTRIC continued

Frames 215T, 254T, 256T, 284T, 286T, 324T, 326T, 364T, 365T

AC Dry Hydraulic Motors duty table, 80 starts per hour

HP	Full Load RPM	Frame	Voltage	Amps (A)					Elevator Duty BTU Per Hour
				Delta				WYE	
				Full Load	No Load	Locked Rotor	KVA Code		
15	1740	215T	20	46	23	270	G	89	1859
	1735	215T	230/460	39.2/19.6	19/9.5	230/115	G	76/38	1859
	1735	215T	575	15.7	7.6	92	G	31	1859
20	1750	254T	200	62	31	340	G	112	2263
	1750	254T	230/460	54/27	27/13.5	296/148	G	98/49	2263
	1750	254T	575	22	11	120	G	40	2263
25	1755	256T	200	73	31	420	G	139	2360
	1755	256T	230/460	62/31	26.4/13.2	366/183	G	120/60	2360
	1755	256T	575	25	10.6	146	G	48	2360
30	1760	284T	200	87	36	500	G	165	2774
	1760	284T	230/460	74/37	31/15.5	430/215	G	142/71	2774
	1760	284T	575	30	12.4	172	G	57	2774
	1760	286T	200	112	42	670	G	221	3282
40	1760	286T	230/460	98/49	37/18.5	580/290	G	192/96	3282
	1760	286T	575	39	14.5	230	G	76	3282
50	1760	324T	200	138	70	850	G	281	3869
	1760	324T	230/460	118/59.4	62/31	740/370	G	244/122	3869
	1760	324T	575	49	25	310	G	102	3869
60	1760	326T	200	162	70	1000	G	330	4477
	1760	326T	230/460	143.2/71.6	64/32	920/460	G	304/152	4477
	1760	326T	575	58	26	370	G	122	4477
75	1770	364T	200	210	87	1320	G	436	5253
	1770	364T	230/460	180/90	72/36	1120/560	G	370/185	5253
	1770	364T	575	72	29	450	G	149	5253
100	1780	365T	230/460	228/114	76/38	1590/795	G	524/262	6015
	1780	365T	575	91	30	636	G	210	6015

AC SUBMERSIBLE HYDRAULIC MOTORS

Frame 217Z

Compact, open-frame construction delivers a lightweight, high-performance, submersible solution.

More than dependable, Imperial Electric AC Submersible Hydraulic Motors are ruggedly built, highly efficient units. Open construction, asynchronous motors are perfectly suited for wet operations. Hydraulic fluid cools the motors as they work. Motor leads are extra length, non-wicking for flexible unit positioning.

Imperial Electric submersible motors are compatible with pump units from all major manufacturers. The motors offer the advantages of small size and light weight coupled with high starting torque and low starting current.

Benefits

- High performance
- Stock availability
- Drop-in replacement
- Available through 50HP

Features

- Rolled steel construction
- Submersible enclosure
- Stock motors dual rated for 80 or 120 starts per hour
- 10–50HP
- 3,600 rpm
- Voltages: 200, 230/460, 575 AC 3-phase, 60Hz
- Single ball bearing
- High starting torque
- Low starting current
- Adapter kits available for alternate pumps
- CUS certified

Applications

- Submersible hydraulic elevators



440 Series w/ flange for Alweiler 440 Series pumps



80 Series Submersible Flange Kit
w/ flange for 80 Alweiler Series pumps



Ac Submersible w/ flange for all other
Alweiler Series pump and Imo pumps

IMPERIAL ELECTRIC FRAME 217Z continued

HP	IE Part #	Motor Loss BTU/hr	FL EFF %	FL PF %	FL RPM	Volts	Amps (A)				
							Delta				WYE
							Full Load	No Load	Locked Rotor	KVA Code	Locked Rotor
15	217EAS015C001	14,120	73	87	3400	200	51.0	27.0	242	F	82
	217EAS015C015	14,120	73	87	3400	230	44.6	23.0	204	F	68
						460	22.3	11.5	102	F	34
217EAS015C020	14,120	73	87	3400	575	17.6	9.2	84	F	30	
20	217EAS020C001	16,074	76	89	3395	200	65.4	31.2	311	F	104
	217EAS020C015	16,074	76	89	3395	230	56.2	25.5	270	F	90
						460	28.1	12.8	135	F	45
217EAS020C020	16,074	76	89	3395	575	22.4	10.2	108	F	36	
25	217EAS025C001	17,946	78	91	3400	200	78.2	34.5	391	F	130
	217EAS025C015	17,946	78	91	3400	230	67.8	30.0	340	F	113
						460	33.9	15.0	170	F	57
217EAS025C020	17,946	78	91	3400	575	26.9	11.3	136	F	45	
30	217EAS030C001	20,296	79	91	3390	200	90.0	36.0	471	F	157
	217EAS030C015	20,296	79	91	3390	230	78.2	31.0	410	F	136
						460	39.1	15.5	205	F	68
217EAS030C020	20,296	79	91	3390	575	31.2	12.0	174	G	58	
40	217EAS040C001	23,879	81	91	3410	200	120.0	46.0	671	G	224
	217EAS040C015	23,879	81	91	3410	230	104.0	40.0	584	G	195
						460	52.0	20.0	292	G	97
217EAS040C020	23,879	81	91	3410	575	42.0	16.0	234	G	78	
50	217EAS050C001	29,861	81	91	3380	200	142.0	42.7	920	G	307
	217EAS050C015	29,861	81	91	3380	230	123.0	37.5	800	G	268
						460	61.5	18.8	400	G	133
217EAS050C020	29,861	81	91	3380	575	49.4	15.0	320	G	106	

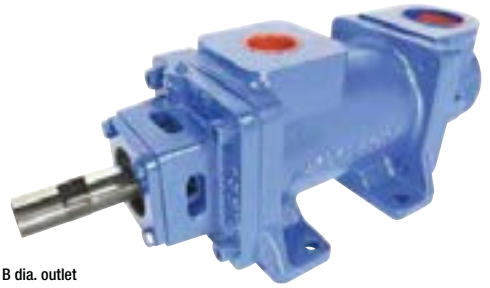
200 volt motors are designed for operation at 208 volts.



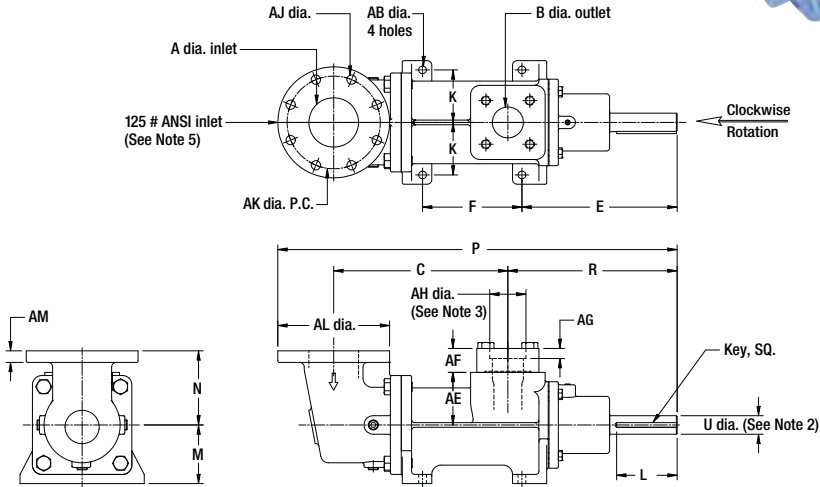
Accessories

Unitec Part #	Otis Part #
440-PFK -	Flange Kit for 440 series motors

IMO® Dry Mounted Pumps



Dimensions, Rotor Sizes 187 – 350



Pump Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	Key SQ
3D-187	2.5	1.5	8.95	3.31	8.81	4.88	6.93	0.50	3.75	3.13	3.31	3.49	3.25	20.26	9.06	0.25
3D-218	3	2	12.14	5.00	12.38	6.63	10.13	0.63	4.50	3.75	4.81	4.00	5.00	29.14	13.26	0.375
3D-250	4	2.5	14.02	4.96	12.50	8.00	10.12	0.75	5.00	4.25	4.81	4.74	6.00	32.15	13.63	0.375
3D-275	4	3	15.40	4.54	12.09	8.94	9.71	0.75	2.63	4.50	4.25	5.12	6.69	33.48	13.59	0.5
3D-312	4	3	17.53	4.25	11.99	10.19	9.36	0.75	2.63	5.25	4.25	5.50	6.25	35.26	13.24	0.5
3D-350	5	4	19.79	4.22	12.03	12.00	9.40	0.75	2.88	5.75	4.25	6.25	7.00	38.44	13.66	0.5

Pump Model	U	V	X	AB	AC	AD	AE	AF	AG	AH	AJ	AK	AL	AM	AN
3D-187	1.125	7.50	8.31	0.63	2.50	1.88	3.63	—	—	—	—	—	—	—	2.38
3D-218	1.5	9.00	10.38	0.63	3.00	2.25	4.13	1.46	0.72	2.41	4 x .75	6.00	7.50	0.75	2.25
3D-250	1.5	10.00	11.94	0.63	3.13	2.38	4.26	1.96	0.81	2.91	8 x .75	7.50	9.00	0.94	2.38
3D-275	1.875	11.00	13.69	0.63	3.25	2.38	5.01	2.22	0.94	3.54	8 x .75	7.50	9.00	1.13	3.25
3D-312	2	12.00	15.38	0.63	3.38	2.63	5.25	2.22	0.94	3.54	8 x .75	7.50	9.00	0.94	3.31
3D-350	2	13.00	17.31	0.63	3.38	2.63	6.26	2.72	1.13	4.55	8 x .875	8.50	10.00	0.94	3.44

1. Cast iron cased pumps.
2. "U" dimensions are subject to standard NEMA tolerances.
3. Dimension "AH" is weld socket (weld by customer).
Removable socket weld flange must be ordered with pump.
4. Top inlet position is standard.
5. LL™-187 has 2 ½ inch NPT inlet and 1 ½ inch NPT outlet, NOT shown as above.
6. All table values are approximate. No tolerances are implied.

Pumps and Motors: IMO



EHDB220C-1L



EHDB280C-1L

DC Contactors

Designed specifically for use with SCR controlled variable speed drive applications and directly controlled DC motors.

ABB/ASEA BROWN BOVERI

Type EHDB

- ABB DC Contactors are designed specifically for use with SCR controlled variable speed drive applications.
- All ABB DC Contactors Type EHDB come with 2 Normally Open and 1 Normally Closed Power Poles. The center NC power pole is used for dynamic braking purposes.
- Each contactor also includes 1NO/1NC aux contacts as standard. Additional aux contacts can be added (see listing below).
- Coil voltages available are 120VAC, 208VAC, 240VAC and 110VDC*.

Part #	Amp Rating	Dimensions (h x w x d)
EHDB220C-__*	220	6.3" x 5.6" x 6.6"
EHDB280C-__*	280	6.3" x 5.6" x 6.6"

*Specify coil voltage when ordering.

EHDB Coil Codes

Suffix	Voltage	Notes
1	120VAC	
B	208VAC	
2	240VAC	
P	110VDC 3 lead coil	Must use CAL16-11E 1NO/1NC late break aux
RE	110VDC 3 lead coil	Includes CCL16-11E 1NO/1NC late break aux and resistor

Aux Contacts for EHDB DC Drive Contactors

Part #	Description	Terminal Markings	AKA
CAL16-11A	Aux contact. 1NO/1NC side mount (left side recommended)	13 - 14 & 21 - 22	EHAX-11A, SK829002-A, CCL16-11A
CAL16-11B	Aux contact. 1NO/1NC side mount (right side recommended)	31 - 32 & 43 - 44	EHAX-11B, SK829002-B, CCL16-11B
CAL16-11C	Aux contact. 1NO/1NC side mount (left side recommended)	53 - 54 & 61 - 62	EHAX-11C, SK829002-C



CAL16-11A



CAL16-11B



CAL16-11C

ABB/ASEA BROWN BOVERI continued

Type EHDB continued

Replacement Parts

Part #	Description
EHDBRC110-*	Coil for EHDB75 and EHDB110
EHDBRC130-*	Coil for EHDB130
EHDBRC280-*	Coil for EHDB220 and EHDB280
EHDBCK110-2	2 NO power pole kit for EHDB110 and EHD110 contactor
EHDBCK130-2	2 NO power pole kit for EHDB130 and EHD130 contactor
EHDBCK220-2	2 NO power pole kit for EHDB220 contactor
EHDBCK280-2	2 NO power pole kit for EHDB280 contactor
EHDBCK110-NC	1 NC power pole kit for EHDB110 contactor. Does not work with EHD contactor
EHDBCK130-NC	1 NC power pole kit for EHDB130 contactor. Does not work with EHD contactor
EHDBCK220-NC	1 NC power pole kit for EHDB220 contactor. Does not work with EHD contactor



EHDBRC110-1

EHDBRC280-2



EHDBCK130-2



EHDBCK130-NC



EHDBCK220-2



EHDBCK220-NC



EHDBRC280-RE

European to US Part Numbers for Selected Replacement Coils

European Part #	US Part #
SK 823 100-AF	EHDBRC110-1
SK 823 100-AK	EHDBRC110-2
SK 824 101-AF	EHDBRC130-1
SK 824 101-AK	EHDBRC130-2
SK 824 101-DE	EHDBRC130-P
SK 825 400-AF	EHDBRC280-1
SK 825 400-AK	EHDBRC280-2
SK 825 400-DE	EHDBRC280-P
SK 825 400-RE	EHDBRC280-RE

*Specify coil voltage when ordering.

DC Contactors Mitsubishi, Overload Relays for DC Contactors



DU-A30-Coil-AC230V



DU N60

MITSUBISHI

Type DU

- All come with 2 Normally Open and 1 Normally Closed power poles
- Each contactor includes 2NO/2NC aux contacts as standard
- Additional aux contacts can be added to the DUN-180 and DUN-260 contactors by using aux contact kit UN-AX150
- Coil voltages available are 120 – 240VAC*

Part #	Amp Rating	Part #	Amp Rating
DU-N30AC120V	120A	DU-N180AC100V	120A
DU-N60AC120V	120A	DU-N180AC120V	120A
DU-N60AC200V	200A	DU-N180AC200V	200A
DU-N120AC120V	120A	DU-N260AC120V	120A
DU-N120AC200V	200A	DU-N260AC200V	200A

*Specify AC coil voltage when ordering.



Z939400G10

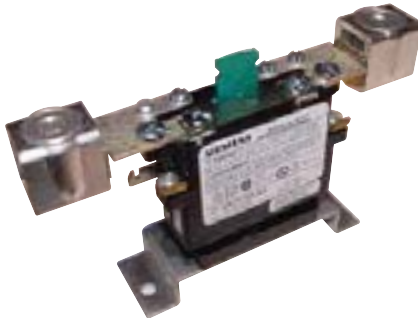
Replacement Parts

Part #	Description
Z939401G10	2NO/1NC contact kit for DU-A60
Z939402G10	2NO/1NC contact kit for DU-A120
BH599N308	2NO contact kit for DU-K180
BH599N309	1NC contact kit for DU-K180

SIEMENS/FURNAS

Overload Relays for DC Contactors, Single Pole Thermal

- Suitable for use with either AC or DC applications
- Max voltage is 600VAC/250VDC
- Use Type K bimetallic heaters
- Manual reset
- Easy to connect. Clamp-style terminals included on line and load side
- Include 1NC contact
- Ambient compensated
- Includes mounting bracket



48JA18AA4

Part #	Rating
48DA18AA4	1.69 – 25 amps
48GA18AA4	8.48 – 60 amps
48HA18AA4	27.1 – 100 amps
48JA18AA4	43 – 180 amps

Need to have FLA of motor to confirm which heater needed.

Overload Relays – Panel Mount

This section lists panel mounted overload relays which may be used to replace starter mounted overload relays that are no longer available.

While most of these overload relays require incoming and outgoing wiring, using the Siemens ESP200 is much easier. Simply pass the wiring straight through the device and connect it directly to the load side of the contactor.

TECHNICAL NOTE

Sizing overload relays for Wye-Delta applications

At Access Elevator Supply we often see overload relays that are incorrectly sized or misadjusted. The motor data tag will provide you with the full load amperage (FLA) of the motor or you can calculate the FLA from the motor HP and line voltage.

The FLA is your starting point for sizing and setting the overload. Since electronic overload relays with an adjustable range are most accurate at mid scale, you should select an overload that meets that criteria if possible.

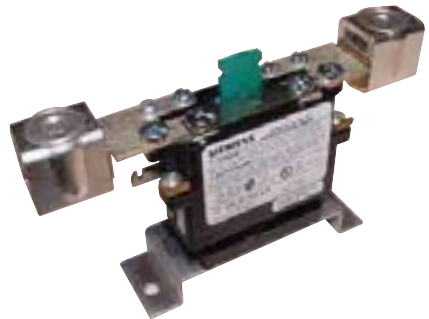
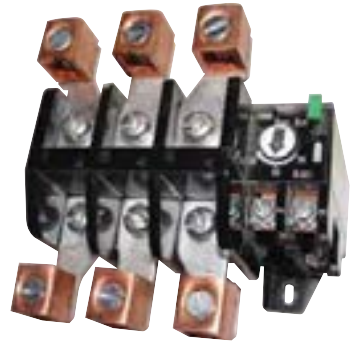
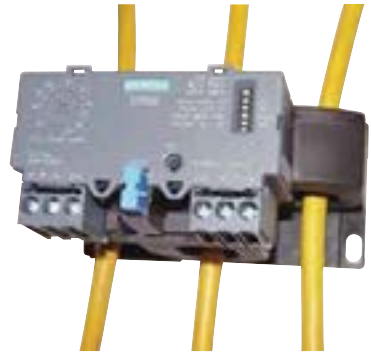
Select the right setting

For across the line motors, the overload should be initially set at the motor FLA. From that point, you can gradually dial down to where nuisance tripping begins, then bump it up from there.

For Wye-Delta motors, the overload relay should be initially set at the motor FLA x .58. For example, a 100A FLA would be set at 58A. This is because this type motor runs at a reduced current inside the delta, where the overload relay is connected.

Where does the .58 multiplier come from? Well, obviously it is the inverse of the square root of 3. But then you already knew that. From your initial setting, dial down as described above until you are above nuisance tripping.

Remember that overloads are a safety item. An improperly sized or adjusted overload can have unintentional consequences.



Overload Relays – Panel Mount Mitsubishi, Siemens



TH-N60KP42A



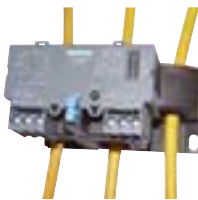
TH-N120TAKPUL105A



48ATC3S00



48ATE3S00



48BTG3S00



48BTH3S00

MITSUBISHI

- Simple installation. Two-hole mounting molded into base
- No heaters required. Simple adjustment via front mounted dial
- Selectable reset mode. Manual or automatic
- Includes test button and trip indicator. Easy to troubleshoot
- Easy to connect. Lugs or saddle clamp terminals included on line and load side
- Not suitable for use with DC circuits

TH-N

Part #	Adjustment Range
TH-N60KP15A	12 – 18 amps
TH-N60KP35A	30 – 40 amps
TH-N60KP42A	34 – 50 amps
TH-N60KP54A	43 – 65 amps
TH-N60TAKP67A	54 – 80 amps
TH-N120TAKPUL105A	85 – 125 amps

TH-T

Part #	Adjustment Range
TH-T50KP29A	24 – 34 amps
TH-T50KP35A	30 – 40 amps
TH-T50KP42A	34 – 50 amps
TH-T65KP22A	18 – 26 amps
TH-T65KP29A	24 – 34 amps
TH-T65KP35A	30 – 40 amps
TH-T65KP42A	34 – 50 amps
TH-T65KP54A	43 – 65 amps

SIEMENS

ESP200 Electronic 3 Phase

- Easy installation. Just run motor wires through the overload relay
- No heaters required. Simple adjustment via front mounted dial
- Wide adjustment range. Four overload relay part numbers cover most applications
- Phase unbalance and phase loss protection. Protects motor from burning out*
- Selectable reset mode. Manual or automatic
- Selectable trip classes. Class 5, 10, 20 or 30
- Ambient compensated. Unaffected by ambient temperature
- Includes test button and trip indicator. Easy to troubleshoot
- Motor ground fault protection. Protects motor against ground faults due to moisture, insulation damage*
- Not suitable for use with DC circuits

Part #	Adjustment Range	European Part #
48ATC3S00	3 – 12 amps	3UB81234CW2
48ATE3S00	10 – 40 amps	3UB81234EW2
48BTG3S00	25 – 100 amps	3UB81334GW2
48BTH3S00	50 – 200 amps	3UB81334HW2

* Feature can be turned on or off

SIEMENS

Single Pole

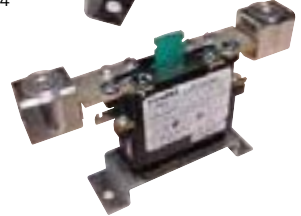
- Suitable for use with either AC or DC applications
- Max voltage is 600VAC/250VDC
- Use Type K bimetallic heaters
- Manual reset
- Easy to connect. Clamp-style terminals included on line and load side
- Includes 1NC contact
- Ambient compensated
- Includes mounting bracket

Part #	Rating
48DA18AA4	1.69 – 25 amps
48GA18AA4	8.48 – 60 amps
48HA18AA4	27.1 – 100 amps
48JA18AA4	43 – 180 amps

Note: Customer must provide full load amps for motor to determine Heater element needed.



48DA18AA4



48JA18AA4



48GA18AA4



48HA18AA4

SPRECHER+SCHUH

CEP7 Electronic 3 Phase

- No heaters required. Simple adjustment via front mounted dial
- Wide adjustment range. Four overload relay part numbers cover most applications
- Selectable reset mode. Manual or automatic
- Selectable trip classes. Class 10, 15, 20 or 30
- Includes test button and trip indicator. Easy to troubleshoot
- Easy to connect. Lugs or saddle clamp terminals included on line and load side
- DIN rail mountable
- Not suitable for use with DC circuits

Part #	Adjustment Range	Panel Mount Adapter
CEP7-EEEB	5.4 – 27 amps	CEP7-EPB
CEP7-EEFD	9 – 45 amps	CEP7-EPD
CEP7-EEGE	18 – 90 amps	CEP7-EPE
CEP7-EPD	Panel mount adapter. For CEP7-ED1..D and CEP7(S)-EE...D	
CEP7-EPE	Panel mount adapter. For CEP7(S)-EE...E	

* Class 10 manual reset only



CEP7-EEEB



CEP7-EEFD



CEP7-EEGE

Contact Kits

Access Elevator Supply offers the largest selection of replacement contact kits of any supplier in the elevator industry. Where possible, we stock both the original manufacturer's contact kit as well as a qualified aftermarket kit. The choice is up to you.

ORIGINAL OR AFTERMARKET (AM)?

Access offers a choice for many of the contact kits in our extensive inventory.

Original



3TY6480-OA



75HF14



55-153677G002

Aftermarket



3TY6480-OA



75HF14



55-153677G002

QUALITY IS THE CRITICAL FACTOR

Our aftermarket (AM) kits offer the same or better quality and performance as the original manufacturer's kits, at a substantial cost savings. All Access AM kits are American-made to our exacting specifications. In addition, we are constantly evaluating and field testing new aftermarket kits. Only after they have passed our stringent quality control inspections are they made available to you. You can be assured that Access stands behind the combination of quality and performance of our AM contact kits.

O&G OR FULL MAINTENANCE?

If you're an elevator contractor, deciding on which replacement contact you buy may depend on the type of contract you have with your customer.

For O&G, the original OEM contacts may be your answer. If it's Full Maintenance, the less expensive aftermarket kit may be more appropriate.

Regardless of which type you may need, Access has the largest selection at the best price. Call today and let us help you find the best solution for your specific contact needs.

ABB/ASEA BROWN BOVERI

Type EG

All 3-pole kits

Part #	Contactors	Size
EG3151CK	EG315	5



EG3151CK

Type EH

All 3-pole kits

Part #	Contactors	Size
EHCK100-3	EH100	4



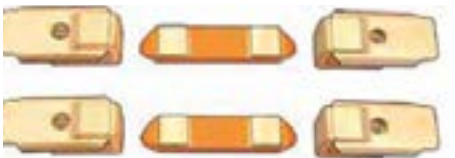
EHDBCK110-2

Type EHDB DC Drive Contactors

Part #	Contactors	Note
EHDBCK110-2	EHDB110	2 pole NO contact kit
EHDBCK110-NC	EHDB110	1 pole NC contact
EHDBCK130-2	EHDB130	2 pole NO contact kit
EHDBCK130-NC	EHDB130	1 pole NC contact
EHDBCK220-2	EHDB220	2 pole NO contact kit
EHDBCK220-NC	EHDB220	1 pole NC contact
EHDBCK280-2	EHDB280	2 pole NO contact kit



EHDBCK130-2



EHDBCK220-2



EHDBCK280-2



EHDBCK110-NC



EHDBCK130-NC



EHDBCK220-NC

Contact Kits Allen-Bradley

Contact Kits: Allen-Bradley



X-33977

X-35162

X-33553

X-36702

X-36670

X-36703

X-36671

X-67541

X-119624



Z-34043



40410-331-52



40420-322-51



40430-300-51



40440-300-51

ALLEN-BRADLEY

Series A

Part #	Size	Description
X-33519	1	Stationary, short, 1 piece
X-33977	0	Stationary, short, 1 piece
X-35162	0	Stationary, long, 1 piece
X-35163	1	Stationary, long, 1 piece
X-33553	0	Movable, 1 piece
X-36702	2	Stationary, 1 piece
X-36670	2	Movable, 1 piece
X-36703	3	Stationary, 1 piece
X-36671	3	Movable, 1 piece
X-67541	4	Stationary, 1 piece
X-119624	4	Movable, 1 piece

Series K

All 1-pole kits

Part #	Size	Note
Z-21102 Series	00	
Z-34037-AM Series	0	
Z-34038 Series	1	
Z-34039-AM Series	2	
Z-34040 Series	3	
Z-34041 Series	4	
Z-34043	5	Accommodates terminal mounted current transformers

500 Line

All 1-pole kits

Part #	Size
40410-331-51	0
40410-331-52	1
40420-322-51	2
40430-300-51	3
40440-300-51	4

IEC 100 Line, A & B

All 3-pole kits

Part #	Contactors
40769-800-01	100-A60
40780-800-01	100-B110



40769-800-01



40780-800-01

IEC 100-C and 100-D Line

All 3-pole kits

Part #	Contactors
CA7-C30	100-C30
CA7-C37	100-C37
CA7-C43	100-C43
CA7-C60	100-C60
CA7-C72	100-C72
CA7-C85	100-C85
CA6-C95	100-D95



CA7-C60



CA7-C30



CA7-C43



CA7-C72



CA7-C85

AROMAT

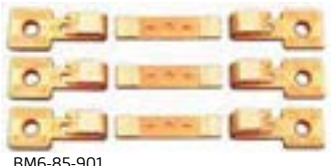
Green Power

All 3-pole kits

Part #	Contactors
BM6-35-901	F35 (size 1++)
BM6-50-901	F35 (size 1++), F50 (size 2+)
BM6-65-901	F65 (size 2++)
BM6-85-901	F80 (size 3), F85 (size 3+)
BM6-125-901	F125 (size 3++)
BM6-190-901	F190 (size 4++)



BM6-50-901



BM6-85-901



BM6-125-901

CUTLER-HAMMER

Series B1

All 3-pole kits

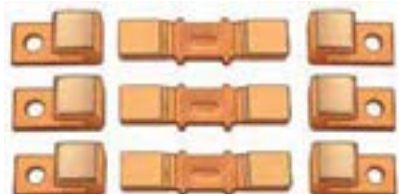
Part #	Size
6-34-2	2
6-35-2	3
6-36-2	4
6-36-4	4



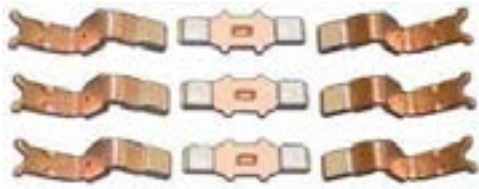
6-34-2



6-35-2



6-36-2



6-65-6

6-65-8

6-43-6



75DA14



75KB14



75BF14



75CF14



75DF14



75EF14



75FF14



75GF14



75HF14



75IF14



75JG14

CUTLER-HAMMER continued

Freedom Series

All 3-pole kits

Part #	Size
6-65-6	1-3/4, H
6-65-8	2, J
6-65-17	K
6-43-6	N
6-45-2	5

FURNAS

Vertical Lift Contactors/Starters

All 1-pole kits

Part #	Size	Contactors/Starter
75DA14	1, 1-1/2	14/40DA
75FB14	2	14FB, 40FB, 22FB, 42FB
75GB14	2-1/2	14GB, 40GB, 22GB
75HB14	3	14HB, 40HB, 22HB
75IB14	3-1/2	14IB, 40IB, 22IB
75JB14	4	14JB, 40JB, 22JB
75RB14	4-1/2	14RB, 14RF, 14RS, 40RB, 40RF, 22RB, 22RF, 22RS
75KB14	5	14/40/22KB, 14/40/22KF, 14/40/22KS

Innova 45° Series Contactors/Starters

All 1-pole kits

Part #	Size	Contactors/Starter
75BF14	00	14/40/22BF
75CF14	0	14/40/22CF, 14/40/22CP, 14/40/22CS
75DF14	1	14/40/22DF, 14/40/22DP, 14/40/22DS
75EF14	1P,1-3/4	14/40/22EF, 14/40/22EP, 14/40/22ES
75FF14	2	14/40/22FF
75GF14	2-1/2	14/40/22GF
75HF14	3	14/40/22HF, 14/40/22HP, 14/40/22HS
75IF14	3-1/2	14/40/22IF, 14/40/22IP, 14/40/22IS
75JG14	4	14/40/22JT, 14/40/22JG

Innova Plus Series Contactors/Starters

All 1-pole kits

Part #	Size	Contactors/Starter
75FP14	2	14/40/22FP, 14/40/22FS
75FP109153	2	Dover Contactor No 147283
75GP14	2-1/2	14/40/22GP, 14/40/22GS



75FP14



75FP109153



75GP14



75GF15

IEC Class Contactors/Starters

All 1-pole kits

Part #	Size	Contactors/Starter
75GF15	G	15/21/23/24GF

Old Style DP (Definite Purpose) Contactors/Starters

All 1-pole kits

Part #	Amps	Contactors/Starter
75CE42	40	42CE
75EE42	60	42EE
75FE42	75	42FE



75CE42



75EE42



75FE42

Centurion 2000 DP (Definite Purpose) Contactors/Starters

All 1-pole kits

Part #	Size	Contactors/Starter
75FE42	75	42FE, 16FE
75HF14	120	42HF, 16HF
75IF14	150	42IF, 16IF



75FE42



75HF14



75IF14



546A300G002



546A300G010



546A301G002



546A301G053



546A780G002



546A780G051



55-153677G002



55-153678G002



55-154607G002



55-154607G041

GE

CR100/200/300 Line

All 3-pole kits, except as noted

Part #	Size	Contactors/Starters	Note
546A300G002	0	CR305/306/309, CR205/206/209, CR105/106/109	4 pole kit
546A300G010	0	CR305/306/309, CR205/206/209, CR105/106/109	4 pole kit
546A301G002	1	CR305/306/309, CR205/206/209, CR105/106/109	4 pole kit
546A301G053	1	CR305/306/309, CR205/206/209, CR105/106/109	4 pole kit
546A780G002	2	CR305/306/309, CR205/206/209, CR105/106/109	
546A780G051	2	CR305/306/309, CR205/206/209, CR105/106/109	
55-153677G002	3	CR305/306/309, CR205/206/209, CR105/106/109	
55-153678G002	4	CR305/306/309, CR205/206/209, CR105/106/109	
55-154607G002	5	CR305/306/309, CR205/206/209, CR105/106/109	
55-154607G041	5	CR305/306/309, CR205/206/209, CR105/106/109	

CL C-2000 IEC

All 3-pole kits

Part #	Contactors	Amps
V31206B	CL06	48
V31207B	CL07	62
V31208B	CL08	68
V31209B	CL09	80
V31210B	CL10	96
V31175CA	CK75	140
V31108CA	CK08C	156
V31109BA	CK09	192



V31206B



V31207B



V31208B



V31209B



V31210B



V31175CA



V31109BA



V31108CA

GE continued

CR7 Spectra 700 IEC

All 3-pole kits

Part #	Contactor	Amps
CR7XDG	CR7CG	37
CR7XDH	CR7CH	45
CR7XDJ	CR7CJ	56
CR7XDK	CR7CK	73
CA5F2CPR1	CA5F2	105
CA5F3CPR1	CA5F3	140

Contact Kits: GE



CR7XDG



CR7XDH



CR7XDJ



CR7XDK



CA5F2CPR1



CA5F3CPR1



6960047G026



2455288



1477513

Misc Contacts

Part #	Note
6960047G026	1 pole kit for CR2810 relay Normally Open or Normally Closed (reversible)
5351643	1 pole kit for CR2800
2455288	Hoyt number 3004
1477513	Hoyt number 3026
1464861	Hoyt number 3027
138A1125G1	Hoyt number M716M

Limitamp Medium Voltage 5KV

All sold per piece, not in kits. Contact Access.

Part #	Amps
138A1125G1	400



138A1125G1

ITE-GOULD/TELEMECANIQUE

All 3-pole kits

Part #	Size
G203C	1
G203D	2



G203C



G203D

JOSLYN CLARK/SYLVANIA

Type CY

All 3-pole kits

Part #	Size
CY31-1	1
CY32-1	2
CY33-1	3



CY32-1



CY33-1



5M52



5M53

Type 5DP

All 1-pole kits

Part #	Contactors	Amps	Note
5M-052	5DP2	56	NO contact
5M-053	5DP3	110	NO contact
5M-045	5DP5	360	NO contact
5M-049	5DP9	260	NC contact
5M-056	5DP9	260	NO contact

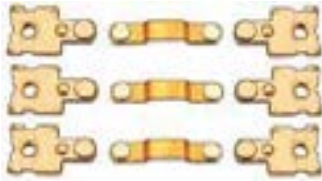


5M49



5M-045

Contact Kits: GE, ITE-Gould/Telemecanique, Joslyn Clark/Sylvania



BH549N301 Main



BH559N306 Main



BH559N307 Main



BH559N300 Main



BH569N301



BH579N301

MITSUBISHI

Series S-D and S-K

All 3-pole kits

Part #	Contactor	Size
BH549N301 Main	S(D)-K35	1.5
BH559N306 Main	S-K38	1.5
BH559N307 Main	S-K48	2
BH559N300 Main	S-K50	2
BH559N302 Main	SD-K50	2
BH559N301 Main	S-K65	2.5
BH559N303 Main	SD-K65	2.5
BH569N300	S-K80	2
BH569N302 Main	SD-K80	2.75
BH569N301 Main	S-K95	3
BH579N301 Main	S-K125	3.5

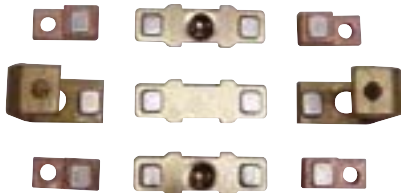
Series S-N

All 3-pole kits

Part #	Contactor
MAINKITBH749N301	S-N35
MAINKITBH759N300	S-N50 and S-N35
MAINKITBH759N301	S-N65
MAINKITBH769N300	S-N80
MAINKITBH769N301	S-N95
MAINKITBH779N300	S-N125



Z939401G10



Z939402G10

Series DU DC Contactors

All 3-pole kits except as noted

Part #	Contactor	Note
MAINKITZ939401G10	DU-A60	3 pole contact kit
MAINKITZ939402G10	DU-A120	
MAINKITBH599308	DU-K180	2 pole NO (purchase with 1 set MAINKITBH599309)
MAINKITBH599309	DU-K180	1 pole NC (purchase with 2 sets MAINKITBH599308)

S+S/SPRECHER+SCHUH

CA1 Contactors/Starters

All 3-pole kits

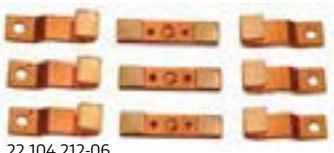
Part #	Contactors	Size
22.110.212-02	CA1-25	2
22.114.212-02	CA1-40	2-1/2
22.104.212-04	CA1-55/60	3, 3-1/2
22.104.212-06	CA1-100	4



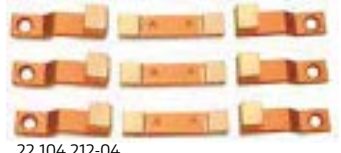
22.110.212-02



22.114.212-02



22.104.212-06



22.104.212-04

CA3 Contactors/Starters

All 3-pole kits

Part #	Contactors	Size
22.701.217-01	CA3-72	2.5



22.701.217-01

CA7 Contactors/Starters

All 3-pole kits

Part #	Contactors
CA7-C30	CA7-30
CA7-C37	CA7-37
CA7-C43	CA7-43
CA7-C60	CA7-60
CA7-C72	CA7-72
CA7-C85	CA7-85
CA7-C97	CA7-97



CA7-C30



CA7-C37



CA7-C43



CA7-C60



CA7-C72



CA7-C85

Contact Kits: S+S/Sprecher+Schuh

Contact Kits Siemens



3TY6460-OA



3TY6480-OA



3TY6520-OA



3TY7440-OA



3TY7450-OA



3TY7460-OA



3TY7470-OA



3TY7480-OA



3TY7490-OA



3TY7500-OA



3TY7520-OA

SIEMENS

3TB Series

All 3-pole kits

Part #	Contactor
3TY6460-OA	3TB46
3TY6480-OA	3TB48
3TY6520-OA	3TB52

3TF World Series

All 3-pole kits

Part #	Contactor
3TY7440-OA	3TF44
3TY7450-OA	3TF45
3TY7460-OA	3TF46
3TY7470-OA	3TF47
3TY7480-OA	3TF48
3TY7490-OA	3TF49
3TY7500-OA	3TF50
3TY7510-OA	3TF51
3TY7520-OA	3TF52
3TY7560-OA/0B	3TF56

3RT SIRIUS

All 3-pole kits

Part #	Contactors
3RT1934-6A	3RT1034
3RT1935-6A	3RT1035
3RT1936-6A	3RT1036
3RT1944-6A	3RT1044
3RT1945-6A	3RT1045
3RT1946-6A	3RT1046
3RT1954-6A	3RT1054
3RT1955-6A	3RT1055
3RT1956-6A	3RT1056



3RT1935-6A



3RT1944-6A



3RT1946-6A



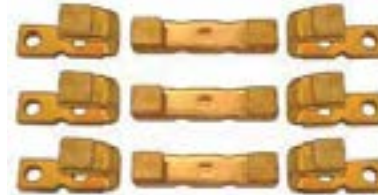
3RT1955-6A



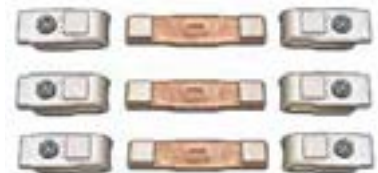
3RT1933-6A



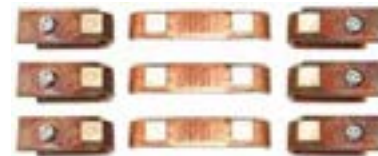
3RT1934-6A



3RT1936-6A



3RT1945-6A



3RT1954-6A



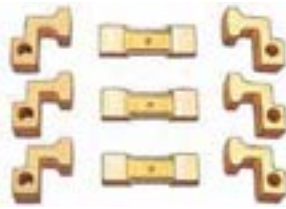
3RT1956-6A

Contact Kits Square D

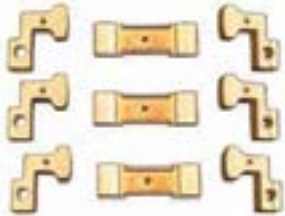
Contact Kits: Square D



9998-BA-81



9998-TA-81



9998-UA-81

SQUARE D

Old Style Contactors and Starters

All 3-pole kits

Part #	Size	Type	Series
9998-BA-81	0	B	A
9998-TA-81	2	D	
9998-UA-81	3	E	

Class 8502 / 8702 / 8536 / 8736 Contactors and Starters

All 3-pole kits

Part #	Size	Type
9998-SL-2	00/0	SB
9998-SL-3	1	SC
9998-SL-4	2	SD
9998-SL-7	3	SE
9998-SL-9	4	SF



9998-SL-2



9998-SL-3



9998-SL-7



9998-SL-4



9998-SL-9

STRUTHERS-DUNN

Dover #14 and #15 Relays

All contacts are individual pieces

Part #	Note
35900	Stationary contact, total length = 2-9/16"
35890	Movable contact
35909	Stationary contact, total length = 1-3/4"



35890



35900



35909

TELEMECANIQUE

LC1 Series

All 3-pole kits

Part #	Contactors
LA5-FF431	LC1FF43, F115, F150
LA5-FG431	LC1FG43, F185



LA5-FF431



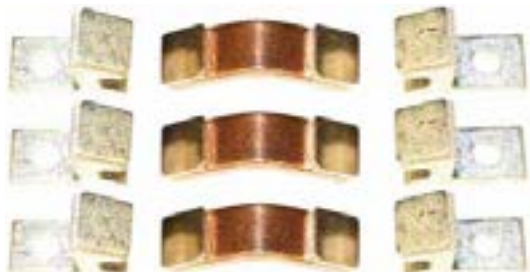
LA5-FG431

WESTINGHOUSE ELECTRIC

Advantage Series

All 3-pole kits

Part #	Size
WCK43	4



WCK43



Dover: 9790123
Access: 75FE42



Dover: 9755317
Access: 75DF14



Dover: 9755330
Access: 75FB14A

Dover: 112194
Access: 75FF14



Dover: 9754714
Access: 75FP14



Dover: 9713384
Access: 75FP109153



Dover: 9755548
Access: 75GB14



Dover: 9755342
Access: 75GP14



Dover: 9755433
Access: 75HF14



Dover: 9755366
Access: 75IB14



Dover: 9755378
Access: 75JB14



Dover: 9755640
Access: 75GF14



Dover: 9755354
Access: 75HB14



Dover: 9839446
Access: 75HF15



Dover: 9755445
Access: 75IF14

DOVER

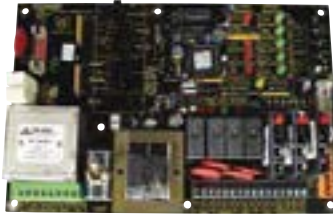
Contact Kits

1 pole kit unless specified

Contact Kit #	Description	Contact Kit #	Access Part #
9790123	42FE DP		75FE42
9755317	Size 1 45° green or gray cover	9755792, 9790081	75DF14
9755330	Size 2 vertical lift green cover	9788785, 9755536, 9790111	75FB14A
112194	Size 2 45° green cover	9788748, 9790135	75FF14
9754714	Size 2 45° gray cover	9790160	75FP14
9713384	Size 2 45° gray cover	9716014, 147283	75FP109153
9755548	Size 2-1/2 vertical lift green cover	9755810, 9790172	75GB14
9755640	Size 2-1/2 45° green cover	9790196	75GF14
9755342	Size 2-1/2 45° gray cover	9790226	75GP14
9755354	Size 3 vertical lift green cover	9755822, 9790238	75HB14
9755433	Size 3 45° green or gray cover	9790240, 147284	75HF14
9839446	Size H IEC	9790251, 9839460, 298AD1	75HF15
9755366	Size 3-1/2 vertical lift green cover	9755834, 9790263	75IB14
9755445	Size 3-1/2 45° green or gray cover	9790275	75IF14
9755378	Size 4 vertical lift green or gray cover	9755834, 9790287	75JB14

REPLACEMENT BOARDS

Part #	Description
MOVFR-0012N	Board. MOVFR Main PC, with (3) input PC board
MOVFR-0075AN	Board. MOVFR II and MOVFRW II Main PC without input PC boards (includes 4 relays). Replaces MOVFR-0069N
MES330R	Alternate More Durable (lifetime warranty) for Mac 104 door operator with relays
72GBD01	Universal replacement logic board. Siemens class 72G soft starter
SRE CIB	Smartrise Cedes interface board
SRE Hall Board	Smartrise hall board
SRE Lock Board	Smartrise lock board
SRE SRU Board	Smartrise SRU board



MOVFR-0012N



MOVFR-0075AN



MES330R



72GBD01



SRE CIB



SRE Hall Board



SRE Lock Board



SRE SRU Board

OEM: Replacement Boards

OEM: Dover Replacement Parts



9838351, 63835



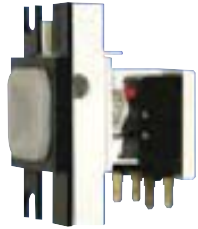
ML-4402



9840230 1/4" ext.
ADA compatible



9773150 California
ADA compatible



9817219



9871925



Dover: 9721769
Access: 85



Dover: 9727190
Access: 657



Dover: 9769377
Access: 120PSB



Dover: 9782485
Access: 503



Dover: 9871688
Access: 24PSB

Dover

DOOR PARTS AND EQUIPMENT

Dover Part #	Description
9838351, 63835	Pick-up roller kit. 1-5/8", includes retaining ring
ML-4402	Universal spirator. 5" diameter, with cable

CAR SIGNAL REPLACEMENT PARTS

Pushbutton Caps

Part #	Description
9840230	Clear pushbutton cap. 1/4" ext., ADA compatible
9773150	Clear pushbutton cap. California ADA compatible

Car Signal Components

Part #	Description
9817219	Pushbutton assembly, complete. Incl. 2 microswitches
9871925	Gong assembly, 48VDC single stroke. Incl. mounting bracket

Replacement Lamps and Bulbs

Dover Part #	Access Part #	Description
9721769	85	Lamp. 28V .04 amp 1.12W subminiature wedge base
9727190	657	Lamp. 28V .08 amp 2.24W wedge base mini
9769377	120PSB	Lamp. 120V .025 amp 3W #5 slide base
9782485	503	Mini lamp. 5.1V .15 amp SC bayonet base
9871664	48PSB	Lamp. 48V .053 amp 2.4W #5 slide base
9871688	24PSB	Lamp. 24V .73 amp #5 slide base
32462	656-120V-CS	Lamp. 120V 6W candelabra screw base
32464	25T8-130V-CS	Lamp. 130V 25W candelabra screw base

For a complete listing of lamps, see Elevator Lamps section starting on page 35.

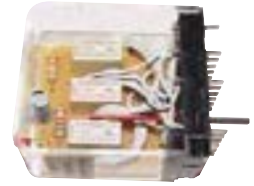
IBM RELAYS

Note: The original IBM relays were electromechanical wire-contact type. While some items may still be available in the original form, they are by nature very expensive.

Some suppliers sell a short, miniature replacement product, but based on feedback from elevator mechanics, these relays are difficult to service and not particularly reliable.

Access stocks quality-made, full-size electronic/solid state IBM replacement relays manufactured by RLS.

Part #	Description
333242RLS	4PDT w/100-120VDC coil
769009RLS	4PDT w/24-32VDC coil
769489RLS	4PDT w/48VDC coil
769019RLS	6PDT w/48VDC coil
186685LRLS	4PDT latching w/48VDC coil
769488RLS	12PDT w/48VDC coil
9710292DRLS	4PDT w/48VDC coil and diode
159942	Base for 6PDT IBM-type relay
159943	Base for 12PDT IBM-type relay



769019RLS



186685LRLS



769488RLS



159942

#14 #15 CONTACTORS

Part #	Description
10074	Cradle block
35900	Contact post, 2-1/2" long
35909	Contact post, 1-1/2" long
35890	Moving contact
36926	Fixed core
10150	Core tube
10152	Core tube bushing
25249	Compression spring, straight
45221	Compression spring, conical
35891	Retaining screw
44778	Belville washer
31735	#10 shakeproof washer
922	#6 flat washer
997	#6 bronze lock washer
434	Nut, #6-32 x 1/4" hex
7371	Nut, #10-32 x 5/16" hex
7097	Lock washer
4660312	Screw, #10-32 rhs



10074



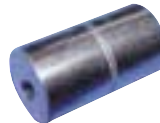
35900



35909



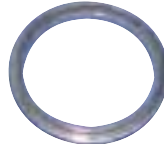
35890



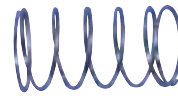
36926



10150



10152



25249

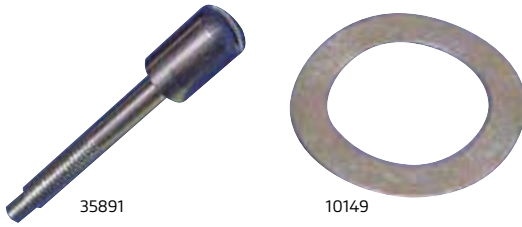


45221

OEM: Dover Replacement Part, 14/15 Parts

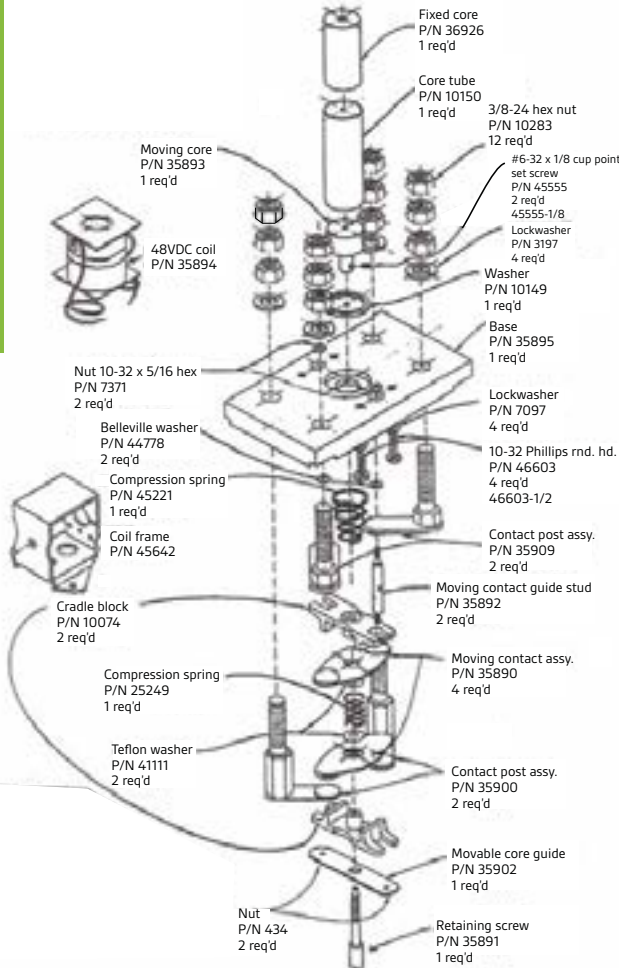
DOVER 14/15 PARTS continued

Normally Stocked Parts



Part #	Description
10074	Cradle block
10149	Wavy washer
10152	Core tube bushing
25249	Compression spring
35890	Moving contact assy.
35891	Retaining screw
35900	Contact post assembly, long
35909	Contact post assembly, short
36926	Fixed core

OEM: Dover 14/15 Parts



Not Shown / Also Available

Part #	Description
922	#6 flat washer
997	#6 bronze lock washer
31735	#10 shakeproof washer
7097	Lock washer
46603-1/2	Screw, #10-32 rhs

DPDT 10-AMP PLUG-IN RELAYS

Dover Part #	Access Part #	Description
9708091	R10E1Y2-V700	Relay, DPDT, 24VDC coil
9719970	RH2B-ULC-DC48V	Relay, DPDT, 48VDC coil
9723780	R10E1X2V15.0K	Relay, DPDT, 115VDC coil
9783295	RH2B-ULC-DC12V	Relay, DPDT, 12VDC coil
9811060	RH2B-UD-DC110V	Relay, DPDT, 110VDC coil w/arc suppressor (same as below)
9832427	RH2B-UD-DC110V	Relay, DPDT, 110VDC coil w/arc suppressor

Note: For more plug-in relays, see page 74.



9708091



9719970



9723780



9783295



9832427

COILS

Dover Part #	Description	Access Part #
9788761	Coil, 120/240V, for size 0 – 2-1/2 starters and contactors	75D73070A



9788761

MICROSWITCHES

Dover Part #	Access Part #	Description	Body Size
9775530	BZ-2RD-A2	Low plunger. SPDT 15 amp @ 120/250VAC	2" x .7" x 1"
9715642, 71565	Z-15GQ-B7-K	Plunger. SPDT 15 amp @ 120/250VAC	2" x .7" x 1"
9818431, V7-1C17D8		Miniature w/pin plunger. For V-7 push button, SPDT	N/A



9818431



9775530



9715642, 71565

OEM: Dover Plug-in Relays, Coils, Microswitches

Otis

ROLLERS

Part #	Description
456AJ2	Roller. Guide 7-7/8 x 1.5 w/shaft ext. 1.025 – used 1941–1962
456C1	Roller. Door lock, 1-5/8" long
456C3	Roller. Door lock, 1-9/32" long
456CV4	Roller. Guide 10 x 1-1/2 w/(2) 6203 bearing and shaft
A290AB1	Roller. Escalator, model "O", 5.5 x 1.125 w/(2) 6203 bearings



456AJ2



456C1



456C3



456CV4



A290AB1

PARTS

Part #	Description
194AD2	Key, lunar
194AD6	Key, 2 section drop
194AD7	Key, 3 section drop
607C1	Solid state SCR replacement for Otis 2050 tube
98A00110-01	Three phase power monitor. 45 – 60VAC side adjust
A290AB1	Roller. Escalator, model "O", 5.5 x 1.125 w/(2) 6203 bearings



194AD2



194AD6



194AD7



607C1



98A00110-01



A290AB1

OEM: Otis Rollers, Parts

OTIS PARTS continued

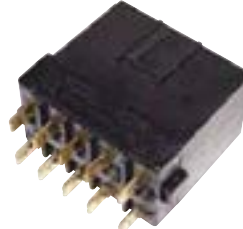
Part #	Description
A6098A3	Switch. Limit R/H straight arm DPST
A6098B7	Switch. Limit; double pole break
VC15-2A2B-AC120VN	Relay. 120VAC, 2NO and 2NC, VC15-2A2B-AC120V
98A00557	Three phase power monitor. 380 – 480VAC
98A00110-01	Three phase power monitor. 45 – 60VAC side adjust



A6098A3



A6098B7



VC15-2A2B-AC120VN



98A00557



98A00110-01

REPLACEMENT PARTS

Part #	Description
M1230-G4	Contact for KS multipole relay with 1/4" silver contact and 4-3/4" shunt
R3620G01	Stationary contact type B-2, N/O
R3620G02	Stationary contact type B-2, N/C
R3620G03	Intermediate contact type B-2, N/O, includes shunt and eyelet



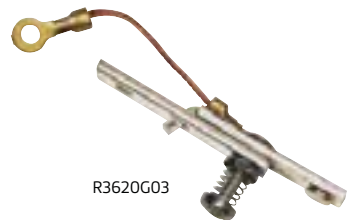
M1230-G4



R3620G01



R3620G02



R3620G03

OEM: Otis Replacement Parts

MCE

REPLACEMENT PARTS FOR MCE CONTROLLERS



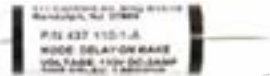
V23050-A1110-A533/SR96001
Safety Relay
6PST 3NO/3NC positively-guided
8 amp contacts w/110VDC coil
Commonly used with A17 compliant
controllers
Equivalent to Schrack SR6A4110



VC155-3A1B-AC120VN/BW2213185K
Relay 4PDT 2NO/1NC 20 amp w/120VAC
coil and screw terminals
MCE part # 27-01-0035



3LD2103-1TP51
Handle and switch for MCE TOPS, 25 amp 690V
MCE part # 36-03-0015



437-110-1-A
Solid state 1 second delay on
make timer, 110VDC 2 amp
MCE part # 27-01-0094



TVA510
TVA1510-E3 Electrolytic Capacitor,
TVA Series, 30 μ F, 250 V, 15.875
mm, Axial Leaded



AZ762-1C-115AEF
Relay 115VAC 8.1KOhm 16A SPDT



438USA
Time Capsule
Delay on make timer, 19 – 288VAC/DC
1 – 1,024 seconds
MCE part # 27-01-0043



438115-1
Time Capsule
Delay on make timer, 115VAC/DC
0.1 – 30 seconds
MCE part # 27-01-0041



438115-5
Time Capsule
Delay on make timer, 115VAC/DC
30 – 8,000 seconds
MCE part # 27-01-0046

REPLACEMENT PARTS FOR MCE CONTROLLERS continued

If you need to replace an MCE SmartStart solid state starter, call Access. You may be able to use one of our S+S PCEC solid state starters. For complete information on these starters, see page 169.



For a complete listing of Siemens electronic soft starters, see page 158.

Universal Logic Board

This board works in all models of the Siemens Class 72 soft starters and fixes over 90 percent of all starter failures. After installation, simply use the starter keypad to configure the replacement logic board for the particular model of starter.

Installation instructions and RMA paperwork included with each replacement board.



72GBD01
Replacement Logic Board

Since they began in 1983, MCE has used a number of different suppliers for their motor control. ACCESS sells replacement contactors, starters, overload relays, coils and contact kits for almost all of these devices. If the motor control manufacturer's product line has been discontinued, we can often offer functional replacements.

To locate a particular manufacturer's listing of products and replacement parts, see the listing below, or just call ACCESS.

ABB Type EHDB DC Drive Contactors

For complete information on these products, see page 182.

**Mitsubishi Type DU DC Contactors**

For complete information on these products, see page 184.



REPLACEMENT PARTS FOR MCE CONTROLLERS continued



GE C2000 Contactors

For complete information on these products, see page 114.



Siemens SIRIUS 3RT Contactors

For complete information on these products, see the Siemens SIRIUS IEC section of Starters and Contactors beginning on page 129.



Elevator Controls

REPLACEMENT PARTS FOR ELEVATOR CONTROLS CONTROLLERS

Tyco/Schrack A17 Safety Relay

Part #	Description
V23050-A1110-A533	SR960001/SR6A4110 safety relay 6PST 3NO/3NC positively guided 8 amp contacts w/110VDC coil Used with A17controllers Equivalent to Schrack SR6A4110



PRD Relays

Refer to page 95 in the Relays section for a complete listing of PRD relays.



Mitsubishi DC Contactor

For complete information, see the DC Contactors section beginning on page 184.

Replacement Logic Board

This board works in all models of the Siemens Class 72 soft starters and fixes over 90 percent of all starter failures. After installation, simply use the starter keypad to configure the replacement logic board for the particular model of starter.



72GBD01 Universal Logic Board

72G Series Soft Starters

Refer to page 159 in the Soft Starters section for a complete listing of Siemens soft starters.



PCEC Series Soft Starters

Refer to page 165 in the Soft Starters section for a complete listing of Sprecher+Shuh PCEC soft starters.



OEM: Elevator Controls



CE15KN3
Freedom Series IEC Contactor



AE16GN0
Freedom Series IEC Starter



AE56NNO
Freedom Series Rev/Wye-Delta IEC Starter



C320KGS1



C320KGS3



C320KGS20



C320KGS31



C320KGT1



C320KGT3



C320KGT15

CUTLER-HAMMER FREEDOM IEC SERIESSTARTERS AND REVERSING STARTERS

Contactor	Starter	Rev. Starter	Amps	200V HP	230V HP	460V HP	Frame
CE15AN3_	AE16ANO_	AE56ANO_	7	1.5	1.5	3	A
CE15BN3_	AE16BNO_	AE56BNO_	10	2	2	5	B
CE15CN3_	AE16CNO_	AE56CNO_	12	3	3	7.5	C
CE15DN3_	AE16DNO_	AE56DNO_	18	5	5	10	D
CE15EN3_	AE16ENO_	AE56ENO_	25	5	7.5	15	E
CE15FN3_	AE16FNO_	AE56FNO_	32	7.5	10	20	F
CE15GN3_	AE16GNO_	AE56GNO_	37	7.5	10	25	G
CE15HN3_	AE16HNO_	AE56HNO_	44	10	15	30	H
CE15JN3_	AE16JNO_	AE56JNO_	60	15	20	40	J
CE15KN3_	AE16KNO_	AE56KNO_	73	20	25	50	K
CE15LN3_	AE16LNO_	AE56LNO_	85	25	30	60	L
CE15MN3_	AE16MNO_	AE56MNO_	105	30	40	75	M
CE15NN3_	AE16NNO_	AE56NNO_	140	40	50	100	N

Note: Not normally stocked at ACCESS, but can be sourced.

AUX CONTACTS

Part #	Description
C320KGS1	1NO, side mounted
C320KGS2	1NC, side mounted
C320KGS3	1NO/1NC, side mounted
C320KGS4	2NO, side mounted
C320KGS5	2NC, side mounted
C320KGT1	1NO, top mounted
C320KGT2	1NC, top mounted
C320KGT3	1NO/1NC, top mounted
C320KGT4	2NO, top mounted
C320KGT5	2NC, top mounted
C320KGT9	3NO, top mounted
C320KGT10	2NO/1NC, top mounted
C320KGT11	1NO/2NC, top mounted
C320KGT12	3NC, top mounted
C320KGT13	4NO, top mounted
C320KGT14	3NO/1NC, top mounted
C320KGT15	2NO/2NC, top mounted
C320KGT16	1NO/3NC, top mounted
C320KGT17	4NC, top mounted

REPLACEMENT CONTACT KITS

All 3-pole kits

Part #	Size
6-65-6	1-3/4, H
6-65-8	2, J
6-65-19	K
6-43-6	N
6-45-2	5



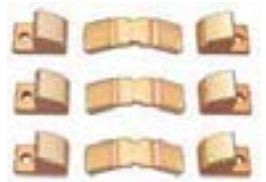
6-65-6



6-65-8



6-65-19

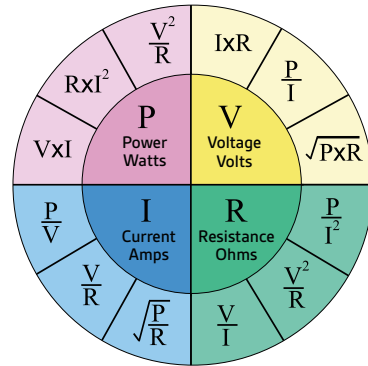


6-43-6

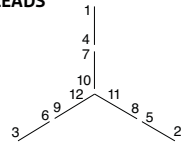
Ohm's Law

Terminal Markings and Connections

Three-phase Motors, Single Speed



NEMA NOMENCLATURE – 12 LEADS



DUAL VOLTAGE EXTERNAL WYE CONNECTION

Voltage	L1	L2	L3	Join
High	1	2	3	4&7,5&8,6&9, 10&11&12
Low	1,6,7	2,4,8	3,5,9	4&5&6, 10&11&12

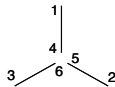
DUAL VOLTAGE WYE-CONNECTED START DELTA-CONNECTED RUN

Voltage	Conn.	L1	L2	L3	Join
High	WYE	1	2	3	4&7,5&8,6&9, 10&11&12
	DELTA	1,12	2,10	3,11	4&7,5&8,6&9
Low	WYE	1,7	2,8	3,9	4&5&6, 10&11&12
	DELTA	1,6,7, 12	2,4,8, 10	3,5,9, 11	—

NEMA NOMENCLATURE – 6 LEADS

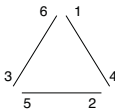
SINGLE VOLTAGE EXTERNAL WYE CONNECTION

L1	L2	L3	Join
1	2	3	4&5&6

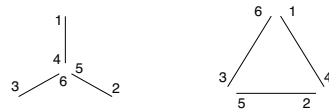


SINGLE VOLTAGE EXTERNAL DELTA CONNECTION

L1	L2	L3
1,6	2,4	3,5



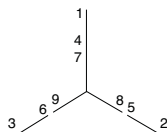
SINGLE AND DUAL VOLTAGE WYE-DELTA CONNECTIONS



SINGLE VOLTAGE

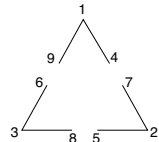
Operating Mode	Connection	L1	L2	L3	Join
Start	WYE	1	2	3	4&5&6
Run	DELTA	1,6	2,4	3,5	—

NEMA NOMENCLATURE – 9 LEADS



DUAL VOLTAGE WYE-CONNECTED

Voltage	L1	L2	L3	Join
High	1	2	3	4&7,5&8,6&9
Low	1,7	2,8	3,9	4&5&6



DUAL VOLTAGE DELTA-CONNECTED

Voltage	L1	L2	L3	Join
High	1	2	3	4&7,5&8,6&9
Low	1,6,7	2,4,8	3,5,9	—

QUALITY ELEVATOR PRODUCTS, INC.



HIGH SECURITY FIRE KEY BOX



SKB series – designed to be more vandal resistant than FKB style (formed cover cannot be pried open)

- Heavy duty vandal resistant design
- 11 Ga. stainless steel #4 finish cover
- 10 Ga. rust proofed steel base
- Designed for outside use
- Surface mount application
- Keyed to local Code requirements
- Equipped with inside key hooks
- Dimensions: 9"H x 5-3/8"W x 2"D
- Weight: 6 lb.

See page 63 for details

Replacement Parts • Aircraft Cable • Door Operator Motors • Door Operators, GAL • Door Pull Straps • Fender Washer • Door Spirators • Gate Operator (Folding Gate) • Peelle Replacement Parts • Car, Hatch, Hall Doors • Accordion Gates • Car Doors • Hall Doors • Hatch Doors • Door Keys, Key Keepers • Escutcheons • Door Emergency Releases and Parts • Hoistway Access Key Box and Parts • Door Safety, Security • Door Edges • Door Edges Adams • Door Interlock • Door Restrictor • Otis "L" Door Lock • Otis "L" Lock Parts • Panaforty & Parts • Door Rollers • Clutch Roller & Shaft • Door Hanger Roller Kit • MOH Horizontal Release • Rollers, Door Hanger • Door Signs, Tools • Key Boxes • Fire Key Boxes, Parts • Personnel Key Boxes • Key Boxes • High Security • Hall Station & Lanterns • Pushbuttons, Hall Station & Lanterns • Car Top Inspection Stations • Inspection Stations • Inspection Stations / Emergency Lights • Inspection Stations Parts • Lamp Guards • Pendant Stations • Bear Pads • Retiring Cam And Parts • Magnetic Landing System • Top Of Car Handrail • Retractable Toe Guard • Elevator Car Retractable Toe Guard • Follower Guide Assembly • Rectangular Handrails & Parts • Round Handrails & Parts • Handrail Worksheets Selector • Emergency Lights & Inspection Stations • Universal LED Key Parts • Heat & Cool • Fans AC/DC • Fans Grills • Elevator Cab Air Conditioner • Elevator Cab Heater • Telephone • ADA Compliant • Non-ADA • Emergency Rescue • Intercoms • Line-Dialers • Selection Chart • Cabinets • Cabinet Parts • Pushbuttons, • Key Switches • Pushbuttons, Switches • Adams • Atlas • Automatic Elevator • D.A. Matot • EPCO • Sedgwick • Innovation • Hall Stations, Lanterns • Push Button Plates • Symbol Plates • Certificate • Frames • Frame Screws • Frame Wrench • Splines • Security Keyless Entry • Security System • Keyless Entry • Cabin Protective Pads • Beam and Cab Pads • Elevator Protective Pads Worksheet • Pad Hooks • Pad Locks • Buffer, Springs • Buffer, Stands • Buffer Spring Stand Worksheet • Pit Ladders • Collapsible • Custom • One Piece • Retractable • Ladder Worksheets • Stationary • Retractable • Flood Alarms • Pit Flood Alarms • Pit Switches • Work Light • Guide Rails • Guide Rail Fishplates • Rail Inserts & Parts • Guide Rail • Inserts • Insert Washers • Closure Strips • Rail Guide Shoes • Guide Shoes • Guide Shoe Worksheet • Rail Brackets, Clips • Rail Brackets • Rail Clips • Roller Guide Assemblies • Roller Guide Assemblies • Rail Leaches, Oilers • Rail Leaches • Rail Oiler • Rail Bugs, Clamps, Gauges • Rail Bugs • Rail Gauges • Hoisting Clevises • Rail Clamps • Rail Shims, Washers • Wire • Bevel Washers • Seizing Wire • Piano Wire • Rail Shims Pit Switches • Auxiliary Convenience Boxes • Under Cab Work Light • Scavenger Pumps • Cylinder Head Pumps • Heavy-Duty Pumps • Replacement Parts • Oil Transfer Pumps • Pump, Oil Transfer • Cylinder Drip Ring • Cylinder Drip Ring • Pit Oil Cleanup • Power Units • Submersible Power Units • Belt Drive Dry Power Units • Emergency Power Units • Power Units Work Sheet • Motors Dry & Submersible • Flange Adapter Kits • Pumps • Pumps Dry • Pumps Submersible • Pumps Temporarily • Control Valves • Valves, EECO • Valves, Maxton • Valves, Coils • O-Ring Kits, EECO • O-Ring Kits, Maxton • Valves, Pipe Rupture • Valves, Shut Off • Valves, Shut Off • Victaulic Fittings • Mufflers • Isolation Couplings, • Pads, Nipples • Isolation Couplings • Isolation Pads • Pipes Stands & Clamps • Pipe Stands • Pipe Clamp Assemblies • Motor Generator Filters • Elevator Cabin Fans, AC/DC • Elevator Cabin Air Conditioner • Elevator Cabin Heater • Tank Oil Coolers • Tank Oil Chillers • Tank Oil Heaters • Motors • Blower • Door Operator • Dry • Fan • Submersible • Tach Generators • Power & Control • Motor • Drives, • Starters, • Contactors, • Overloads • Phase Monitors • Contact Kits, • Replacement • 24VDC Din Rail Power Supply • Switches • Governor • Hatch • Hoistway • Limit • Magnetic • Mechanical • Pressure • Proximity • Safety • Otis "L" Door Lock • Pushbuttons & Key Switches • Pushbuttons & Parts • Adams • Atlas • Automatic Elevator • D.A. Matot • EPCO • Sedgwick • Innovation • Hall Stations, Lanterns • Alarm, Bells, Chimes • Alarm • Bells • Chimes, Handicap • Signals, Audio • Outdoor Alarm Bell • Batteries • Batteries, Emergency Lights Replacement • Relay, Timers, Sockets • Timers • Relays • Relay, Sockets • Wire Connectors, Terminals • Connectors • Transformers • Rectifiers • Escalator Ski • Brush • Escalator Parts • DOVER • HAUGHTON • HITACHI • MONTGOMERY • OTIS • WESTINGHOUSE • Chain • Lubricator • AC Sensor • Burnishing Tools • Continuity Tester • Fish Tapes • Fuse Pullers • GFCI Tester • Multimeters • Orange Sticks • Relay Testers • Tomahawk • Wire Wrap Tools • Mechanical • Fasteners • Files • File Holders • Inspection Mirrors • Pick-Up Tools • Screwdrivers • Spanner Drivers • Hydraulic • Jack Aligning System • Liquid Pressure Gauge • Oil Level Gauge • Packing Hooks • Packing Tape • Piston Clamps • Piston Wrenches • Portable Filter Systems • Pump, Oil Transfer • Distance, Speed, Force • Calipers • Dial Indicator

WARRANTY & DISCLAIMER

Quality Elevator Products, Inc. warrants its products to be free from defects in material and workmanship for a period of 120 days from date of shipment, unless otherwise stated.

Purchaser's rights shall consist solely of requiring the manufacturer to repair, or at the manufacturer's discretion, replace free of charge, any defective items received at said factory during the warranty period.

No warranty or affirmation of fact, express or implied, other than as set forth in the limited warranty statement above is made or authorized by Quality Elevator Products. Quality Elevator Products disclaims any liability for product defect claims that are due to product misuse, improper product selection or misapplication.

Quality Elevator Products shall not be liable for any unauthorized claims or representations made by vendors, distributors, or any other third party, nor for any damages resulting from such claims or representations.

Any liability for consequential, incidental, special, exemplary, or punitive damages is expressly disclaimed. Quality's liability in all events is limited to, and shall not exceed the purchase price paid for the product that gives rise to any liability.

The manufacturer shall not be liable for any injury, loss, damage, or other cost, direct, incidental, or consequential. The purchaser must determine the suitability of the product for his intended use and the user assumes all risks and liabilities in connection herewith.

All sales are final, subject to existing warranty provisions.

TERMS OF PAYMENT

Minimum order \$25.00
F.O.B. Niles, IL

A delinquent charge of 1.5% per month will be made on all invoices 30 days past due.

All major credit cards accepted.

PRICES

All prices F.O.B. Niles, IL and are subject to change without notice.

Quotations expire in 30 days unless stated otherwise in writing. Published or quoted prices do not include any applicable taxes.

TERMS OF COLLECTION

Customer agrees to pay Quality interest at the rate of one and one-half percent (1.5%) per month for all amounts not paid within thirty (30) days from date of invoice. Further, customer agrees to pay any reasonable attorneys' fees incurred by Quality Elevator Products to collect such overdue amounts.

RETURNS

10% restocking (\$25.00 Minimum) charge on returned items. Returned items must have a return authorization number. No item can be accepted for return after 90 days from date of sale. Acceptance of returned material is at the sole discretion of Quality Elevator Products.

TABLE OF CONTENTS

ADA Phones	45, 46	Door Bumpers	34
Air Conditioner, Cab	1, 2	Door Force Gauge	69
Alarm Bells	3, 4	Door Gap Gauge	38
Area of Rescue		Door Gibbs	35
Communication System	48, 49	Door Hanger Rollers	209, 213
Astragals	5-8	Door Jamb Braille	10
Audio Signals	9	Door Key Keepers	37
Auxiliary Convenience Box	8	Door Keys	36
		Door Lock, Parts	99
Babbitt Sockets	8	Door Locks	95, 98
Batteries	9, 44	Door Operator Motors	37, 184
Beam Pads	179	Door Pressure Gauge	69
Bells	3, 4	Door Pull Straps	196
Bevel Washers	9	Door Releases	42
Blowers, Blower Motors	9	Door Restrictor	38
Bracket, Limit Switch	107	Door Saddle Inserts	226
Braille	10, 11	Door Spirators	230
Brush Springs	12	Drip Ring	39
Brushes	13-23	Dynamometer	39
Buffer Springs, Stands	24		
Burnishing Tool	25	Educational Material	40
Buzzers	90	Electric Eyes	41
		Elevator Identification Tags	86
Cab Air Conditioner	1, 2	Elevator Pads	180, 181
Cab Pads	180	Emergency Door Releases	42
Cab Pads, Worksheet	181	Emergency Light Combination Units	92
Cable Hangers	25, 26	Emergency Lights	43, 44, 92
Cable Oilers	27	Emergency Phones	45-47
Cable Support Grips	26	Escalator Brush	50
Calipers	27	Escalator Comb Plates	53-55
Capacity Plates, Signs	28	Escalator Demarcation Strips	55
Car Test Weight	237	Escalator Rollers	56
Car Top Inspection Stations	88	Escalator Signs	223
Carpet Mask	122	Escalator Step Gauge	57
Certificate Frames	29	Escutcheons, Plates, Caps, Locks	57
Chain Lubricator	95		
Chiller, Oil	30	Fan Grills, Lighted	73
Chimes	29	Fans	58, 59
Circumference Tape Measure	27	Fascia Stencils, Paint	59
Clevises, Rail Hoisting, Clamp	203	Fasteners, Spanner Drivers	60
Clutch Roller and Shaft	29	Fender Washer	196
Comb Plates	53-55	File, File Holder	61
Connectors	32	Filter Systems	62
Contact Cleaner	108	Fire Evacuation Signs	65
Contact Kits	33	Fire Key Boxes	63
Continuity Tester	207	Fire Key Boxes, High Security	Inside Front Cover
Cylinder Drip Ring	39	Fire Key Boxes, Parts	64
		Fire Signs (Phase I)	66
Danger Signs	32	Fire Signs (Phase II)	67, 68
Data Tags	32	Fish Tapes	64
Dial Indicator	34	Fittings, Victaulic	62
Door Astragal and Holder	8	Floor Protection	122
Door Astragals	5-7	Follower Guide Assembly	69

TABLE OF CONTENTS

Force Gauge, Digital	69	Listening Tool	123
Freight Signs	28	Load Weighing Devices	255
Fuse Pullers	70	Loading Signs	28
Fuses	70-72	Lockout Tags, Breakers	223
Gate Operator (Residential)	86	Lubricants	108, 109
Gate Shoes	73	Magnetic Landing System	110
Generator Filters	74, 75	Magnetic Switches	111
GFCI tester	73	Maintenance Barricades	111
Governor Rope Clamp	215	Maintenance Signs, Tape	112
Governor Switch	121	Manuals, Elevator/Inspection	40
Governors	76, 215	Mats, Sticky	97
Grills	73	Meters (VOM)	113
Guide Rails	77	Mirrors	216
Guide Shoes	78, 79	MOH Release Assembly	114
Handrails, Flat	81, 83	Morrison Blowers	9
Handrails, Round	82, 84	Motor Starters	115, 116
Hatch Sills	225	Motors Submersible, Dry	117, 118
Hatch Switch	85	Mufflers	119
Heater, Cab	85	Multi-Cable	Inside Back Cover
Hoist Ropes	249	No Smoking Signs	120
Hoistway Access Box	85	No-Go Gauge	252
Hoistway Limit Switches	106, 107	Oil Coolers	234
Horizontal Release Assembly	114	Oil Dry Absorbent	97
Identification Tags	86	Oil Level Gauge	120
Inserts	87	Oil Transfer Pump	124
Inspection Mirrors	93	Oilers Cable/Rope	27
Inspection Pickup Tools	93	Oilers, Rail	205
Inspection Station, Parts	90	Orange Sticks	124
Inspection Stations	88, 89, 92	Order Form	258
Intercoms	94	Outdoor Alarm Bell	4
Interlocks	95, 98	Packing Hooks	178
Isolation Couplings	100	Packing Tape	178
Isolation Pads	100	Packing, Cylinder	125-176
Jack Aligning System	96	Packing, Traction Machine	172-177
Janitorial Supplies	97	Pad Hooks	180
Key Switches	200, 201	Padlocks	179
Keyless Entry System	219	Pads, Beam	179
Lamp Guards	100	Pads, Elevator Protective	180, 181
Lamp Socket	198	Panaforty-Plus	182, 183
Lamps	101-105	Peelle Replacement Parts	184
LED Lamps	105	Pendant Stations	89
Leveling Packages	106	Phase Monitors	185
Light Meter	114	Piano Wire	221
Limit Switches	106, 107, 121	Pipe Clamps	190
Limit Switches, Manual Reset	106	Pipe Rupture Valves	186
Line Dialer, Line Verificator	47	Pipe Stands	186
Liquid Pressure Gauges	107, 207	Piston Clamps, Piston Wrenches	186, 254
		Pit Flood Alarm	190

TABLE OF CONTENTS

Pit Ladders	187	Sound Meter	114
Pit Ladders, Worksheet	188	Spanner Drivers	218
Pit Ladders, Retractable, Worksheet	189	Spirators	230
Pit Pads	97	Splines	231
Pit Switches & Outlets	191	Spool Insulator	25
Power Units	192-194	Starters	115, 116
Power Units, Dry	Inside Back Cover	Switch, Hatch	85
Pressure Switches	195	Tach Generators	231
Printed Circuit Boards	31, 115	Tachometers	232, 233
Proximity Switches	195	Tank Coolers	234
Pull Straps	196	Tank Heaters	235
Pumps, Submersible, Dry	197	Telephone Cabinet Accessories	237
Pushbutton Braille	11	Telephone Cabinets	236
Pushbuttons	198-201	Telephones	45-47
Rail Brackets	202	Temporary Run Stations	89
Rail Bugs	203	Tension Sheave Assembly	215
Rail Clamps	204	Test Weight	237
Rail Gauge	203	Thermometer	114
Rail Hoisting Clevises	203	Timers	238, 239
Rail Inserts	87	Tomahawk	238
Rail Leaches	205	Top of Car Handrails	240
Rail Oilers	205	T-Rail	77, 231
Rail Shims	205, 221	Transformers	240
Relay Testers	207	Traveling Cables	26
Relays, Relay Sockets	206	Under Cab Work Light	8
Retiring Cams	208	Unistrut Bracket	25
Roller Guide Assemblies	80	Valve "O" Ring Replacement Kits	246, 247
Rollers	56, 209-213	Valve Coils	245
Rope Tension Gauge	214	Valve Test Kit	207
Run Stations	89	Valves, EECO	244
Safety Handbook	40	Valves, Maxton	241-243
Safety Mirror	216	Valves, Shut-Off	245
Safety Switch	121	Victaulic Fittings, Gaskets	62
Scavenger Pumps	217	Waste Cans	247
Screwdrivers	218, 219	Wedge Sockets	248
Security System	219	Weighing Devices	255
Sedgwick Replacement Parts	220	Wire Rope	249, 250
Seizing Wire	221, 251	Wire Rope Clamps	254
Shim Stock	221	Wire Rope Clips	251
Shut-Off Valves	245	Wire Rope Seizing Bands	251
Signs	221, 222	Wire Rope Wear Gauge	252
Signs, Lockout, Escalator	221, 223	Wire Wrap Tools	252
Sill Support Angles	227	Wireway	253
Sills	224-226	Woodfold Gates	256, 257
Smoke Detector	228	Work Light	93, 190
Smoke Detector Tester	228	Wrenches, Piston	254
Socket Fast	229	X-Pando	254
Soft Jaws	228		
Solder Pots	229		
Solid State Motor Starters	115		

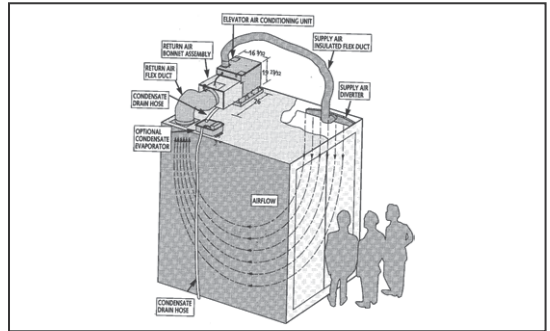
ELEVATOR AIR CONDITIONER

Air Conditioner Dimensions

Length	26 inches
Width	16 ⁹ / ₃₂ inches
Height	19 ²³ / ₃₂ inches
Installed Weight	103 lb.

Features

- Lightweight, 103 lb. unit mounts easily in virtually any position on top of the elevator.
- Self-contained, packaged design for easy installation.
- Compact rotary compressor saves space and weight.
- Rated at 7,100 BTUH nominal capacity.
- Mechanical heat/cool thermostat mounted in supply air duct for secure settings and more accurate temperature sensing. 15' umbilical for remote thermostat mounting. Optional automatic change-over heat/cool thermostat also available.
- Standard 1600W electric heater delivers 5,600 BTUH heat capacity.
- Fan runs continuously for improved air circulation and filtration.
- 150 cubic feet per minute airflow rate.
- Hermetically sealed at factory for leakproof refrigerant flow.
- Black finish on supply air diverter conceals it in the gap between the false ceiling and interior wall.



- Compressor and outer cabinet are mounted on shock - absorbing rubber for added durability.
- Long lasting copper tubing is fabricated with shock loops to strengthen the system's vibration resistance.
- Gas-flux brazed joints on the tubing to resist corrosion.
- Start kit with start capacitor and relay makes starting easier on the compressor.
- All galvanized steel construction of the outer cabinet ensures corrosion resistance.
- Heavy duty, galvanized steel drain pan is designed for corrosion free durability with bronze brazed corners and powder coated epoxy paint.
- Freeze protection is provided to prevent evaporator freeze up.
- 4 pin connector plugs into air conditioner for easy thermostat hookup.
- Field wiring accomplished simply and easily to lugs on Printed Circuit Board.
- Off the shelf, 12" x 16" filter drops into return air bonnet.
- 240 Volt, 50 Cycle, 1 Phase unit available.
- Automatic transformers, 240 volt, 50 Cycle, 1 Phase, to 115 Volt 60 Cycle, 1 Phase.

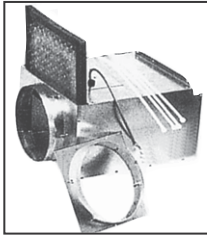
QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

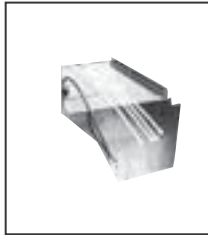
ELEVATOR AIR CONDITIONER (FEATURES)



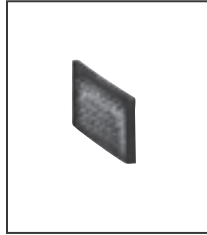
12.5 Return Air 10" Flex Duct



Return Air Bonnet Assembly



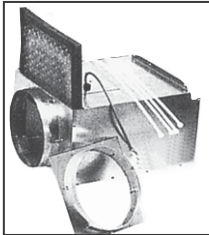
Thermostat Umbilical with 4 pin Connector



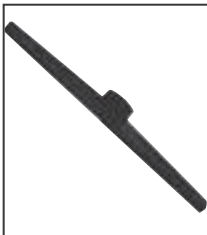
Standard Size 12" x 16" Off The Shelf Filter



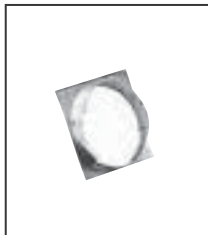
12.5' Supply Air 4" Insulated Flex Duct



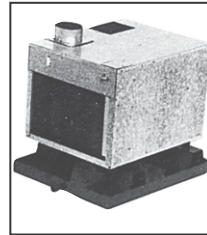
Four Wire Ties for Ducts



Supply Air Diverter



Return Air Duct, Mount Ass'y.



Elevator Air Conditioning Unit



Optional Condensate Evaporator

Model AC6531B692A

Air conditioner, complete, short bonnet.

Model AC6531-3251

Condensate evaporator.

Model AC6531-3241

Auxiliary programmable thermostat.

Optional 2,000W/120V condensate evaporator with a capacity of 6 pounds of water per hour. Includes drain pan filter to screen particles out of evaporator. Also includes overflow drain tube.

SPECIFICATIONS

Nominal BTUH Cooling Capacity	7,100
Delivered BTUH Heating Output	5,600
Electrical Rating	115V 60 Cycles 1 Phase
Locked Rotor Cooling Amps	34
Approximate Full-Load Amps/Cooling	6.9
Approximate Full-Load Amps/Heating	16
Running Watts ¹	990
Running Watts ²	1,150
Running Watts/Heating	1,600
Evaporator Air Delivery CFM (high speed)	150
AC Unit Circuit Rating Amps	20
Evaporator Circuit Rating Amps	20

¹ Tested under the following conditions: Cooling A.R.I. Standard Conditioning 80°F. DB/67°F. WB Indoor, 95°F DB Outdoor at 115VAC

² Tested under the following conditions: Cooling A.R.I. Standard Conditioning 95°F. DB/71°F. WB Indoor, 115°F DB Outdoor at 103.5VAC
Colman is a registered trademark of the Colman Company, Inc. used under license. LiftAire is a trademark of Recreation Vehicle Products, Inc.

Also Available

Model AC6533392A

14,800 BTUH cooling unit.

Model AC6533-3251

Condensate evaporator.

CALL FOR DETAILS!!

**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

ALARM BELLS

ALARM BELLS

All bells are built with universal adapter plates which mount directly on the surface of any single, double or octagon box. AB6 is a red bell designed to work off most standard emergency light units. (AB6I & AB12 also red).

Model	Bell	Amp	Voltage	Decibel (at 10'-0")
AB6	6"	.5	6VDC	86
AB6I*	6"	.18	6VDC	90
AB12	6"	.18	12VDC	92
AB12-AC	6"	.80	12VAC	90
AB24-DC	6"		24VDC	
AB24-4	4"		24VAC	
AB120	6"	.1	120VAC	86
AB120W	6"		Waterproof	
AB120I*	6"	.08	120VAC	88
AB240	6"		240VAC	



AB6



AB120F

FLASHRING ALARM BELL

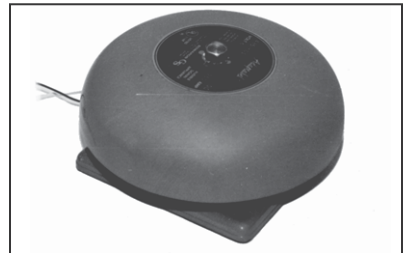
6" diameter vibrating bell for indoor or outdoor use. The solid state bell and light installs quickly.

Model AB120F

- 120VAC
- .10A
- Decibel rating 92-94
- Red lens removes easily for lamp replacement

*Model AB6I, AB120I

- 6" Dia. bell with interrupter
- Specially designed for Canadian market
- Decibel rating 90
- CSA approved



AB6I

ALARM/FLASHING STROBE

Heavy duty, 6" diameter vibrating grey bell. Features continuous ring with high decibel output.

Model AB120FS

- 120VAC, .09A
- 7.00 ohms
- Solid state, high intensity, long life xenon strobe
- One flash/second
- Decibel rating 92-94



AB120FS

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

ALARM BELLS / BELLS

BRASS BELL

2-1/2" diameter single stroke brass bell for elevator floor leveling indication. Each bell individually packaged. Includes identifying label with circuit and operational information.

Model G12D

- 12VDC

Model G115D - 3400Ω

- 115VDC, wire in parallel with hall lantern

Model G40D - 30Ω

- 40W 115VDC, wire in series with hall lantern



G115A

ELECTRONIC CHIMES

See page 29

OUTDOOR ALARM BELL

White box with "Elevator Emergency Call Police" in 2" red letters. Designed to work off standard emergency light unit.

Model OAB

- Rust-proofed for outside use
- 9-1/2" H x 13-7/8" W x 3-1/2" D
- Provided with Model AB6 6VDC bell

Model OAB12

Same unit with 12VDC alarm bell inside.

Model OAB120

Same unit with 120VAC alarm bell inside.

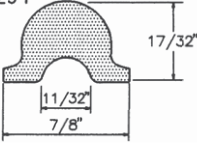
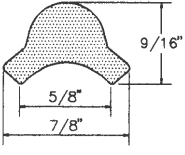
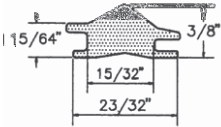
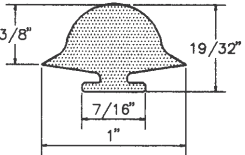
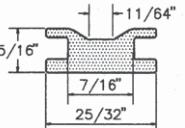
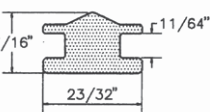
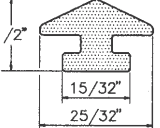


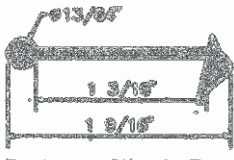
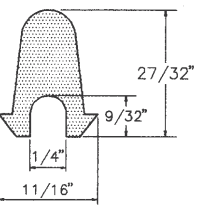
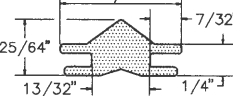
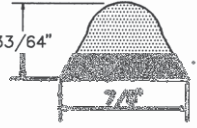
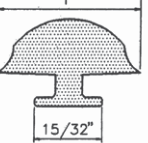
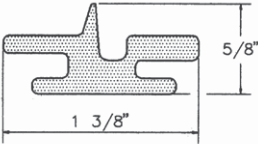
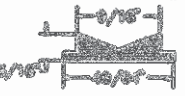
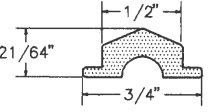
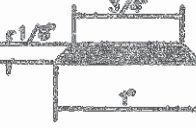
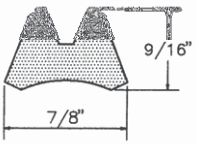
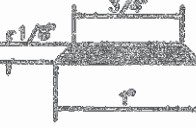
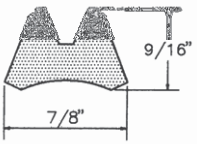


OAB

ASTRAGALS

DOOR ASTRAGALS

These parts have been compounded to meet specifications of ASTM-D-2000 SAE J200 2BC 715 B14 C 12 F17 GP20. Ordering information -- The astragals are stock in 7' lengths. If a special length is required, please specify when placing order. (All astragals shown are full size).

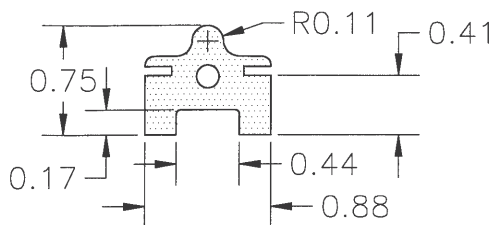
<p>Astragal #A100 Replaces hoistway astragal Dahlstrom SPOS294</p> 	<p>Astragal #A101</p> 	<p>Astragal #A102</p> 	<p>Astragal #A103</p> 	
<p>Astragal #A104 COMPANION PARTS Companion part #A105</p>  <p>Companion part #A104</p>	<p>Astragal #A105</p> 	<p>Astragal #A106</p> 	<p>Astragal #A107</p> 	<p>Astragal #A108</p> 
<p>Astragal #A109 Reversing</p>  <p>Replaces Otis & Escal</p>	<p>Astragal #A110</p> 	<p>Astragal #A111 Reversing 3/8" Groove</p> 	<p>Astragal #A112</p> 	
<p>Astragal #A117</p> 	<p>Astragal #A118 Reversing</p> 	<p>Astragal #A115 COMPANION PARTS Companion part #A116</p> 	<p>Astragal #A116 Companion part #A115</p> 	
<p>Astragal #A119 Reversing</p> 	<p>Astragal #A120</p> 	<p>Astragal #A119 Reversing</p> 	<p>Astragal #A120</p> 	

ASTRAGALS

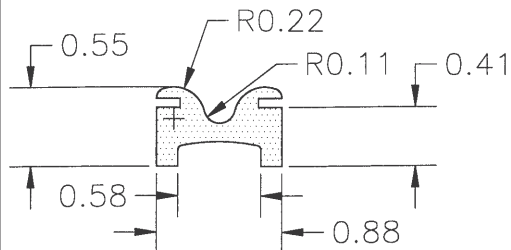
<p>Astragal #A121 Reversing Westinghouse</p>	<p>Astragal #A122 Reversing</p>	<p>Astragal #A123 Reversing</p>	<p>Astragal #A126 Reversing</p>
<p>Astragal #A124 COMPANION PARTS Companion part #A125</p>	<p>Astragal #A125 Replaces H&B</p> <p>Companion part #A124</p>	<p>Astragal #A128</p>	<p>Astragal #A129 Reversing</p>
<p>Astragal #A130</p> <p>Companion part #A131</p>	<p>Astragal #A131</p> <p>Companion part #A130</p>	<p>Astragal #A132 Reversing</p>	<p>Astragal #A135 Westinghouse Reversing</p>
<p>Astragal #A133 COMPANION PARTS Companion part #A134</p>	<p>Astragal #A134</p> <p>Companion part #A133</p>	<p>Astragal #A136 COMPANION PARTS Companion Part #A137</p>	<p>Astragal #A137 Companion Part #A136</p>

ASTRAGALS

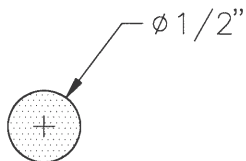
Astragal #A143A



Astragal #A143B



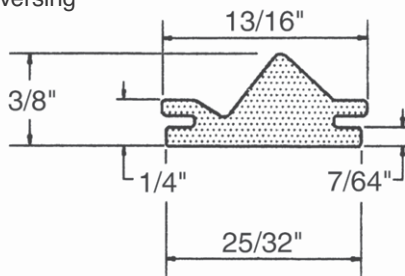
Astragal #A138



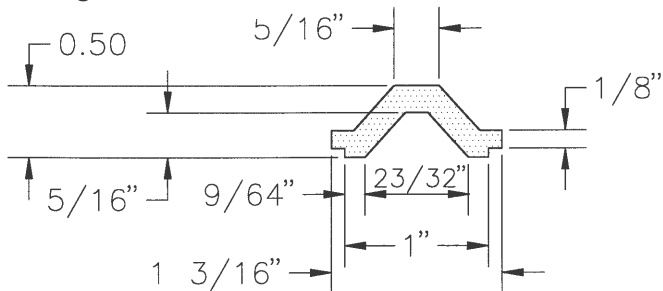
MATERIAL:
FLAME RETARDANT
BLACK RUBBER

Astragal #A132-DAA

Reversing



Astragal #A140



ASTRAGAL HOLDER, BABBITT SOCKETS

DOOR ASTRAGAL AND HOLDER

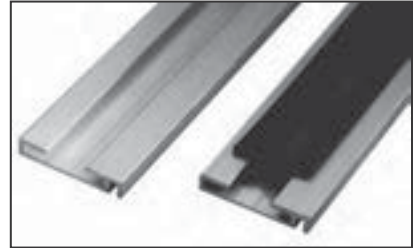
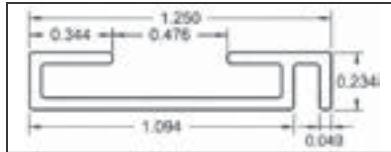
Door Astragal is included. 7' Length x 1-1/4" Wide.
(8' Length Also Available, Model DAA-8)

Model DAA

• Aluminum

Model DAAB

• Anodized Bronze



DAA

Model A132-DAA

• Replacement Astragal for DAA holder (see page 7)

AUXILIARY CONVENIENCE BOX

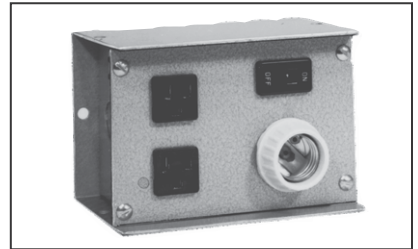
(Under Cab Work Light)

Model ACB

Designed with two 3-prong electric cord outlets, light switch, and ceramic incandescent light bulb socket. Pre-drilled mounting brackets ensure easy installation.

Model ACBG

Ground Fault Circuit Interrupter provided in place of 3-prong outlets. (Shown with optional metal lamp guard and rough service lamp)



ACB

BABBITT SOCKETS

All sockets meet and / or exceed ANSI A17.1 Rule 212 and proposed rule for wedge sockets.

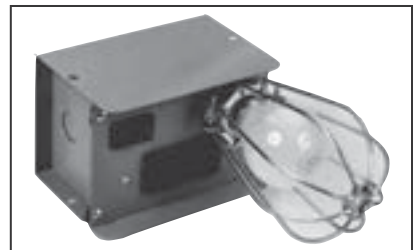
BS1218 1/2 x 18 3/4" Dia. rod

BS1224 1/2 x 24 3/4" Dia. rod

BS5812 5/8 x 12 7/8" Dia. rod

BS5818 5/8 x 18 7/8" Dia. rod

BS5824 5/8 x 24 7/8" Dia. rod



ACBG (Lamp and Lamp Guard optional)

SOLDER POTS see page 229

WEDGE SOCKETS see page 248



**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

BATTERIES, BEVEL WASHERS, BLOWERS, BLOWER MOTORS

Model

BATBR23A	3V	1.2AH	with leads (see page 44)
21EL005	4.8V	2.2AH	NICAD stick with leads
EP626	6V	3AH	5-1/4"L x 2-5/16"H x 1-5/16"D
EP-670-6	6V	7AH	5-7/8"L x 3-5/8"H x 1-5/16"D
PS-682-W2	6V	8AH	with leads
EP-695-6	6V	12AH	
EP-1229	12V	2.9AH	
DR-12V7AH	12V	7AH	5-1/8"L x 3-5/8"H x 2-1/2"D
B-718AAC1	12V	9.5AH	
EP-1212	12V	12AH	



BEVEL WASHERS (Hillside Washers)

Malleable iron square bevel washer 16° bevel matches up with flange on standard beams and channels. Use for shims and leveling.

Model BW050

- 1/2" hole diameter, 1-1/4" square
- 100 per pack

Model BW625

- 5/8" hole diameter, 1-1/2" square
- 100 per pack

"MORRISON" REPLACEMENT BLOWER MOTORS

Model 21FN011

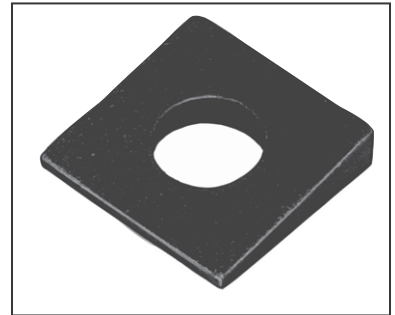
Motor, Cover and Wheel for #OE 2 speed blower, 115V.

Model 21FN010

Motor, for #AA 3 speed blower, 115V.

FAN MOTORS

See page 58



MORRISON BLOWERS/FANS

Model 21FN012

- Two speed fan
- 14" O.D.
- 5-1/4" high

Model MB3S

- Three speed blower, Model "AA"
- 115VAC

Model MB3SOE

- Three speed blower, Model "OE"
- 115VAC
- Replacement for 2 speed, Model "OE"

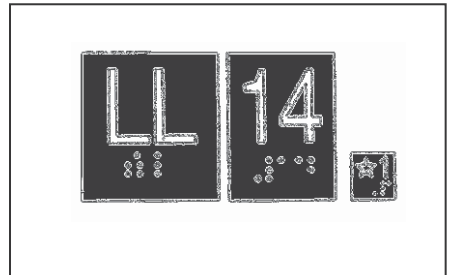
QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

BRAILLE, DOOR JAMB

BRAILLE PLATES

Pressure sensitive stainless with black background specially designed for the visually impaired. Stainless or bronze background and threaded studs are also available, but not in stock. All California code plates have tactile positioned to the left of the number or symbol.



JAMB PLATES

Character and Braille, 19 gauge (.042)

Bronze characters, black background

Model RBJ342

- 2" character
- 3" x 4" plate
- ADA Compliant

Model RBJ442

- 2" character
- 4" x 4" plate
- ADA Compliant

Black character, bronze background

Model BRJ342

- 2" character
- 3" x 4" plate
- ADA Compliant

Model BRJ442

- 2" character
- 4" x 4" plate
- ADA Compliant

Black characters, stainless steel background

Model BSJ342

- 2" Character
- 3" x 4" plate
- ADA Compliant

Model BSJ442

- 2" Character
- 4" x 4" plate
- ADA Compliant

Stainless steel characters, black background

Model SBJ342

- 2" character
- 3" x 4" plate
- ADA compliant

Model SBJ432BL

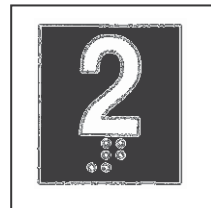
- Braille left
- 2" character
- 4" x 3" plate
- ADA compliant

Model SBJ340

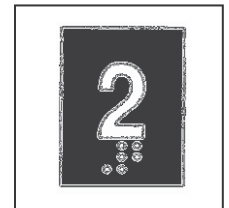
- 2.5" single character
- 3" x 4" plate

Model SBJ440

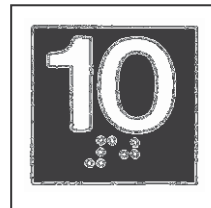
- 2.5" double character
- 4" x 4" plate



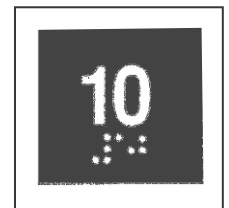
Model SBJ340



Model SBJ342



Model SBJ440



Model SBJ442

Model SBJ442

- 2" character
- 4" x 4" plate
- ADA compliant

Model SBJ642*

- 2" character
- 6" x 4" plate
- ADA compliant

Model SBJ640*

- 2.5" character
- 6" x 4" plate

*EASILY AVAILABLE, NOT STOCKED!

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

BRAILLE

PUSH BUTTON PLATES

For car operating panel and hall station. Numbers, letters and NEII symbols 22 gauge (.032)

Model SBJ125

- 1-1/4" x 1- 1/4" plate
- DO, DC, AL, ES, UP, DN, and floor markings
- "Fire Dept. Use Only" with red background to be used on Fire Key Boxes
- Black background, stainless steel characters

Model SBJ38*

- 1-3/8" Dia.
- All characters

Model SBJ100*

- 1-1/4" x 1" plate

Model SBJ116*

- 1-1/16" x 1-1/16" plate

Model WBJ125C*

- Meets California code
- White letters on black background

SYMBOL PLATES

Model SBJ325

- Phone, Phone Symbol, Lobby
- 22 gauge (.032)
- 1-1/4" x 3-1/4" plate

Model SBJ325C

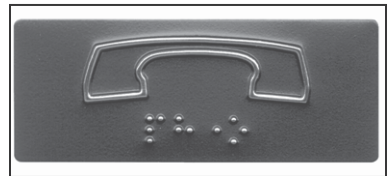
- Meets California code
- White letter on black background

All braille available in various colors and sizes - special order.
Variety of fastening systems to suit your needs.

***EASILY AVAILABLE, NOT STOCKED!**



Model SBJ125



Model SBJ325-PHON

BRUSH SPRINGS

SPRING CLIPS FOR BRUSHES - (TORSION & TENSION SPRINGS)

DOVER

Model DS-1015
Model DS-1016

BRUSH SIZE

1/2 x 1-1/2 x 2
3/16 x 1-1/4 x 2

IMPERIAL

Model IS-1032
Model IS-1033
Model IS-1034
Model IS-1035
Model IS-1036
Model IS-1037

BRUSH SIZE

7/16 x 1-1/2 x 2
3/8 x 1-1/2 x 2
3/8 x 1-1/4 x 2
3/8 x 1 x 1-1/2
5/16 x 1-1/4 x 2
1/4 x 1 x 1-1/2

OTIS

Model OES-1
Model OES-2
Model OES-3
Model OS-1049

BRUSH SIZE

OTIS TORSION SPRINGS
OTIS TORSION SPRINGS
OTIS TORSION SPRINGS
.492 X 1.565 X 2

WESTINGHOUSE

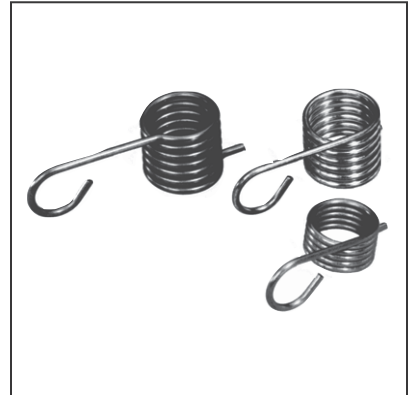
MODEL WS-1061
MODEL WS-1063
MODEL WS-1067
MODEL WS-1068
MODEL WS-1069
MODEL WCS-1

BRUSH SIZE

3/8 x 1 x 1-1/4
3/8 x 1 x 1-1/2
3/8 x 1-1/2 x 1-1/2
1/2 x 1-1/2 x 1-1/2
5/8 x 1-1/2 x 1-1/2
CLOCK SPRING



Westinghouse



Otis

OTHER STYLES AND SIZES AVAILABLE.
PLEASE INQUIRE.

BRUSHES

ARMOR MOTOR GENERATORS

Model No.	ARMOR Part No.	T (in.)	W (in.)	L (in.)	Style
A-BR116	10367-01	0.375	1	2	30
A-BR130	10368-01	0.5	1	2.125	30
A-BR136	10365-01	0.5	1.25	2	6
A-BR144	12906-01	0.625	1.25	2.125	43

ARMOR HOIST MOTORS

Model No.	ARMOR Part No.	T (in.)	W (in.)	L (in.)	Style
A-BR116	10367-01	0.375	1	2	30
A-BR120	10364-01	0.375	1.25	2	6
A-BR134	10365-01	0.5	1.25	2	6
A-BR136	10365-01	0.5	1.25	2	6
A-BR138	10366-01	0.625	1.25	2	6
A-BR146	12906-01	0.75	1.5	2.75	43

DOVER

Model No.	DOVER Part No.	T (in.)	W (in.)	L (in.)	Style
D-BR100	9705466	0.375	0.625	1.1875	5
D-BR101	9743674	0.375	1	2	6
D-BR102	9743601	0.375	1.25	2	6
D-BR103	9713890	0.375	1.5	2	6
D-BR104	9713888	0.5	1.5	2	59
D-BR105	9743906	0.5	2	2	6

IMPERIAL MOTOR GENERATORS

Model No.	Frame.	K.W.	T (in.)	W (in.)	L (in.)	Style
IM-BR104	284AY	7.5	0.25	1	1.5	6
IM-BR116	286AY	10	0.375	1	1.5	6
IM-BR124	324-326 AY	15-20	0.375	1.25	2	6
IM-BR132	366-367 AY	25-30	0.375	1.5	2	6
IM-BR138	367AY	40	0.44	1.5	2	7
	D-59	50				

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

BRUSHES

IMPERIAL HOIST MOTORS

Model No.	Frame.	HP	T (in.)	W (in.)	L (in.)	Style
IM-BR102	284 AY 286 AY	7.5-10 12.5	0.25	1	1.5	26
IM-BR122	324 AY 326AY	12.5-15 15	0.375	1.25	2	26
IM-BR130	326-368 AY D-56	20-40 40-50	0.375	1.5	2	26
IM-BR136	D-59	50-60	0.4375	1.5	2	7
IM-BR138	D-67	75	0.5	1.5	2	7
IM-BR140		100	0.625	1.5	2	12

HAUGHTON

Model No.	T (in.)	W (in.)	L (in.)	Style
H-BR100	0.25	0.625	1	6
H-BR102	0.375	1	1.5	60
H-BR104	0.375	1	1.5	--
H-BR106	0.375	1	1.5	61
H-BR108	0.375	1.25	1.75	62
H-BR110	0.375	1.25	2	55
H-BR112	0.375	1.375	1.5	62
H-BR114	0.5	1.5	2	62
H-BR116	0.5	1.5	1.5	62
H-BR118	0.625	1.5	2.125	46
H-BR120	0.625	1.5	2.75	46

BRUSHES

BULL

Model No.	Part No.	T (in.)	W (in.)	L (in.)	Style
B-BR100	SP54637	.3125	1	1	6
B-BR102	10372-01	.3125	1	1.1875	6
B-BR106	SP55345 (B15458)	.375	1.25	2	6
B-BR108	12948-01	.4375	1	1.875	26
B-BR110	3500/12	.5	0.625	1.25	58
B-BR112	691/5A	.5	1.25	1.625	2
B-BR114	SP55346 (B17977)	.5	1.25	2	6
B-BR116	3500/15	.625	0.625	1.25	58
B-BR118	691-5	.625	1.25	1.625	2
B-BR120	1714/15	.375	0.875	1	2
B-BR121	B15887	.3125	1	1.5	6
B-BR122	B17876	.626	1.25	2	6
B-BR123	B16116	.4375	1	1.5	2

GENERAL ELECTRIC MOTOR GENERATORS

Model No.	G.E. Part No.	FRAME Type	T (in.)	W (in.)	L (in.)	Style
GE-BR116	G-1/P-5	LY815,816,817	0.375	1	2	30
GE-BR130	G-2/P-10	LY819	0.5	1	2	6
GE-BR136	G-5/P-17		0.5	1.25	2	6
GE-BR144	G-3/P-12	LY820,822	0.625	1.25	2.125	SPLIT43

GENERAL ELECTRIC HOIST MOTORS

Model No.	G.E. Part No.	FRAME Type	T (in.)	W (in.)	L (in.)	Style
GE-BR120	G-6/P-18	CD286	0.375	1.25	2	6
GE-BR134	G-7/P-20	GTE12,16,25,31	0.5	1.25	2	6
GE-BR138	G-8/P-22		0.625	1.25	2	6
GE-BR146	G-9/P-24	GTE40	0.75	1.5	2.725	SPLIT43

BRUSHES

LERROY SOMER HOIST MOTORS

Model	Leroy Somer			T	W	L	Style
	Part No.	Frame	Bearing	(in./mm)	(in./mm)	(in./mm)	
LS-BR101	B2100537	284-324	SLEEVE	.31/8	.78/20	1.26/32	1
LS-BR103	B2100539	324(850)	SLEEVE	.47/12	.78/20	1.26/32	1
		326-366	SLEEVE				
		404(850)	SLEEVE				
LS-BR105	B2101436	364-406	BALL	.49/12.5	1.26/32	1.97/50	6
LS-BR106	B2100540	404-406	SLEEVE	.47/12	1.26/32	1.26/32	1
LS-BR107	B2100364	284-324	BALL	.39/10	.98/25	1.97/50	6
LS-BR109	B2100519	326	BALL	.31/8	1.26/32	1.97/50	6

LERROY SOMER MOTOR GENERATORS

Model	Leroy Somer			Style	T	W	L
	Part No.	Frame	K.W.		(in./mm)	(in./mm)	(in./mm)
LS-BR100	B2100537	GHA181	7.5	1	.31/8	.78/20	1.26/32
LS-BR100	B2100537	GH183	15	1	.31/8	.78/20	1.26/32
LS-BR102	B2100540	GH188	50	1	.47/12	1.23/32	1.26/32
LS-BR104	B2100539	GH182	10	1	.47/12	.78/20	1.26/32
LS-BR104	B2100539	GH184-86	20-30	1	.47/12	.78/20	1.26/32
LS-BR104	B2100539	GH187	40	1	.49/12	.78/20	1.26/32
LS-BR116	B2101309	GHA/C182	10	5	.49/12.5	.78/20	1.26/32
LS-BR116	B2101309	GHA/C187	40	5	.49/12.5	.78/20	1.26/32
LS-BR118	B2101426	GHA/C183	15	5	.31/8	1.26/32	1.26/32
LS-BR120	B2101361	GHA/C184-18620-30		5	.49/12.5	1.26/32	1.26/32

BRUSHES

WESTINGHOUSE

Model No.	Part No.	Style	T (in.)	W (in.)	L (in.)
W-BR200	X38A-62	2	0.375	0.75	1.25
W-BR201, 202	X38A-65, 74	2	0.375	0.75	1.5
W-BR203, 204, 205, 206, 207	X38A-64, 74, 63, 12, 13	2	0.375	1	1.5
W-BR208	X38A-3	2	0.375	1	1.75
W-BR209, 210	X38A-4, 69 X38-A	2, 11	0.375	1.25	1.75
W-BR211, 212, 214	X38A-6 16, 39, 72	2	0.5	1	1.75
W-BR215, 216, 217	X38A-67, 75, 32	2	0.5	1.25	1.75
W-BR218, 219	X38A-7, 9	2	0.5	1.25	1.75
W-BR220, 221	X38A-36, 68	2	0.625	1	1.75
W-BR222, 223	X38A-17, 40	2	0.625	1.25	1.75
W-BR250, 251, 252	X38B-7, 8, 9, X38-B	3	0.375	0.75	1.25
W-BR275	X38C-18	14	0.375	1	1.75
W-BR278	X38C-24	12	0.375	1.5	1.75
W-BR280, 281	X38C-22, 14 X38-C	12, 14	0.5	1	1.75
W-BR283, 284, 285	X38C-8, 15 23	13, 14	0.5	1.25	1.75
W-BR286, 287, 282	X38C-20, 19, 6	12, 13	0.5	1.25	1.75
W-BR288, 289	X38C-17, 25	12, 14	0.5	1.5	1.75
W-BR300, 301	X38E-4, 15	21	0.25	0.5	1
W-BR302, 303	X38E-18, 14	1	0.25	0.75	1.12
W-BR304, 305	X38E-2, 9	16	0.25	0.5	1.12
W-BR306	X38E-6 X38-E	16	0.25	0.75	1.25
W-BR307, 308, 309, 310	X38E-20, 22, 23, 24	16	0.25	0.75	1.25
W-BR311, 312	X38E-25, 21	16	0.25	0.75	1.25
W-BR313	X38E-10	16	0.25	0.75	1.37
W-BR314	X38E-19	16	0.21875	0.21875	0.937
W-BR325	X38F-3	17	0.1875	0.25	0.5
W-BR326	X38F-4 X38-F	17	0.1875	0.25	0.75
W-BR327	X38F-1	17	0.21875	0.28125	0.62
W-BR330	X38G-3 X38-G	1	0.5	0.75	1.25
W-BR340	X38H-5	16	0.1875	0.25	0.56
W-BR341	X38H-1 X38-H	16	0.1875	0.5	1
W-BR342	X38H-7	16	0.25	0.25	0.75
W-BR345	X38I-1 X38-I	1	0.375	1	1.75
W-BR350	X38J-3X38-J	23	0.1875	0.5	1.25
W-BR360, 361	X38K-2, 4	8	0.375	1	0.87
W-BR362	X38K-5	7	0.375	1	1.56
W-BR363	X38K-8	10	0.375	1	1.75
W-BR364	X38K-6	10	0.5	1	1.75
W-BR365	X38K-7	10	0.5	1.25	1.75
W-BR375	X38L-8	18	0.5	1	1.75
W-BR376	X38L-1	18	0.5	1	1.25
W-BR377, 378	X38L-2, 10 X38-L	18	0.5	1.5	1.5
W-BR379, 380, 381	X38L-9, 12, 3	18	0.5	1.5	1.5
W-BR382	X38L-6	18	0.5	0.625	1.75
W-BR400, 401	X38M-12, 16	2	0.3125	1.5	1
W-BR402, 403	X38M-10, 20	2	0.3125	1.5	1.75
W-BR404, 405, 406, 407, 408	X38M-3, 4, 9, 5, 17 X38-M	2	0.375	1	1.25

**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

BRUSHES

WESTINGHOUSE

Model No.	Part No.	Series	Style	T (in.)	W (in.)	L (in.)
W-BR409,410	X38M-1-19		2	0.375	1.5	1.75
W-BR411	X38M-13		2	0.5	1.5	1.75
W-BR425	X38N-1		16	0.25	0.3125	0.75
W-BR426	X38N-2	X38-N	16	0.25	0.3125	1
W-BR450	X38Q-28		20	0.375	1	1.25
W-BR451	X38Q-1		20	0.375	1	1.5
W-BR452	X38Q-32		19	0.375	1.5	1.5
W-BR453	X38Q-18		20	0.5	1	1.25
W-BR454,455	X38Q-2,-22		20	0.5	1	1.5
W-BR456	X38Q-3		19	0.5	1.5	1.5
W-BR457	X38Q-8	X38-Q	19	0.5	1.5	1.5
W-BR458,459,460,461	X38Q-10, 15, 17, 23		19	0.5	1.5	1.5
W-BR462,463	X38Q-5, 24		19	0.5	1.5	1.75
W-BR464,465,466,467	X38Q-4, 9, 14, 26		19	0.625	1.5	1.5
W-BR468,469,470,471	X38Q-6, 11, 25, 20		19	0.625	1.5	1.75
W-BR472,473	X38Q-12, 16		19	0.75	1.5	1.75
W-BR474,475	X38Q-13, 19		19	1	1.5	1.75
W-BR500	X38R-24		4	0.375	0.625	1
W-BR501,502,503	X38R-14, 18, 22		4, 11	0.375	0.625	1.25
W-BR504,505,506,507	X38R-1, 2, 6, 10		4	0.375	1	1.25
W-BR508	X38R-19	X38-R	4	0.5	0.625	1.25
W-BR509	X38R-3		4	0.5	1	1.25
W-BR510	X38R-15		4	0.5	1	1.5
W-BR511	X38R-21		11	0.375	1	1.5
W-BR512,513	X38R-4, 11, 16		11	0.375	1.5	1.5
W-BR515,516,517	X38R-5, 12, 17		11,2	0.5	1.5	1.5
W-BR518,519	X38R-13, 23		11	0.625	1.5	1.5
W-BR525	X38T-1	X38-T	16	0.1875	0.25	1

BRUSHES

OTIS

Model No.	Part No.	Style	T (in.)	W (in.)	L (in.)
O-BR151	240E22	2	0.75	1.75	2.75
O-BR160, 161, 162	240F3, 4, 5	26	0.375	1	2
O-BR163, 164, 165	240F14, 22, 26	26	0.375	1	2
O-BR166	240F20	26	0.375	1.5	2
O-BR168	240F1	26	0.5	2.0	2
O-BR169	240F21	26	0.5	1.5	2
O-BR171, 172, 173	240F11, 12, 23	26	0.625	1.5	2
O-BR175	240F15	26	0.875	1.5	2
O-BR167	240F19	26	0.5	1.5	1.75
O-BR174	240F25	26	0.625	1.5	2
O-BR170	240F27	26	0.625	1	2
O-BR180	240G1	34	1.0	0.5	1.5
O-BR181	240G3	33	1.25	0.75	1.875
O-BR190	240H2	24	0.4375	1.5	3
O-BR191	240H3	24	0.6875	1.5	3
O-BR192	240H4	24	0.6875	1.75	3
O-BR200, 201	240J1, 3	30	0.375	1.5	1.75
O-BR202	240J2	31	0.5	1.5	2
O-BR220, 221, 222, 223	240P1, 2, 3, 4	12, 32	0.375	1.5	1.75
O-BR261A	240R1, 3	28, 29	0.5	1.5	2
O-BR261	240R2	28	0.625	1.5	2
O-BR262	240T1, 5	26, 30	0.375	1	2
O-BR263	240T6	--	0.5	1	2
O-BR264	240W1, 3	6	0.5	1.5	2
O-BR265	240Y1	35	0.5	1.5	1.875
O-BR266	1-240Y1	--	0.5	1.5	2
O-BR402	186206	--	0.5	0.5	0.8125
O-BR404	186150	52	0.1875	0.1875	0.5
O-BR406	145094	16	0.25	0.25	0.5625
O-BR408	186142	52	0.25	0.3125	0.625
O-BR410	186207	16	0.25	0.375	0.8125
O-BR412	184450	16	0.4375	0.4375	1
O-BR414	186132	16	0.25	0.375	0.875
O-BR416	183454	52	0.1875	0.375	0.375
O-BR418	184448	24	0.25	0.625	1
O-BR420	186133	2	0.25	0.75	0.875
O-BR422	184306	52	0.375	0.675	1.25
O-BR426	184307	1	0.375	0.675	1.125

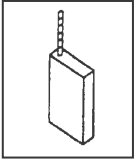
BRUSHES

OTIS

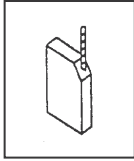
Model No.	Part No.	Style	T (in.)	W (in.)	L (in.)
O-BR100	240A1	24	0.6875	1.75	3
O-BR110	240AA1	28	0.49	1.57	2
O-BR120, 121	240B3, 4	25	0.5	1.5	2
O-BR122	240B6	28	0.625	1.5	2
O-BR130	240C1	27	0.25	1	1.125
O-BR140	240E10	67	0.25	0.875	2
O-BR141	240E13	67	0.375	1	2.75
O-BR142	240E14	67	0.375	1.25	2.75
O-BR144	240E16	67	0.375	1.5	2.75
O-BR145	240E17	67	0.375	1.75	2.75
O-BR146	240E18	67	0.375	2	2.75
O-BR147	240E2	67	0.05	1.5	2.75
O-BR148	240E4	67	0.625	1.5	2.75
O-BR149	240E8	67	0.625	1.5	2.75
O-BR150	240E20	67	0.625	1.75	2.75

BRUSHES

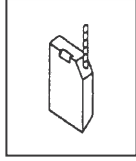
BRUSHES CROSS REFERENCE 1-28



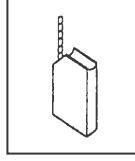
1



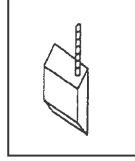
2



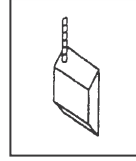
3



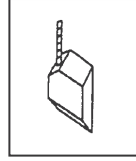
4



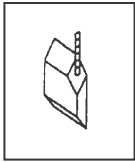
5



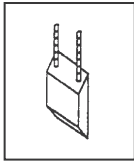
6



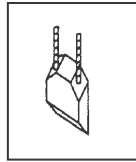
7



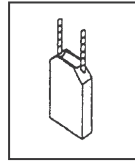
8



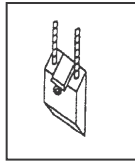
9



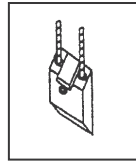
10



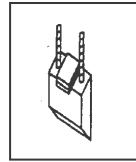
11



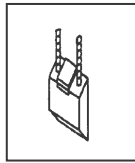
12



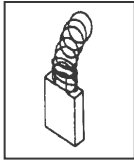
13



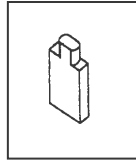
14



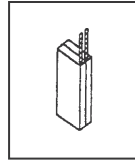
15



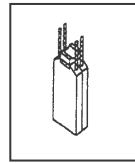
16



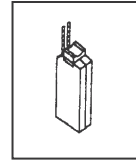
17



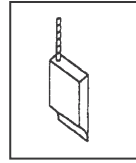
18



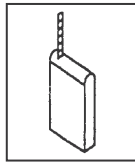
19



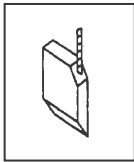
20



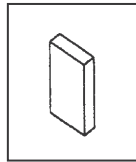
21



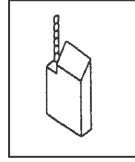
22



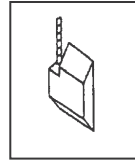
23



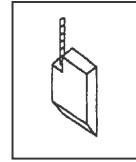
24



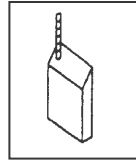
25



26



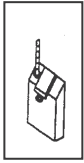
27



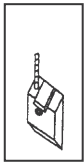
28

BRUSHES

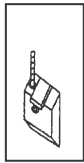
BRUSHES CROSS REFERENCE 29-67



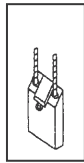
29



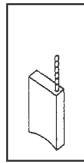
30



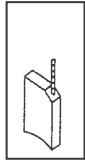
31



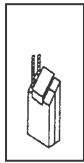
32



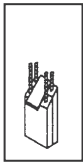
33



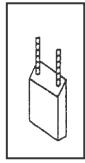
34



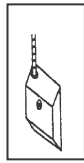
35



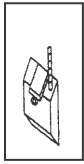
36



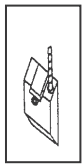
37



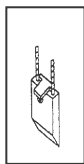
38



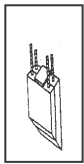
40



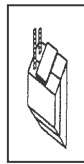
41



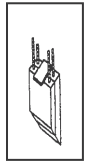
42



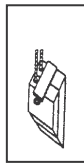
43



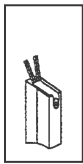
44



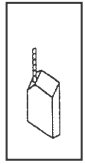
45



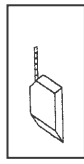
46



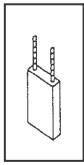
47



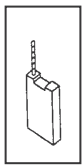
48



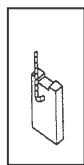
49



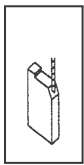
50



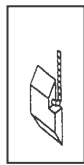
52



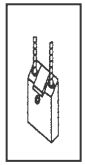
53



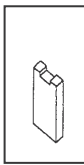
54



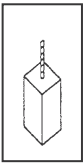
55



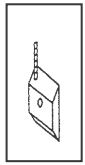
56



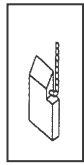
57



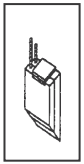
58



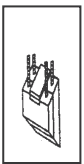
59



60



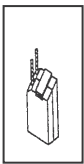
61



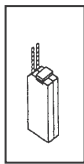
62



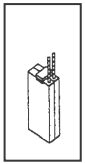
63



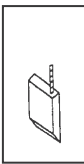
64



65



66



67

BRUSHES

BRUSHES WORKSHEET

MASTER COPY
PLEASE PHOTO COPY

MACHINE DATA

EQUIPMENT MANUFACTURER: _____

HOIST MOTOR OR MOTOR GENERATOR

FRAME _____

RPM _____

VOLTS _____

AMPS _____

M/G SET (KW) _____

HOIST MOTOR (HP) _____

NUMBER OF BRUSHES PER UNIT _____

BRUSHES DEFINITIONS:



BRUSHES DIMENSIONS:

THICKNESS _____ (IN.)

WIDTH _____ (IN.)

LENGTH _____ (IN.)

BRUSHES STYLES (SEE PAGES 21, 22)

BEVEL ANGLES



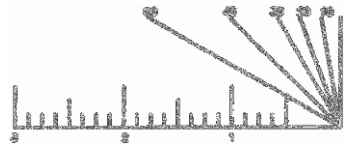
TOP BEVEL _____ °

FACE BEVEL _____ °

SHUNT LENGTH

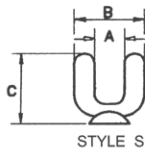


SHUNT LENGTH = _____ (IN.)

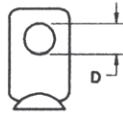


TERMINAL (SPECIFY SIZE OF ALL OPENINGS)

STYLE _____



STYLE S



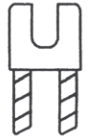
STYLE C



STYLE FC



STYLE FO



STYLE PT

DIMENSIONS: A _____ B _____ C _____ D _____

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

BUFFERS: SPRINGS AND STANDS

BUFFER SPRINGS

Model BUF

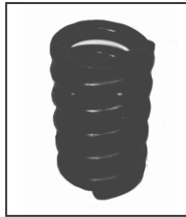
- 9" H, 5-1/2" O.D., 3-3/8" I.D.
- 1-1/16" wire.
- Max. Solid Capacity - 10,721 lb.
- Rating - 4,288 lb./in. with 2-1/2" stroke

Model BUF2

- 8-1/4" H, 2-15/16" O.D., 1-1/2" I.D.
- 11/16" wire
- Max. Solid Capacity - 5,386 lb.
- Rating - 3,314 lb./in. with 1-5/8" stroke

Model BUF3

- 12-3/4" H, 3-3/4" O.D., 2-1/2" I.D.
- 11/16" wire
- Max. Solid Capacity - 3,505 lb.
- Rating - 1,275 lb./in. with 2-3/4" stroke



BUFFER SPRING STAND

Manufactured from structural steel shapes. Spring size determined by car capacity. Custom made for each order.

Model	Total Height
BSS24	up to 24"
BSS36	up to 36"
BSS48	up to 48"
BSS120	up to 120"

Model BSSCWT

- Counterweight Buffer Stand for BUF, BUF2 and BUF3 springs

BUFFER SPRING STAND WORKSHEET

1 Total Height: _____

2 Total Length: _____

Gross Load: _____

Stands Quantity: _____

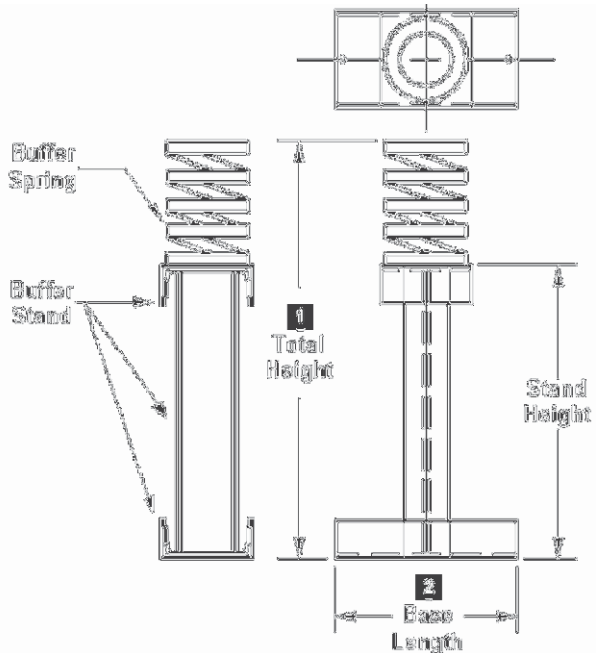
Include one of the springs (if necessary):

- Model: BUF:
 • 9" H, 5-1/2" OD, 3-3/8" ID
 • 1-1/16" wire
 • Max. Solid Capacity - 10,721 lb
 • Rating - 4,288 lb/in with 2-1/2" stroke

- Model: BUF2:
 • 8-1/4" H, 2-15/16" OD, 1-1/2" ID
 • 11/16" wire
 • Max. Solid Capacity - 5,386 lb
 • Rating - 3,314 lb/in with 1-5/8" stroke

- Model: BUF3:
 • 12-3/4" H, 3-3/4" OD, 2-1/2" ID
 • 11/16" wire
 • Max. Solid Capacity - 3,505 lb
 • Rating - 1,275 lb/in with 2-3/4" stroke

Note:
 Stands are custom made and non-returnable.
 Please recheck before submitting.



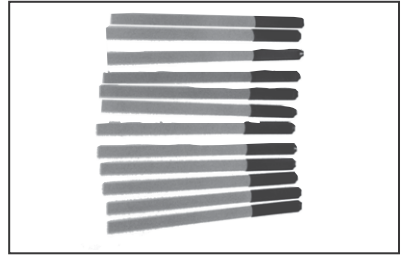
BURNISHING TOOLS, CABLE HANGERS

BURNISHING TOOL

Model CB8043

Metallic “Non-Residual” Contact Burnisher
Use on Silver, Platinum, Tungsten, Molybdenum, and all precious metal contacts. Leaves no grit, dust or film on contact to start a new carbonaceous build up.

- Economical - Respects valuable contact material due to very hard and so very mild abrasive surface, both sides of blade
- Flexible - Just enough stiffness so you can apply right amount of pressure to contact.



CABLE HANGERS

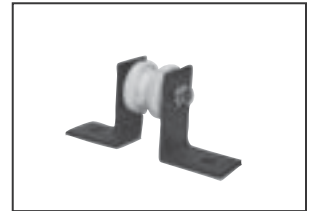
Two models available.

Insulated model with spool insulators

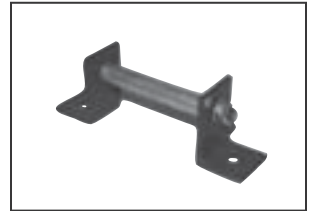
- Model CHI-1** • One spool
- Model CHI-2** • Two spool
- Model CHI-3** • Three spool
- Model CHI-4** • Four spool

Non-Insulated model

- Model CHNI-1** • One cable
- Model CHNI-2** • Two cables
- Model CHNI-3** • Three cables
- Model CHNI-4** • Four cables



MODEL CHI-1

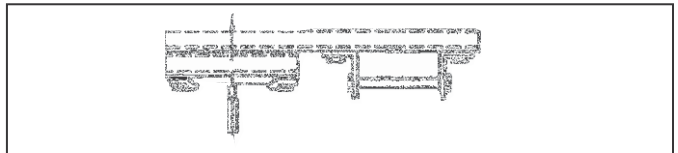


MODEL CHNI-1

UNISTRUT BRACKET

Model CHU

- Optional 48” unistrut bracket



MODEL CHU

SPOOL INSULATOR

Model RI5107

Round porcelain insulators

Dimensions

- 2-1/8” high, 2-1/4” diameter, 9/16” center hole.



MODEL RI5107

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

CABLE SUPPORT GRIPS, TRAVELING CABLES

SUPPORT GRIPS

Carry hanging load of cable by outer jacket.
Use to alleviate stress that could be exerted on individual copper wires inside travelling cable which can result in circuit failure.

Model	Cable Diameter
CG-050	1/2" - 5/8"
CG-062	5/8" - 3/4"
CG-075	3/4" - 1"
CG-100	1" - 1-1/4"
CG-125	1-1/4" - 1-1/2"
CG-150	1-1/2" - 1-3/4"



TRAVELING CABLES (IN STOCK!)

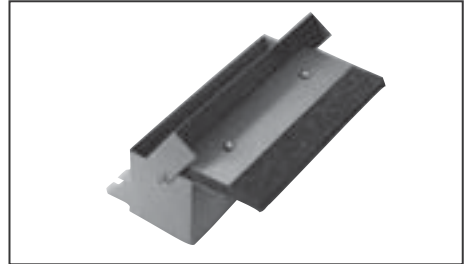
JUTE CENTER CORE	TC10-18	10#18AWG (0.54" Diameter)
	TC20-18	20#18AWG (0.71" Diameter)
	TC30-18	30#18AWG (0.94 " Diameter)
	JC27	20#18, 3#14, 2 Shielded Pair (0.94" Diameter)
	JC37	31#18, 4#14, 1 Shielded Pair (1.00" Diameter)
	JC57	45#18, 6#14, 3 Shielded Pair (1.39" Diameter)
	JC59	49#18, 4#14, 3 Shielded Pair (1.22" Diameter)
STEEL CENTER CORE	CWS45D	31#18, 4#14, 5 Shielded Pair (1.31" Diameter)
	CWS56	48#18, 6#14, 1 Shielded Pair (1.20" Diameter)
	CWS59	49#18, 4#14, 3 Shielded Pair (1.22" Diameter)
	CWS71	61#18, 6#14, 2 Shielded Pair (1.50" Diameter)
	CWS75	69#18, 4#14, 1 Shielded Pair (1.38" Diameter)
	CWS81	59#18, 8#14, 7 Shielded Pair (1.60" Diameter)
	CWS94	70#18, 12#14, 6 Shielded Pair (1.68" Diameter)
	TCSX57	40#18, 4#14, 6 Shielded Pair, 1 Coax (1.53" Diameter)

CABLE OILERS, CALIPERS, CIRCUMFERENCE TAPE MEASURE

CABLE OILERS

Keeps cables lubricated for longer cable and sheave life. To determine size measure distance between outside cables and add 1" to each side.

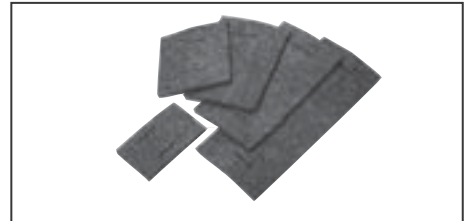
Model CO4	• 4" Oiler
Model CO7	• 7" Oiler
Model CO9	• 9" Oiler
Model CO12	• 12" Oiler
Model CO16	• 16" Oiler



WICKS

Replacement wicks for cable oilers.

Model CO4W	• 4" wick
Model CO7W	• 7" wick
Model CO9W	• 9" wick
Model CO12W	• 12" wick
Model CO16W	• 16" wick

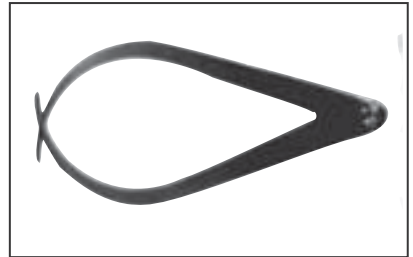


CABLE OIL see page 108

CALIPERS

Model FJC10

Firm joint outside caliper legs made from high grade steel. Measure pistons up to 13" Dia.



TAPE MEASURE

Model CT6

Measure diameter of any circular object. Two side blade graduation. Front: 16ths, 32nds for first 12". Back: diameter inches to 1/100ths. Blank space before zero.

- 6 feet long by 1/4" wide
- Steel blade with metal ring
- Lightweight plastic case w/automatic rewind



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

CAPACITY PLATES, SIGNS

ELEVATOR CAPACITY PLATES

Model CPS-13

3-1/2"W x 1-1/2"H, 1/16" Thick.

Pliable laminated material, with metallic finish on black substrate

- Brushed silver with black engraved lettering (in stock)
- Brushed gold available
- 5/8" high letters
- 1" high letters available

Model CPM-24

4" W x 2" H 22 gauge (.032) Stainless steel or bronze. Several versions available:

- All brushed stainless or bronze
- Black background with brushed stainless letters (in stock)
- Black background with bronze letters
- Stainless steel or bronze background with black letters
- 5/8" H letters

**CAPACITY
2000 LBS.**

CPS-13-2000

**CAPACITY
2000 LBS.**

CPM-24-2000

ELEVATOR CAPACITY & LOADING SIGNS

Signs are available in custom sizes, colors, words and various metal finishes. Please inquire.

F-1080

10" x 7"



F-1102

9" x 6"



F-1104

10" x 7"



F-1105

10" x 7"



F-1106

10" x 7"



F-1107

10" x 7"



F-1108

10" x 7"



F-1109

10" x 7"



**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

CERTIFICATE FRAMES, CHIMES

CERTIFICATE FRAMES

- Stainless steel, bronze or mirrored stainless finish with acrylic windows
- Hidden mounting screws prevent vandalism
- Mounts vertically or horizontally

Model 51CF001

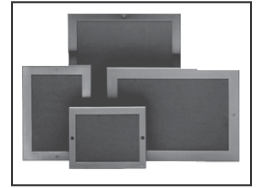
Screws only for certificate frames

Model 51CF001W

Replacement Wrench



CF46NS



Finish and Model				Window Dimensions		Outside Dimensions	
Stainless	Stainless #8	Bronze	Bronze	Width	Length	Width	Length
Brushed (#4)	Mirrored (#8)	Brushed (#4)	Mirrored (#8)				
CF235	CF235MS	CF235B	CF235MB	2"	3-1/2"	3"	4-1/2"
CF34	CF34MS	CF34B	CF34MB	3-1/2"	4-3/4"	4-1/2"	5-3/4"
CF46	CF46MS	CF46B	CF46MB	4"	6"	5-1/2"	7-1/2"
CF46.5 GSA				4"	6-1/2"	5-1/2"	8"
CF48	CF48MS	CF48B	CF48MB	4-1/4"	8-1/4"	5-3/4"	9-3/4"
CF69	CF69MS	CF69B	CF69MB	5-5/8"	8-5/8"	7-1/8"	10-1/8"
CF810B		CF810B		7-3/4"	9-3/4"	9-1/4"	11-1/4"
CF8514				8-1/2"	14"	10"	15-1/2"

Certificate frames are now available with "NO SMOKING," "ELEVATOR PERMIT ON FILE IN MANAGEMENT OFFICE," "PERMIT ON FILE IN ENGINEERS OFFICE," silk screened on frame. Add NS to model number (short side) or NSL (long side).

HANDICAP CHIMES

Electronic replacement for mechanical bells.

Model CA100 48-130VAC/VDC

Model CA100-12 12VAC/VDC

Model CA100-24 24VAC/VDC

Arrival Chime, ANSI A117.1, Rule 4.10.4.

Model CA101

Arrival Chime, extra loud (with External Speaker).

Model CP101

Passing Chime 20-130VAC/VDC

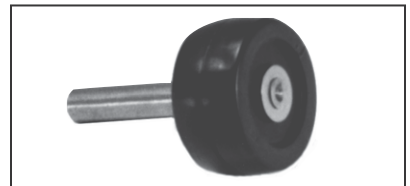
- ANSI A117.1, Rule 4.10.13

Model CSG102

Signal Generator to activate floor passing chimes on elevators without a "floor passing signal".

CLUTCH ROLLER & SHAFT

Model CRS • Replacement for G.A.L. - MO



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

CHILLER, HYDRAULIC OIL

- Stable efficiency regardless of the ambient air temperature
- Best for high temperature in the machine room
- Screw pump with high suction capability
- Compact alternative to oil-to-air heat exchangers

OIL COOLER

- Operating oil ISO VG 32, viscosity 10 cst to 68 cst
- Output oil temperature setting 68°F (20°C) to 95°F (35°C)

COMPRESSOR

- Rotary hermetic compressor, cooled by the refrigerant
- Thermal overload protection

REFRIGERANT CIRCUIT

- Charge connection, dryer filter, high pressure switch
- HFC ecological cooling fluid R410 (or R134A/R410A/R404A)

EVAPORATOR

- Braze- joining, stainless steel, with anti-freeze protection

COOLING FAN

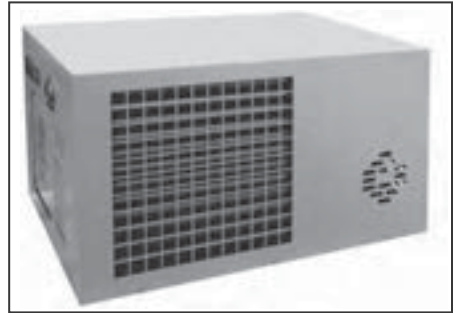
- Thermal overload protection, speed control, and safety guard

OIL PUMP

- Direct drive screw pump with high suction capability
- 7.93 GPM, adjustable pressure up to 135PSI (10bar)

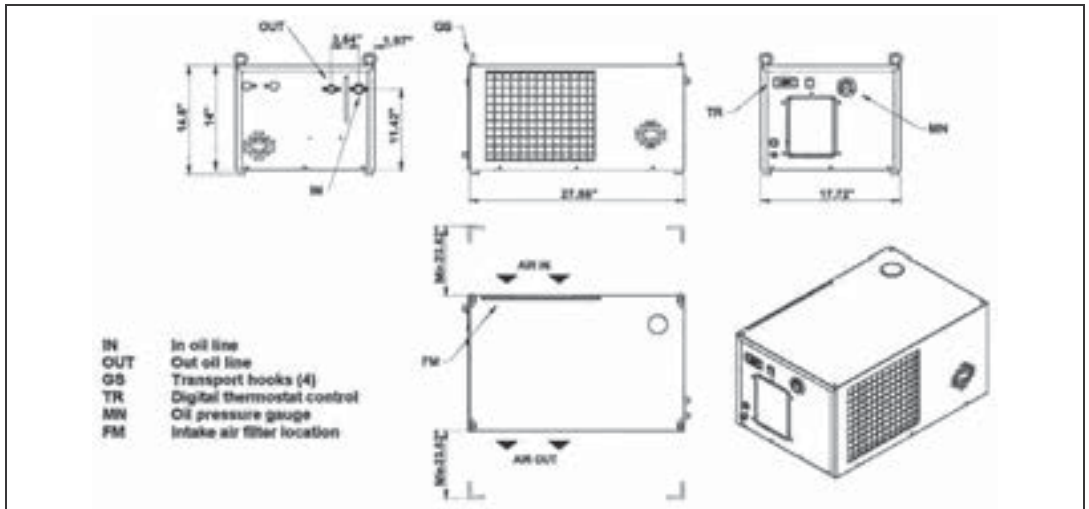
DIGITAL THERMOSTAT

- On-Off cooling adjustment, keypad lock
- Alarm signals
- Oil temperature sensor with 10' leads



Model OC-15873

Capacity:	15,873 BTU/h
Ambient air:	59°F to 113°F
Electrical:	230VAC, 1 Phase, 11.6A Max.
Noise level:	54 dBA @ 3 feet, UNI ISO 3746
Oil line:	IN 3/4" BSP, OUT 1/2" BSP
Dimensions:	27.56"L x 17.75"W x 14.6"H
Weight:	110 lbs (50 kg)

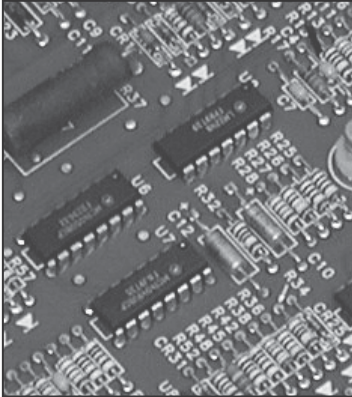


OIL-TO-AIR HEAT EXCHANGERS see page 234

CIRCUIT BOARDS

CIRCUIT BOARDS

ECI Circuit Boards are now available at Quality Elevator Products. We carry a selected inventory of Boards. All other Boards, Board repair and exchanges available.



- Allen Bradley
- Amtech
- Armor
- Baldor
- Baxco
- CE Electronics
- Claddagh
- Computerized
- Concord
- Condor
- Denver
- Divelbliss
- Dover
- ECI Canada
- Elevator Controls
- EMAC
- Entertron
- EPCO
- ESCI
- ESCO
- GAL Manufacturing
- GE Fanuc
- General Electric
- Haughton
- Industrial Electronic
- Innovation Industries
- Intel
- International Power
- IPC Automation
- Kinematics
- Kone
- Lambda
- LH Research
- Louis Allis
- MAC
- Magnetek
- Mathis Electronics
- Matrox
- Memco-Otis Memco
- Micro Control
- Millak
- Montgomery
- Motion Control (MCE)
- Mowrey
- Nickerbocker-New York
- Northern Elevator
- O&K
- Otis
- Payne Elevator
- Photo Bell
- Power One
- Reliance
- Reynol
- Robico
- Salish
- Schindler
- Serge
- Sweo
- Swift
- Thame
- US Elevator
- Vertisys
- Vertitron
- Virginia
- Westinghouse
- White
- Wigger
- World

The following Models on the page are just a few of the Boards available. If you don't see the Board you need, CALL!!

MODEL NUMBER O.E.M. DESCRIPTION

KONE	
10119	I/O BOARD, 55011G02
10120	FLOOR BOARD, 55007G01/55005
10121	RELAY OUTPUT, 55019G03/55017
10122	RELAY OUTPUT, 55019G03/55017
10138	RELAY OUTPUT, 55055G01
OTIS	
10228	INTERFACE, A8114A1
10086	5/35 VOLT P/S, A8118A1
10087	5/35 VOLT P/S, AAA610RE1
10142	LRV/LRS HALL CALL, E8121BE1
10141	LRV PROCESSOR, E8121DB1/AAA610GL CS
10140	LRV-3 PROCESSOR, F8121BC1/AAA610GK
10227	LRS TONE INTERFACE, A8121BJ1
10143	LRV3, A8121AW1
10144	HALL CALL, A8121AY1
SCHINDLER	
10084	IO2 EPOCH 1, 998C090H12
10108	IO6 EPOCH 1, 998C091H12
10085	IO8 EPOCH 1, 998C092H12
10236	HVM, 998C214H12
10238	FCB, 998C148H25

MODEL NUMBER O.E.M. DESCRIPTION

DOVER	
10123	DMC POWER RELAY, 6300BJ11
10124	DMC CLC PROCESSOR BOARD
10125	CLC PROCESSOR BOARD, 6300BP4/9715710
10126	MAIN SENSOR, 66300CV2
10127	SELECTOR, 6300CV2
10128	DOOR/BD/DMC/TIV, 6300FX3
10114	EMITTER DETECTOR, PWA 1958384A
10115	EMITTER DETECTOR, PWA 1958384A
10116	EMITTER DETECTOR, PWA 1958384A
10117	EMITTER DETECTOR, PWA 1958384A
10118	EMITTER DETECTOR, PWA 1958384A
10229	4 SLOT POWER, 105248
10230	DUPLEX, 68433
10231	TOP & BOTTOM, 105251
10232	INTERMEDIATE, 105252
10233	OPTION, 105254
10234	DOOR, 124519
10235	CAR, 123948
10256	OPTICAL LEVELING BOARD, 145557

**QUALITY
ELEVATOR** PRODUCTS, INC.

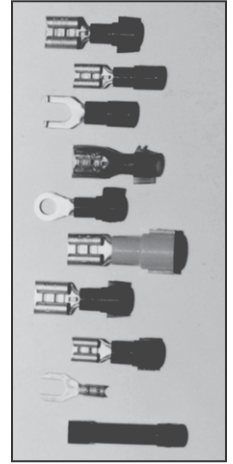
(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
 7760 N. Merrimac Ave. • Niles, IL 60714

CONNECTORS, SIGNS, DATA TAGS

CONNECTORS

Sold in packages of 10

Part No.	Vendor No.	Wire Range	Description
C02IS001	ICTD125-250-03F	22-16	Red Female Quick Slide
C02IS003	TME125-187-0SF	22-16	Red Insulated Female Quick Connect
C02IS004	ICTY12540W	22-16	Blue With 90° Up Flange
C02IS005	ICTN125-187-02FA(45)	22-16	Red Insulated Quick Slide
C02IS006	ICTD12535MB	22-16	Red Ring Tongue
C02IS007	ICTD550-250-03F	12-10	Yellow Female Quick Slide
C02IS008	ICTD200-250-03F	16-14	Blue Female Quick Slide
C02IS009	ICTD200-187-02F	16-14	Blue Female Quick Slide
C02PE001	62-3070		#6 Telephone Space Lug
C02PF001	TMB125S	22-16	Red Butt Connector



CKIT 10 each of the above in case.

DANGER SIGNS

OD-87
7" x 10"



OD-90
7" x 10"



OD-94
11" x 14"



OD-3
7" x 10"



OD-91- Danger/Elevator pit (7" x 10").

DATA TAGS

(Custom tags also available, call for quote)

MANUFACTURER	DATE INSTALLED
CAPACITY LB	SPEED FPM
ROPE SIZE	NUMBER
STRENGTH LBS	CAB WEIGHT LBS

MODEL TAG (5" W x 2 1/2" H)

DATE OF TEST
FULL LOAD P.S.I. LBS.
BYPASS P.S.I. LBS.

MODEL TAG2 (4" W x 2" H)



MODEL 2011T11 - 5/16" Blank lead seal, 6" leads.

RATED LOAD-LBS	RATED SPEED-FPM
HOIST ROPES	BREAKING STRENGTH-LBS
TOTAL CAR WT-LBS	INSTALLED

MODEL TAG4 (8-1/2" W x 1-1/2" H)

MANUFACTURER	DATE INSTALLED
CAPACITY LB	SPEED FPM
PISTON DIAMETER	
CAB WEIGHT LBS	

MODEL TAG3 (5" W x 2 1/2" H)

GOVERNOR TEST	
TRIP SPEED	FPM
EMERGENCY STOP	FPM
TRIP SPEED	FPM
DATE OF TEST	

MODEL TAGGOV (3" W x 4" H)

GOVERNOR	
ANNUAL SAFETY	
5 YEAR BUFFER	
DATE RELAY	

MODEL TAG5 (3-1/2" W x 1-3/4" H)

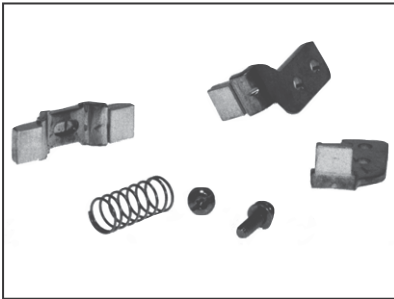
HYDRAULIC PRESSURES	
STATIC EMPTY	
WORKING	
RELIEF	
DATE OF TEST	

MODEL TAG6 (3" W x 1-5/8" H)

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

CONTACT KITS, REPLACEMENT



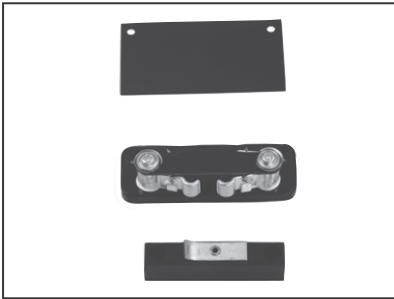
FURNAS CONTACT KITS

Single pole stationary and movable contacts, contact springs.

Model 75FB14A
Model 75GB14
Model 75HB14A
Model 75IB14A
Model 75JB14A

Model 75DF14
Model 75FF14
Model 75GF14
Model 75HF14
Model 75IF14

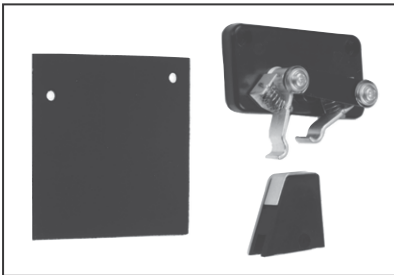
Available in either Furnas or aftermarket equivalent. Other kits, including Allen-Bradley, G.E., and Square D readily available.



G-GATE SWITCH KIT (GAL Part No. G-KT)

Model DG-KT consisting of:

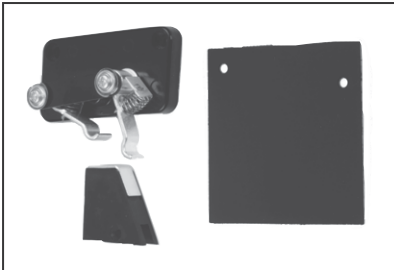
- 1 Stationary Contact Assembly
- 1 Movable Contact Assembly
- 1 Insulator
- Mounting Screws



MO RIGHT HAND CONTACT KIT (GAL Part No. MO-KT-R)

Model DMO-KT-R consisting of:

- 1 Right Hand Contact Assembly
- 1 Bridging Block
- 1 Insulator
- Mounting Screws



MO LEFT HAND CONTACT KIT (GAL Part No. MO-KT-L)

Model DMO-KT-L consisting of:

- 1 Left Hand Contact Assembly
- 1 Bridging Block
- 1 Insulator
- Mounting Screws

DIAL INDICATORS, DOOR BUMPERS

DIAL INDICATOR

Model DI-1

- Travel range 1/4"
- Graduation 0.001"
- Reading 1-100
- Satin chrome finish



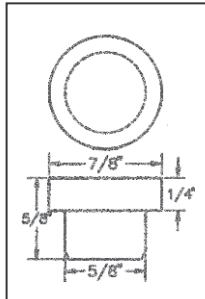
Model DI-1

RUBBER DOOR BUMPERS

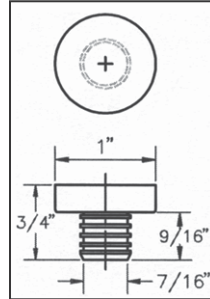
Rubber bumpers for installations and renovations or as a general maintenance replacement part.

Model RDB1647

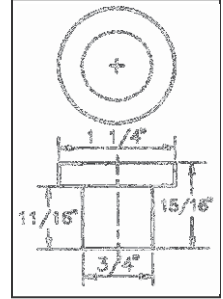
- 7/8" diameter face
- 5/8" diameter shaft
- 5/8" o.a. height



Model RDB1647



Model RDB716



Model RDB242

Model RDB716

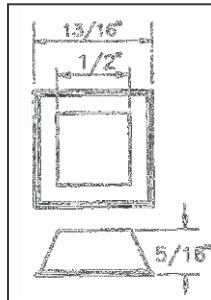
- 1" diameter face, 3/16" thick
- Shaft molded to fit 7/16" diameter hole

Model RDB242

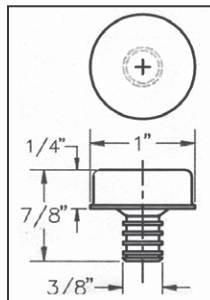
- 1-1/4" diameter face
- 3/4" diameter shaft
- 15/16" o.a. height

Model RDB209

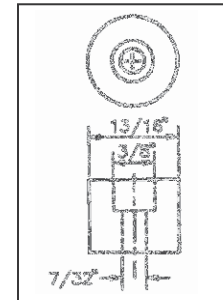
- Threaded stem
- 1" diameter face
- 3/8" diameter shaft
- 7/8" o.a. height



Model RDB8023



Model RDB209



Model RDB251

Model RDB251

- 13/16" diameter face
- 7/32" diameter shaft through
- 23/32" o.a. height

Model RDB8023

- 13/16" square
- 5/16" o.a. height

DOOR GIBBS

DOOR GIBBS

Model DGCECD4C

- 1-1/8" wide chassis with 15/32" wide white nylon gib
- 10 adjustments

Model DGCECD5C

- 1-1/4" wide chassis with 15/32" wide white nylon gib
- 12 adjustments

Model DGCEHD4C

- 1-1/8" wide chassis with 17/32" wide green nylon gib
- 10 adjustments

Model DGCEHD5C

- 1-1/4" wide chassis with 17/32" wide green nylon gib
- 12 adjustments

Model DGCETD4C

- 1-1/8" wide chassis with 1/2" wide blue nylon gib
- 10 adjustments

Model DGCETD5C

- 1-1/4" wide chassis with 1/2" wide blue nylon gib
- 12 adjustments

Model DGCEMGD4C

- 1-1/8" wide chassis with 7/16" wide black nylon gib
- 10 adjustments

Model DGCEMGD5C

- 1-1/4" wide chassis with 7/16" wide black nylon gib
- 12 adjustments

Model EP-GBBR (Fire Gib)

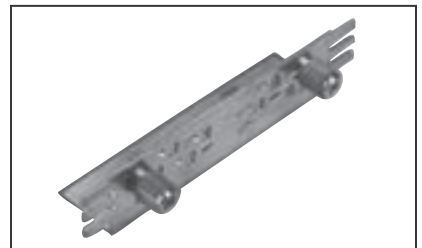
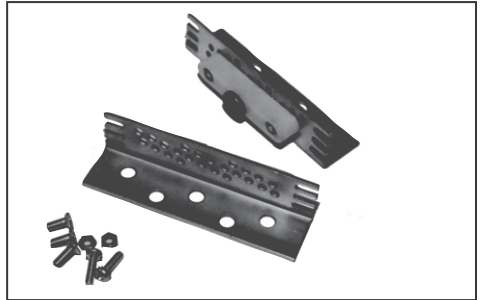
Roller bearing door gib for extended door operation life.

- Eliminates door side play
- Specify chassis width when ordering: 1", 1-1/8", or 1-1/4"

EP-BRD3 • 1"

EP-BRD4 • 1-1/8"

EP-BRD5 • 1-1/4"

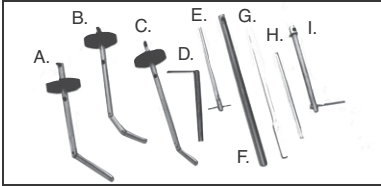


EP-GBBR

DOOR KEYS

DOOR KEYS

All aluminum and steel construction



A. Model O2N

Otis 2 section 5.76"
Replacement for
Otis #194AD3

B. Model O3N

Otis 3 section 5.76"
Replacement for
Otis #194AD7

C. Model O2N2

Otis 2 section 7.12"
Replacement for
Otis #194AD4

D. Model GML

G.A.L. Type M lock

E. Model OL6

Otis L lock

F. Model OL10

Otis Lunar 10-1/2" L
Replacement for Otis #194D2

G. Model WT9

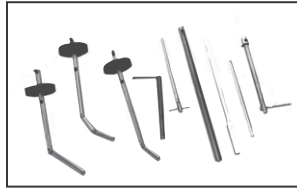
Westinghouse "T" 9" L

H. Model WL6

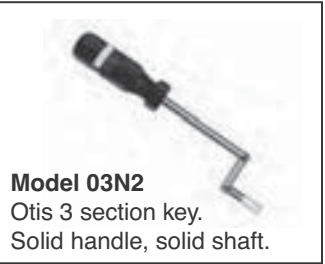
Westinghouse Lunar 6" L

I. Model GDK

Replacement for
G.A.L. Model KMO



Model KP Set of all 9 keys



Model 03N2

Otis 3 section key.
Solid handle, solid shaft.



Model 03N2F

Otis 3 section key.
Hollow handle, flexible shaft.



Model OTK-UTA (Otis UTA) **Model OTK-UTE** (Otis UTE)
Model OTK-UTB (Otis UTB) **Model OTK-UTF** (Otis UTF)
Model OTK-UTC (Otis UTC) **Model OTK-UTG** (Otis UTG)
Model OTK-UTD (Otis UTD)



Dover keys in stock

Model DK-1846 (H1846)

Model DK-1848 (H1848)

Model DK-2389 (H2389)

Model DK-2385 (H2385)

Model DK-2395 (H2395)

Model DK-2398 (H2398)

Model DK-1

• Door Key Montgomery MK06

Model DK-2

• Door Key Montgomery A00

Model MK01

• Door Key Montgomery

Model MK05

• Door Key Montgomery

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

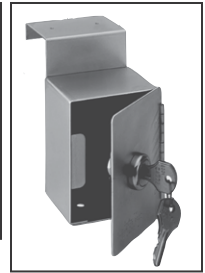
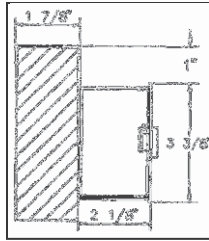
7760 N. Merrimac Ave. • Niles, IL 60714

DOOR KEY KEEPERS, DOOR KIT, DOOR MOTORS, PRESSURE GAUGES

DOOR KEY KEEPER

Model DKK

This sturdy 16 gauge welded steel keeper has one common key ... eliminating multiple key confusion and deterring theft. Cadmium plated to prevent rust, its continuous piano hinge is designed so that the pin cannot be removed. We provide registered keying, preventing unauthorized entry. Additional keys are available upon request.



DKK

Key Keeper Replacement Part

Model K01KK Key only

Model DKK-KT

This door key keeper mounts around a door handle. The key is housed in a 2-3/4" L x 1-1/4" W x 1-1/8" H 16 gauge steel box. We provide registered keying, preventing unauthorized entry. Additional keys are available upon request.



DKK-KT

DOOR KIT (HANGER ROLLER)

Door Hanger Roller Kit

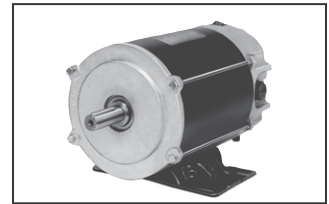
(Replaces GAL NH Roller Kit)



NH-KIT

Model NH-KIT

• Consists of roller, wiper and washers.



REPLACEMENT DOOR OPERATOR MOTORS

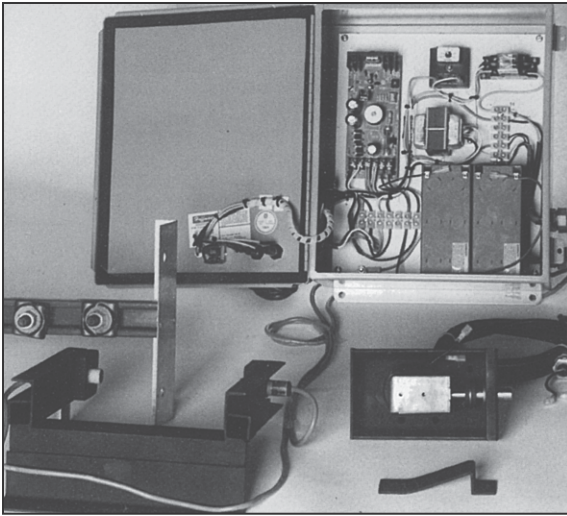
Replacement motors match the original specifications exactly. Just remove the old, install the new: same frame, same mounts, same shaft diameter, same power.

Model	Type	Operating		HP	Weight	Length		Diameter	
		Voltage				Body	Shaft	Body	Shaft
DD6	Dover	230VDC		1/6	9.9 lb.	7-5/8"	1-9/16"	3-7/16"	1/2"
DOG6	G.A.L.	230VDC		1/6	18.6 lb.	8-5/8"	1-3/4"	5-7/8"	5/8"
DOG2	G.A.L.	230VDC		1/2	23.0 lb.	9-5/8"	1-3/4"	5-7/8"	5/8"
DOM6	MAC	24VDC		1/6	9.7 lb.	7-1/2"	1-1/2"	3-3/8"	1/2"
DOG6-PM	G.A.L.	230VDC		1/6					

DOOR PRESSURE GAUGE, DOOR FORCE GAUGE, DIGITAL FORCE GAUGE

See page 69

DOOR RESTRICTOR, DOOR GAP GAUGE



MODEL QEDR-97

Patented 5,918,705

CSA Approved

Easy Installation!

Does not use Reflective Tape

- Does not require alignment of sensing beams or cleaning and inspecting of reflective tape.
- Uses reliable self-contained, industrial grade opposed mode sensors.
- System operates in dirty, dusty and smoke filled environments.
- Complies with A17.1 rules 111.12 and 300.12 and A17.3 Rule 2.7.4

Quality Elevator Products Door Restrictor operates a solenoid any time the elevator is away from a landing zone. Electronic sensors on the elevator create a beam that is broken by waves positioned in the unlocking zone at each floor. Low voltage control system is provided with a battery back up for seven hours of protection.

DOOR GAP GAUGE

MODEL DGG

Check all your door gap clearances with one tool. Made of aluminum, anodized and laser etched. Will last a lifetime. Easy to use, small, fits in your shirt pocket.

Precise measurements 3/8", 1/2", 3/4", 1", 1-1/4", 2" and 4" will allow you to verify compliance with ASME A17.1-2000:

Section 2.5 Clearance Between Car and Landing Sills

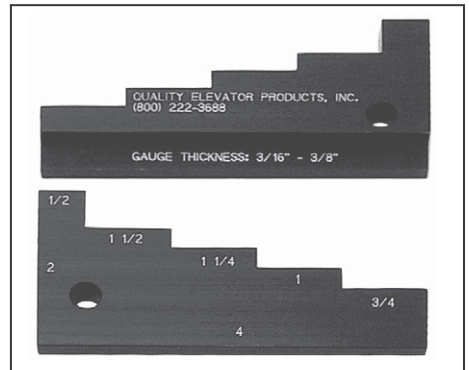
Section 2.11 Entrance frame clearances

Section 2.12 Closed Position of Hoistway Doors

Section 2.12 Restricted Opening of Hoistway or Car Doors

Section 2.14 Closed Position of Car Doors or Gates

and more...



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

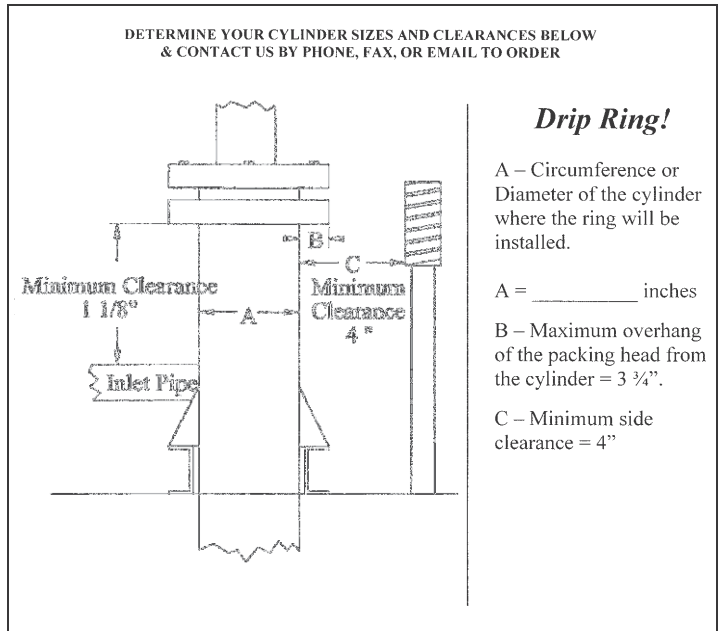
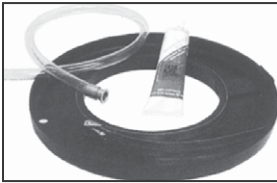
Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

DRIP RING (CYLINDER), DYNAMOMETER

CYLINDER DRIP RING

- Keep pit floors dry and safe
- Simple and cost effective
- Installs in 15 minutes
- For cylinders 5-3/4" to 15-1/2" in diameter
- Oversized drain resists clogging
- Made from highly durable, oil resistant material



DIAMETER	CIRCUMFERENCE	MODEL
5-3/4" - 7"	18" - 22"	CDR-1
7" - 8-1/2"	22" - 26"	CDR-2
8-1/2" - 10"	26" - 36"	CDR-3
10" - 12"	31" - 37-1/2"	CDR-4
12" - 15-1/2"	37-1/2" - 48"	CDR-5
3-7/8"	Dover Inverted	CDR-IVO

DIAMETER CIRCUMFERENCE CONVERSION CHART

DYNAMOMETER



Model DYN-1000

Features:

- Range 0-1000 lb.
- Accuracy 0.5% of full range
- NIST certificate of calibration
- Temperature range -50 to +140
- Zero control up to 20% of capacity
- 5" Dial
- Two universal shackles
- Max. load indicator (dials remain at peak load)
- Comes with hard plastic carrying case

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

EDUCATIONAL MATERIAL BOOKS AND MANUALS IN STOCK

Model ELEVHKBK

Elevator Industry Inspection Handbook
by Zack McCain

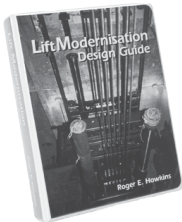


Brimming with tables featuring the effective date of code changes for electric elevators, hydraulic elevators, escalators and moving walks. The Elevator Industry Inspection Handbook has been developed to help the experienced,

knowledgeable elevator inspector assure compliance with ASME QEI-1 requirements.

Model ELEVLMG

Lift Modernization Design Guide
by Roger Howkins



A working manual to assist engineers, consultants, mechanics, surveyors and sales teams actively involved in the art of lift modernization.

Model ELEVESH

Field Employee's Safety Handbook



146 pages, loose leaf style, user-friendly format, improved illustrations, heavy-duty poly-vinyl yellow binder.

Model ELEVMFH

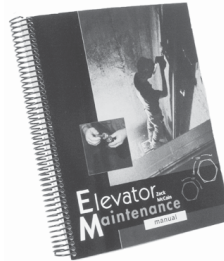
Elevator Maintenance Field Handbook
by Zack McCain



A pocket-sized companion to the Maintenance Manual designed for the service mechanic to take into the field. Contains over 75 charts and guides, from the Elevator Maintenance Manual to be used by the mechanic on a service route.

Model ELEVMM

Elevator Maintenance Manual
by Zack McCain



An in-depth guide designed for the service technician, covering elevator maintenance programs and practices as related to electric and hydraulic elevators. Also covers, escalators and moving walks. This publication is a

comprehensive "how-to" guide that can be used for training classes or home study. In addition to technical material, the manual presents topics such as: Public Relations, Maintenance Safety, Maintenance Control and Troubleshooting. Also available! The Maintenance Field Handbook is a companion to the Maintenance Manual designed for the service mechanic to take into the field.

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

ELECTRIC EYES

ELECTRIC EYES -- INNOVATION

Featuring a solid state LED (Light Emitting Diode) light source, these complete DuoPath electric eyes include a high speed photo-transistor light sensor, automatic disable, visible alignment indicator and fixed or variable time out. Models are CSA certified.

IN STOCK

Other models available, call for quote.

Model 1004V

- 3 year warranty
- 25" beam centers

Model 1004VADA

- 3 year warranty
- 24" beam centers

Model RC1004N

- Replacement cord for 1004V electric eye (with plastic adapter)

Model RC1004O

- Replacement cord with metal adapter



Model 1004V

DOOR SAFETY EDGES (PANAFORTY) see pages 182, 183

EMERGENCY DOOR RELEASES

EMERGENCY DOOR RELEASES

Three surface mount stainless steel models provide 2 keys that cannot be removed in open position. All locks are registered and keyed alike. Each emergency door release comes with a 24" chain and pull ring to adapt to a through the wall application.

The boxes are designed to receive a standard heavy walled EMT pipe nipple, cut and threaded to fit your thickness.

Available in stainless steel brushed (#4) finish or bronze electroplated finish over brushed (#4) stainless steel.

Model EDRA Stainless steel

Model EDRA-B Bronze

- 3-1/8"W x 5-5/8"H x 7/8"D
- Break away glass "For Emergency Use" markings
- Same lock used on Model EDRA and Model EDRB

Model EDRB Stainless steel

Model EDRB-B Bronze

- 3-1/8"W x 5-5/8"H x 7/8"D
- Solid front (no glass)
- Same lock used on Model EDRA and Model EDRB

Model EDRC Stainless steel

Model EDRC-B Bronze

- 1-7/8"W x 3-1/2"H x 7/8"D
- Solid front (no glass)
- Suitable for dumbwaiter applications

EMERGENCY DOOR RELEASE REPLACEMENT PARTS

Model G01DR001 Replacement glass for EDRA

Model L02DR003 Lock with two keys for EDRC

Model L02DR001 Key only (#CAT155) for EDRC

Model L01DR002 Lock with two keys for EDRA & EDRB

Model L01DR001 Key only (#60100) for EDRA & EDRB, before year 2010 (T160)



EDRA
EDRA-B



EDRB
EDRB-B



EDRC
EDRC-B

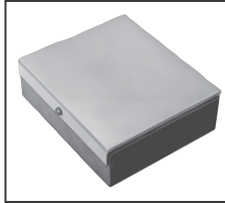
EMERGENCY LIGHTS

EMERGENCY LIGHTS

Designed for use in new construction, modernization, and direct replacement for existing units. Meeting both lighting and alarm codes ANSI A17.1, these systems contain maintenance-free nickel cadmium batteries, and solid state circuitry with accessory terminals for use with 6VDC alarm bell.

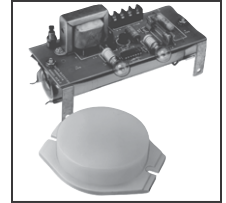
Model ELCM-1

- Ceiling mount
 - Self-contained unit
 - White acrylic lens
 - Alarm bell (optional) can be wired into terminal strip
- 6-5/16" x 5-1/4" x 1-13/16"



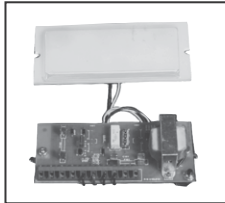
Model ELPB-2

- Mounts to back of cover plate
- 3" Dia. round lens
- For OEM, or replacement use



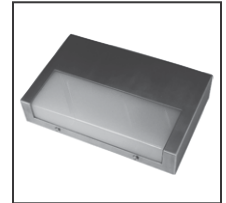
Model ELPB-1

- Mounts inside car operating panel
- Power pack, light source, and rectangular lens included
- For OEM or replacement use
- CSA approved



WALL SURFACE MOUNT

- CSA approved
- 5-1/2" x 8-1/2"
- Alarm bell (optional) can be wired into terminal strip



Model ELWS-2

- Brushed stainless steel finish

Model ELWS-2B

- Bronze electroplated finish

REMOTE TRIMLINE

Car top mount power supply with alarm bell.

- CSA approved
- External test switch
- 18 gauge galvanized steel box
- Remote light source 7" x 1-7/8" x 1" (can be mounted in car above operating panel or ceiling)

Model ELSL-2

- 3.75"H x 5.25"W x 6.31"L box

Model ELSL-2-SB

- 1.75"H x 5.25"W x 6.31"L box



ELSL-2

Model ELSL-ACBG

- 4"H x 4"W x 6"L box
- Dual GFCI outlet



ELSL-ACBG

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

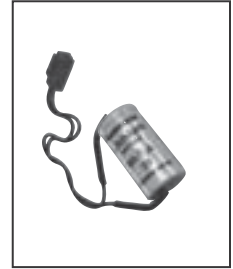
Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

EMERGENCY LIGHT REPLACEMENT PARTS

EMERGENCY LIGHTS REPLACEMENT PARTS

Model	Description
BATBR23A	3V battery with Epson Plug and 5" leads, for TI, GE and Maida Micro-Processor back-ups. Minimum 5-year shelf life.
15EL002	ELPB-1 Power pack - includes circuit board and battery
15EL003	ELCM-1 Power pack - includes circuit board and battery
15EL004	ELWS-2 Power pack - includes circuit board and battery
15EL001	ELSL-2 Power pack - includes circuit board and battery
21EL005	ELSL-2 4.8V NiCad battery - 5 to 6 year life span (approx.)
21EL001B	ELSL-2 Circuit board only
15EL005	ELSL-2 Without bell
15EL006	ELSL-2 Without lens
15EL007	ELSL-2 Lens w/ leads
15EL008	ELPB-1 Lens & bracket
A02EL001	ELWS-2 Lens only
A02EL005	ELPB-1 Lens only
71LB0035	502 Replacement lamp



Model BATBR23A

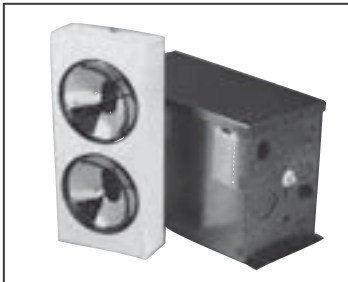


Model 21EL005

"EPCO" EMERGENCY LIGHTS REPLACEMENT PARTS

Model	Description
EP-10063300	Dual lamp, ceiling mounted, emergency light fixture
EP-10000301	6V power pack
EP-695-6	6V "GEL" battery
EP-NP24-12B	24V "GEL" battery, for "Flexi-Light"
EP-EFP1120B	Circuit Board for "Flexi-Light"
EP-EFP1120C	Charger for "Flexi-Light"
EP-EFP1120P	Power Pack for "Flexi-Light"

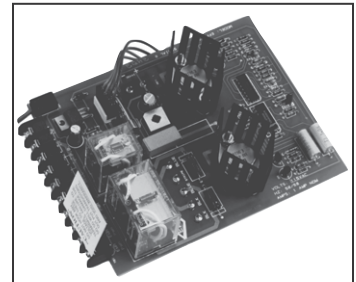
NOTE: Complete "Flexi-Light" consists of 1 each, Charger, and Power Pack.



Model EP10000301 with EP-10063300



EP-695-6



Model EP-EFP1120B

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

TELEPHONES, A.D.A. COMPLIANT

ADA COMPLIANT PHONE SYSTEMS

Hands-free elevator phones. Indicator light tells hearing impaired when to speak and that help is on the way. Braille and raised letter text available for visually impaired. Operates on regular phone line. No power supply or battery back-up required. Built in dual auto dialer. Remotely programmable from any telephone line by authorized persons knowing designated access code. One dedicated phone line or dedicated extension line of PBX required per phone or consolidator. FCC registered.

“V” option listed on model number designates inclusion of “Voice” software.

SURFACE MOUNT PHONE

Model ETP-100M, ETP-100MV

- Fits in standard phone box
- 4.81”W x 8.81”H x 2.5”D
- Stainless steel

FLUSH MOUNT PHONE

- 9.5”W x 11.75”H cover
- 4.5”W x 7.5”H x 2.5”D wall opening

Model ETP-100E, ETP-100EV • Stainless steel

Model ETP-100ER, ETP-100VR • Brushed bronze

FLUSH MOUNT PHONE WITH BRAILLE

- 9.25”W x 11”H cover
- 4.5”W x 7.5”H x 2.5”D wall opening

Model ETP-150, ETP-150V • Stainless steel

Model ETP-150R, ETP-150VR • Brushed bronze

CAR OPERATING PANEL PHONE

No cover plate included. Designed to mount to back of car operating panel.

Model ETP100SP, ETP-100-SPV

- Internal pushbutton and LED

Model ETP-103, ETP-103V

- Leads for external pushbutton and LED connection

RAISED LETTER / BRAILLE PLATES

Model ETP-MP

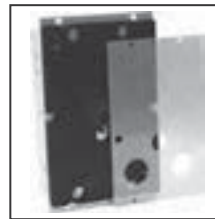
- 5/8” raised letter
- Stainless steel, self-adhesive, set of three plates
- Stainless steel with black lettering or black with stainless steel lettering
- Available in bronze



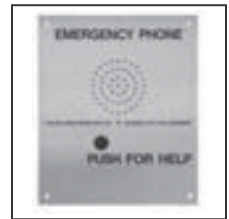
ETP-100E
ETP-100EV



ETP-100M
ETP-100MV



ETP-103



ETP-150V
ETP-150



ETP-MP

**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

TELEPHONES, A.D.A. COMPLIANT

Model EC-8

Consolidator.

- Save money on monthly phone bills
- Allows 8 phones on one line with no loss of volume
- Line seizure feature eliminates need for dedicated line
- Elevators can either be connected to a phone line, or as an internal communication system without use of external phone lines
- Can be used to switch calls from internal security service to external phone line for day/night operation
- Also works as a caller I.D. when placed in a location that is monitored
- 11-13/16"W x 7-5/8"H x 1-3/4"D, wall mount style
- Requires 120VAC, maintained power supply



Model EC-2

Consolidator.

- Allows 2 phones to operate on one line
- Requires 120VAC, includes battery backup

Model ETP-400K

- Same as ETP-400, with 12 key phone pad

Model ETP-UPS

- Recommended when using EC-8 consolidator, or EBS, or EBS200 base stations
- Back up power supply for power outages

Model EBS201

Super base station.

- Includes EB200 base station and software. Connected to a dedicated PC, allows a person receiving a call from an emergency phone to automatically see the identity of the calling unit, its location, who to contact in case of emergency, that person's telephone number, and any special instructions that may apply.

Model EPS

Polled Supervision.

- Includes software and a card that mounts to PC. Enables the PC being used for the Super Base Station function to automatically call each emergency phone, turn it "on," and obtain a report back from the unit. Automatically verifies that the telephone lines are connected to the emergency phone, and that the phone electronic functions are operating properly. Provides immediate report of any problems as well as storing information in an automatically updated data base. Various management reports can also be generated.

Model ETP-400

- Flush mount phone, for indoor and outdoor use
- Auxiliary inputs and outputs
- Stainless steel, 9-1/2"W" x 12"H
- Built in braille

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

TELEPHONES, LINE-DIALERS

LINE DIALER

Model ALD-N

Autoline dialer - one number dialer.

- Does not require separate line or programmer
- Line power, 48 volt
- Non-volatile memory
- Plugs into phone jack
- Install in the machine room

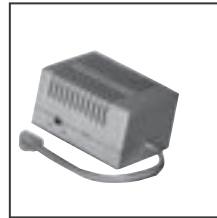


ALD-N

Model PRB

Phone ring back.

- Provides the capability to call the car



PRB

LINE VERIFICATOR

Model PLV

Immediately detects a cut or disconnected phone line.

- Complies with ASME A17.1 Elevator Code
- Works with any analog device on any analog line
- Volume adjustable audible signaling
- Two keys are included
- 120VAC / 12VDC UL Listed adapter, included
- Power supply wire length: up to 500 ft. @ #24 gauge
- Mounts in standard double gang electrical box
- Dimensions: 4.9" x 4.9" x 1.3" (124 mm x 124 mm x 33 mm)



PLV

EMERGENCY RESCUE

(AREA OF RESCUE COMMUNICATION SYSTEM)

ADA AREA OF RESCUE IS YOUR BUILDING IN COMPLIANCE?

According to the Americans with Disabilities Act Accessibility Guidelines (ADAAGs), "A method of two-way communication, with both visible and audible signals, shall be provided between each area of rescue assistance and the primary entry."

Talk-A-Phone's fully ADA compliant Area of Rescue Communication System provides high quality, reliable two-way communication that meets Area of Rescue requirements. Ideal for use in a wide variety of building communications, our system can also be used in multi-story buildings for elevator communications and in parking areas to provide emergency and information assistance.

Whatever your building's requirements, we can configure a versatile communication system to meet your specific needs.

Model EPCS-100

Emergency Personnel Command Station provides emergency personnel centralized control of a wide variety of building communications. Up to four command stations per system can be utilized.

Model ARCU-400

Area of Rescue Communication Unit
Offers 2-way communication with audible and visible signals to those in need of emergency assistance.

Model ARPP-64

Area of Rescue Power Processor
The power behind the system, the ARPP-64 is comprised of a central microprocessor-based controller, modular card cage and U.L. listed power supply.



EMERGENCY RESCUE

(AREA OF RESCUE COMMUNICATION SYSTEM)

FEATURES

Auto Answer	Automatically activates designated Area of Rescue Communication Unit on incoming ring signal.
Auto Shut-Off	Automatic shut-off once call is completed. Full reset authorization from Command Station and use of key-switch by emergency personnel upon arrival at activated Area of Rescue Communication Unit.
Capacity	Each ARPP-64 Power Processor can accept up to eight AR-8 Line Cards. Each AR-8 Line Card can accommodate up to eight ARCU-400 Area of Rescue Communication Units, for a total capacity of 64 units. For systems requiring more than 64 units, a maximum of three ARXU-64 Expansion Units may be added. Each of these Expansion Units has the additional capacity for 64 more ARCU-400s when filled with eight AR-8 Line Cards. Total maximum capacity for the Area Rescue Area Communication System is 256 units. When Emergency/Information Phones are required for use in elevators of parking areas, use ETP-8 Line Cards. Order line cards separately.
Circuit Protection	Built-in surge suppression on all incoming lines
Compliance	System is fully ADA compliant. Elevator communications, as required by A17 Elevator Code, can be provided when Area Rescue Communication System is used with our ADA Compliant, hands-free elevator phones.
Connection	Area of Rescue Units use RJ-45 (8 wire) connections. Emergency Phones uses RJ-11 (2 wire) connections.
Construction	Emergency Personnel Command Station, EPCU-100: Back lit LCD displays up to 4 lines of 40 characters showing location of Area of Rescue Units and Emergency Phones calling for assistance. Provides two-way communication with selective listening capability as well as zone and all-call paging to Area of Rescue Units. Area of Rescue Communication Unit, ARCU-400: Built-in cast metal letters and braille signage reads "Emergency." Vandal-resistant, red metal call button. Includes (3) operating LED lights: <ul style="list-style-type: none">• Help Requested - Indicates unit has been activated by someone requiring assistance. Can only be reset using key-switch.• Help Coming - Activated by Command Station, visually indicates help is on the way.• Connection Made - Whether initiated by Command Station or Communication Unit, indicates connection made between the two. Microphone and speakerphone are indoor and outdoor rated; circuit boards conformal coated. EPCU-100 and ARCU-400: Durable stainless steel construction; 12 gauge (0.1094"); #4 brushed stainless steel face plates. Area of Rescue Power Processor, ARPP-64: Durable, cold-plated rolled steel.
Dialing Mode	Works with all tone systems when calling off-site.
Dialing Speed	Approximately 10 tones per second.
Digit Capacity	Stores up to 18 digits including pauses.
Dimensions	Emergency Personnel Command Station, EPCU-100: 14"W x 14-1/2"H x 3-3/4"D Area of Rescue Communication Unit, ARC-400: Face Plate: 9-1/2"W x 12"H Wall opening: 6-5/8"W x 9-3/4"H x 2-1/2"D. Area of Power Processor, ARPP-64: Sized to mount in standard 19" rack.
Mounting	Emergency Personnel Command Station, EPCU-100: Flush mounts to wall or surface mounts with stainless steel Surface Mount Accessory, EPCS-SM. Area of Rescue Communication Unit, ARCU-400: Flush mounts to wall or surface mounts with stainless steel Surface Mount Accessory, ETP-SM with choice of attractive color finishes. During construction, Mounting Sleeve, MS-400 can be installed for easy flush mounting. Area of Rescue Power Processor, ARPP-64: Surface mounts or mounts in standard 19" rack.
Power Requirements	ARPP-64 is 120VAC powered. Use off the shelf U.P.S. for required battery back-up. 120V required for optional strobe light at EPCS-100 or ARCU-400.
Programming	Locally with standard keyboard or remotely with a PC via a telephone line. Batteries not required to retain programming. May be unplugged from telephone and/or power line for unlimited time program loss.
Self-Testing Capability	Continuously monitors lines. Any problems are noted on Command Station LCD display. Activity Report printout available if using optional printer interface. Report can also be automatically forward to service company via modem.
Telephone System Compatibility	Calls from Area of Rescue Communication Unit received at EPCS-100 Command Station. If no answer, calls can be automatically redirected to an alternate location, i.e. police, fire or security company, via a standard telephone line.

OPTIONS

Area of Rescue Sign	Meets ADA requirements. Constructed of ultra-violet light resistant polycarbonate, sign is self-adhesive. Measures 6"W x 8"H.
CCTV Camera	CCTV surveillance black and white camera with wide-angle lens is a built-in option on the Area of Rescue Communication Unit, ARCU-400. Includes high intensity, active infrared LEDs enabling camera to view someone at station even where area is dimly lit. Comes with low voltage power supply requiring 120V.
Clock/Calendar	Real time clock for real time and date functions available on the Emergency Personnel Command Station, EPCS-100.
Modem	Using modem option, Emergency Personnel Command Station, EPC-100 can automatically report all emergencies to a designated off-site location.
Printer Interface	Provides activity printout capabilities via serial printer port.
Strobe Light	Attention-getting blue strobe light (ETP-EL) flashes brightly when emergency button is pressed and remains flashing until emergency personnel reset using key-switch on Area of Rescue Communication Unit.
Talk-A-Lert®	Windows® based System offers the two following applications, as well as data storage and report generation capabilities.
PC-Based Package	Polled Supervision: Automatically verifies line integrity to Communication Units and/or Emergency Phones, as well as the electronic functioning of each Communication Unit and/or Emergency Phone up to six times per day. Super Base Station: Automatically displays the exact call location from incoming Communication Units and/or Emergency Phones and other critical information.

**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

ESCALATOR BRUSH

MOTION GUARD™ ESCALATOR SKIRT DEFLECTOR DEVICE



FEATURES AND BENEFITS

PHYSICAL CHARACTERISTICS

- Patented Design: Application #09/611,198
- Conforms with ASME A17.1 code requirements
- One piece molded construction, including integrated end cap
- Stainless Steel Alignment Pins ensure positive alignment
- Fasteners are easily accessible when product is mounted, but are concealed from easy view
- A selection of fasteners is available to support most application requirements
- Bristles are flagged to provide a softer contact surface for riders and their clothing
- Bristles are pitched downward to discourage the retention of liquids and other contaminants along the brush surface
- The leading edge of the bristles are chamfered to create a 90 degree orientation to the step surface
- Highly durable and weather resistant
- Unique flexible designs allow transition curves to be formed on-site
- Product is supplied to exact length and ready for quick mounting on escalator

FLAME RATING

The product uses flame retardant materials to achieve the following criteria:

- Bristles meet: UL-94-V2 vertical burn, UL-94-HB horizontal burn
- Body meets: CAL117, ASTM E662, FAR 25,853, Airbus ATS 1000.001

INSTALLATION

- Installation procedure is simple with clear and easy to follow instructions
- Average installation time is about two hours for average rise escalator
- Unlike competitive products, Motion Guard is supplied ready to install when removed from the shipping box

MAINTENANCE

- Damaged sections can be easily removed and replaced

LEAD TIME

- Typically ship in 24 hours

SHIPPING AND HANDLING

- The Motion Guard product is packaged in a highly effective cardboard box designed to minimize freight and handling costs while also providing suitable protection for the product

ORDERING

- The order form has been combined with a very simple survey sheet developed to collect the three information items needed to complete an order: Length, Color, Escalator skirt details

Customer Information

Company Name: _____ Billing Address: _____

Order Placed By: _____

Branch Office: _____

IRS#: _____ Ph#: _____ Fax#: _____

Purchase Order: _____ Shipping Address: _____

Date Of Order: _____

Request Ship Date: _____

Shipping Method: _____

Order Information

Purchase Order: _____ Shipping Address: _____

Date Of Order: _____

Request Ship Date: _____

Shipping Method: _____

Requested Product And Fastener Package

MG Gen I:

10/32" Thru Bolt / Nylock Nut

10/32" Machine Screw

10/32" Self Drilling Screw

MG Gen III:

8/32" Thru Bolt / Nylock Nut

8/32" Machine Screw

8/32" Self Drilling Screw

Job Site Survey

Building Name: _____ Job Site Address Same As Shipping Address

Name Of Escalator: _____ Job Site Address: _____

Escalator Model: _____

Measured Escalator Length: _____

(Measured from comb tip to comb tip & with survey instructions) Authority Having Jurisdiction: _____

Code Observed: A17, B44, Other _____

Floor#: _____ Unit#: _____

Unit Description (Eg: 1-2 Up) Up Down

Skirt Construction:

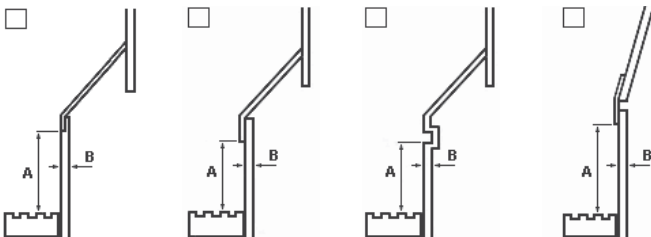
- Stamped Stainless Skirt
- Stainless Over Wood Skirt
- Extruded Aluminum Skirt
- Other _____

Skirt Finish:

- Silver
- Black
- Other _____

Choose the drawing that best matches your skirt design:

Dimension A (mounting window): _____ Dimension B (skirt thickness): _____



Draw Your Own

ESCALATOR COMB PLATES

COMB PLATES

Quality Elevator Products feature a line of escalator comb plates, demarcation strips and step treads durably constructed to promote safe riding. Many of the comb plates are available in yellow to give visual warning to riders that they are approaching the top or bottom of the escalator.

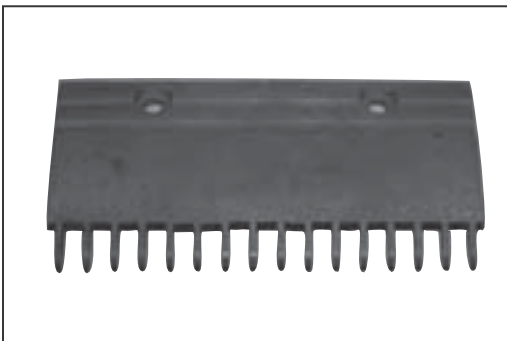
Model	Size	Usage	Teeth	Alignment
Dover Type A				
DC-5AP01	4.937"W	32" & 48"	15	Center
DC-5AP02	4.937"W	48"	15	Center
DC-5AP03	6"L	48"	15	Right
DC-5AP04	6"L	32"	16	Left
DC-5AP05	6"L	48"	14	Left
DC-5AP06	6.271"L	32"	19	Center
DC-5AP07	6.437"W	32"	19	Right

Specify Black or Yellow

Dover Type B

DC-5BP01	5.664"	Standard	14	Standard Comb
DC-5BP02	6.072"	32"	14	End Bottom
DC-5BP03	6.072"	32"	14	End Top
DC-5BP04	5.725"	32" & 48"	13	LH Bottom
DC-5BP05	5.725"	32" & 48"	13	RH Top
DC-5BP06	5.577"	48"	13	RH Bottom
DC-5BP07	5.577"	48"	13	RH Top

Available In Black



Dover Type A



Dover Type B

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

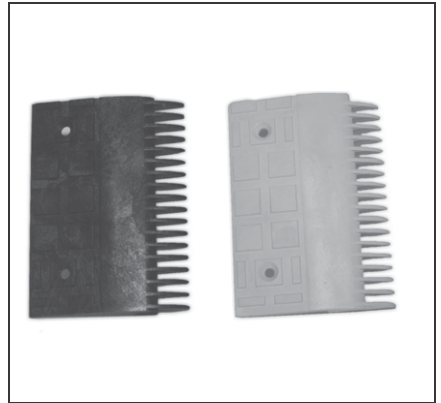
7760 N. Merrimac Ave. • Niles, IL 60714

ESCALATOR COMB PLATES

OTIS

Comb Plates - Please Specify Black or Yellow

OC-453Z1	5.992"
OC-453Z2	5.460"
OC-453Z3	5.710"
OC-453Z4	5.738
OC-453Z5	5.367"
OC-453Z6	5.617"
OC-453Z7	5.587"
OC-453Z8	5.837"
OC-453Z9	4.992"
OC-453Z10	5.992"
OC-453Z11	5.738"
OC-453Z12	6.117"
OC-453Z13	5.863"



WESTINGHOUSE

Comb Plates

Model	Width	Description	Teeth
Model 32N/32BB, BT 48BB, BT			
W626D315H03	6-1/4"	RH	16
W626D315H02	6-1/4"	LH	16
W626D315H06	5-3/4"	Center	16
Model 48N			
W626D315H05	6-1/4"	RH	15
W626D315H04	6-1/4"	LH	15
W626D315H06	5-3/4"	Center	16
Model 32NT			
W628D184H02	5-7/8"	RH	16
W628D184H01	5-7/8"	LH	16
W628D184H06	5-3/4"	Center	16
Model 48NT			
W628D184H04	5-1/2"	RH	15
W628D184H03	5-1/2"	LH	15
W628D184H06	5-3/4"	Center	16

ESCALATOR COMB PLATES, DEMARCATION STRIPS, CURVES, ETC.

HITACHI

Comb Plates

HC-L	Raised - 2 Left Teeth
HC-R	Raised - 2 Right Teeth
HC-C	Center

Available In Yellow

Demarcation Strip for 24" Stainless Steel Step

HC-24L	Left	HC-24R	Right
HC-24F	Front	HC-24B	Rear

Demarcation Strip for 48" Stainless Steel Step

HC-48L	Left	HC-48R	Right
HC-48F	Front	HC-48B	Rear



Model MC-B32484

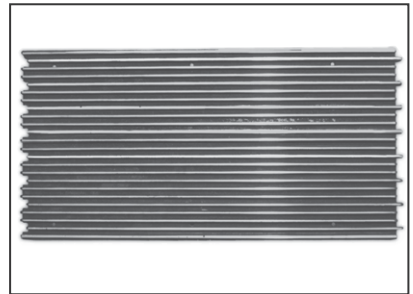
MONTGOMERY

Comb Plates

MC-46634Y	LH Yellow Aluminum
MC-46635Y	RH Yellow Aluminum
MC-B32484	Die Cast Aluminum
MC-PFP32484	Die Cast Aluminum - Yellow

Misc. Montgomery Escalator Replacement Parts

ME-C	Upper and Lower Curves - Plastic
ME-B29103	LH Step Tread - Die Cast Aluminum 8"W x 16.080"L
ME-B29102	Center Step Tread - Die Cast Aluminum 8"W x 16.080"L
ME-B29104	RH Step Tread - Die Cast Aluminum 8"W x 16.080"L
ME-HG	Aluminum Handrail Guide - Upper & Lower

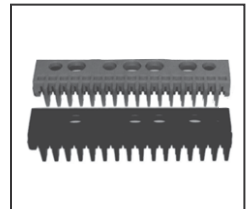


Model ME-29104

WESTINGHOUSE

Demarcation Strips - Yellow

Model	Width	Placement	Quantities Used	
WC321C596H1	6"	Right	32" - 1	48" - 1
WC321C596H2	6"	Left	32" - 1	48" - 1
WC321C596H3	5-11/16"	Center Right	32" - 1	48" - 2
WC321C596H4	5-3/8"	Center Left	32" - 1	48" - 3



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

ESCALATOR ROLLERS

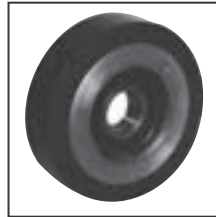
All Escalator Rollers Are Manufactured With Aluminum Hubs and 95A Polyurethane Tires.

WESTINGHOUSE

Model	O.D.	Bore	Width	Face
Model BBBT Handrail Drive Roll WR196C271G1	5-3/16"	3/4"	1-3/8"	1-3/8"
Model M Handrail Drive Roller WR152B238G1	5-3/8"	1-3/4"	1-7/16"	1-5/32"
Model LMNNTS Step Trail Roller WR217B235H7	5-1/4"	.6693"	1-3/16"	7/8"
Model ML Trail Roller WR322C363G1	5-1/4"	.6693"	1-3/16"	7/8"
Model NNT Trail Roller WR216B509G4	4"	.6693"	7/8"	3/4"
Model BTBB Trail Roller WR691B785G5	3"	.6693"	1-1/4"	5/8"
WR691BG0103	3"	.6693"	1-1/4"	1-3/32"
Same Model, Double Bearings WR691B785G6	3"	.6693"	1-1/4"	5/8"
Treadway Roller WR324C681G2	4"	.6693"	1-5/32"	3/4"
Model N Handrail Pressure Roller WR325C359G1	2-1/2"	.6693"	3"	3"

OTIS (Step/Chain Rollers)

	O.D.	Bore	Width	Face
OR-290AJ2	3"	.75"	7/8"	3/4"
OR-290BP4	3"	.669"	7/8"	3/4"
OR-290BR4	3"	.50"	7/8"	3/4"
OR-G02215B36	4"	.7874"	1-1/8"	1"



OTIS OR-290BP4



Westinghouse
WR196C271G01

HAUGHTON

	O.D.	Bore	Width	Face
HR-80004 (STEP)	3-1/2"	.7874"	1-3/16"	1-3/32"
HR-84578 (STEP)	4"	.7874"	15/16"	15/16"
HR-93485-44 (STEP)	3"	.6693"	13/16"	1"
HR-97662 (STEP/CHAIN)	3-1/2"	.7874"	1-1/32"	1-1/32"

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

ESCUTCHEONS



ESG

ESCALATOR STEP GAUGE

Model ESG

Step measurement aid.

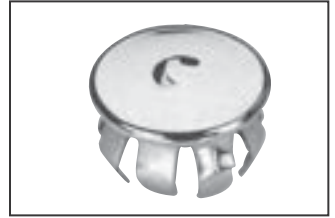


DEWT

ESCUTCHEON CAPS

Model DEWT

Chrome caps, 1" O.D., snap in for Westinghouse T-Key.



DEWL

ESCUTCHEON CAPS

Model DEWL

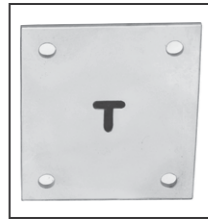
Chrome caps, 1" O.D., snap in for Westinghouse Lunar Key.



02NE



WL6E



WT9E



OLTE

* AVAILABLE IN BRUSHED BRONZE - WL6EBB, AND MIRROR BONZE - WL6EMB

ESCUTCHEON PLATES

1-3/4" x 1-1/2" steel plated for G.A.L., Otis Lunar Westinghouse Lunar, and Westinghouse "T" keys. Mounts with 4 pop rivets.

ESCUTCHEONS

For shaft door key with 7/16" clear hole, black retainer clip, fits G.A.L., GDK, Otis, Dover, Mac, etc.

- Model DEB • Aluminum anodized to bronze, 2" long
- Model DEC • Aluminum, 2" long
- Model DEC-4.5 • Aluminum, 4-1/2" long

SAFETY PLUG LOCK

Designed to secure door lock release holes.

- Chrome plated plug lock and key
- Zinc plated escutcheon
- 1-1/8" OD (requires 7/8" DIA hole)

- Model DECL • For doors up to 1-3/4" thick
- Model DECL-2 • For doors 2-1/2" to 3-1/4" thick
- Model K01DE001 • Key only



DEC



DECL

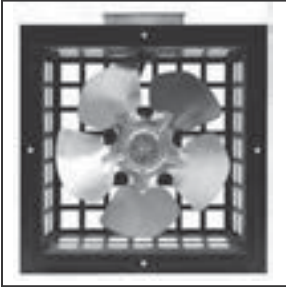
QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

FANS

FANS

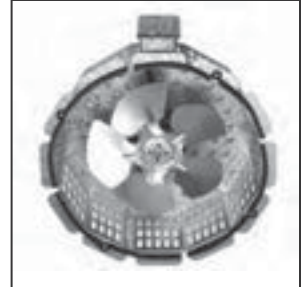
Engineered for maximum air distribution, our fans are totally enclosed, pre-lubricated, easy to install, quiet and dependable. Available with 115VAC or 220VAC single or two speed motor and 5-blade fan. Durable cages made from 16-gauge welded steel. Round cages - galvanized, square – black powder coated.



SSF3, SSFE
TSF1, TSFE



SSF3C, TSF1C



SSF3R, TSFE1420
TSFE1421, TSFE1424

SQUARE FANS

Model	Speed	CFM*	Voltage	Cage Dimensions	Cage Opening
SSF3	Single	380	115VAC, 50-60 Hz	12" x 12" x 4-1/4" H	10" x 10"
SSF3C**	Single	380	115VAC, 50-60 Hz	12" x 12" x 4-1/4" H	10" x 10"
SSFE	Single	325	220VAC, 50-60 Hz	12" x 12" x 4-1/4" H	10" x 10"
TSF1	Two speed	345-300	115VAC, 50-60 Hz	12" x 12" x 4-1/4" H	10" x 10"
TSF1C**	Two speed	345-300	115VAC, 50-60 Hz	12" x 12" x 4-1/4" H	10" x 10"
TSFE	Two speed	325-290	220VAC, 50-60 Hz	12" x 12" x 4-1/4" H	10" x 10"

* Approximate CFM values.

** 7/16" Dia. cage holes to comply with California code.

Lip 1" wide with four (4) mounting holes, 11" center to center.

ROUND FANS

Model	Speed	CFM*	Voltage	Cage Dimensions	Cage Opening
SSF3R	Single	380	115VAC, 50-60 Hz	14" Dia. x 4-1/2" H	12" Dia.
TSFE1421	Two speed	325	115VAC, 50-60 Hz	12" Dia. x 4-1/2" H	10" Dia.
TSFE1424	Two speed	325	115VAC, 50-60 Hz	14" Dia. x 3-1/2" H	12" Dia.
TSFE1420	Two speed	325	115VAC, 50-60 Hz	14" Dia. x 4-1/2" H	12" Dia.

* Approximate CFM values.

Lip 1" wide with four (4) mounting holes, 13" center to center, and 11" for TSFE1421.

FAN REPLACEMENT PARTS

21FN001	Single speed fan motor
21FN002	Two speed fan motor
A01FN001	Two speed suction blade
A01FN002	Single speed suction blade
A01FN003	Single/Two speed push blade

GRILLS see page 73

"MORRISON" BLOWER MOTORS see page 9

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

D.C. FANS, FASCIA STENCILS & PAINT

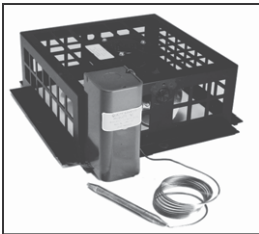
STAND-BY EMERGENCY VENTILATION FOR GLASS ELEVATORS

Ideal for use in glass elevators exposed to direct sunlight. Our fan with emergency power source is designed to exceed the minimum ANSI A17.1-2004 Section 2.14.2.3.3(b) requirement of one hour.

NOTE: Not intended as primary ventilation.

Model SSF4DC

- 12VDC fan
- 300 CFM free air
- 12VDC motor
- Bulb type thermostat operates the fan when elevator temperature reaches 80°F and shuts off when temperature decreases to 75°F, allowing greater time frame for emergency operation.



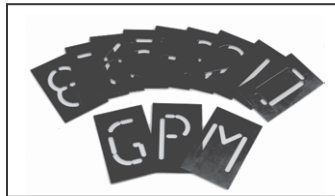
Model SSF4DC

FASCIA FLOOR MARKING STENCILS

Model FFMS

Complete set includes:
0, 1-9, B, G, H, L, M, P characters
are on individual plates.

- Characters 4" high



FASCIA SPRAY PAINT

Model FSP

Yellow OSHA spray paint for use with stencils.

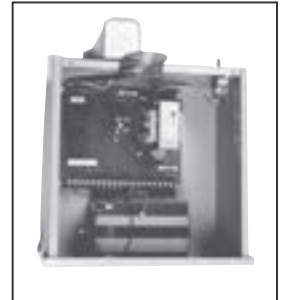


Emergency Power Supply

- Sealed lead acid batteries for uniform discharge performance
- 110VAC solid state charging system constantly maintains battery charge
- In the event of a power failure, the power supply will restore the charge at the rate of eight hours for every four hours of discharge
- Can be mounted horizontally or vertically
- Four hour power supply
- Test switch
- Indicator lights (charging)

Model PP/SSF4DC

Replacement supply
(12"x12")

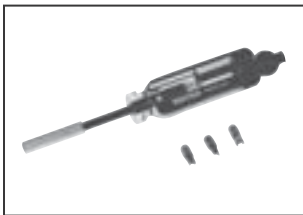


Model PP/SSF4DC

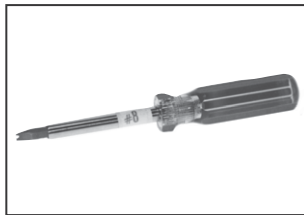
FASTENERS

SECURITY FASTENERS

Model		Size	Head Style
632OSS2	Stainless	6/32 x 2"	Oval
8321OSS	Stainless	8/32 x 1"	Oval
832OSS	Stainless	8/32 x 1-1/2"	Oval
832OSB	Brass	8/32 x 1-1/2"	Oval
832OSS2	Stainless	8/32 x 2"	Oval
832OSS-PAN	Stainless	8/32 x 1 1/2"	Pan
832OSB2	Brass	8/32 x 2"	Oval
8323FSS	Stainless	8/32 x 3"	Flat
1032OPSS	Stainless	10/32 x 3/4"	Oval
1032OSB	Brass	10/32 x 1-1/2"	Oval
1032OSS	Stainless	10/32 x 1-1/2"	Oval
1032OSS2	Stainless	10/32 x 2"	Oval
1032PO	Stainless	10/32 x 2"	Oval
83215AH	Stainless	8/32 x 1-1/2"	Allen



Model SD-SET3



Model SD8

FIXTURE FASTENERS

Cut to length screws. Good for all car panel modernizations.

Model 832PO

- 8/32 x 2" Phillips oval
- 50 per pack

Model 1032PO

- 10/32 x 2" Phillips oval
- 50 per pack

Model 832PT

- 8/32 x 2" Phillips truss
- 50 per pack

Model SN

- 8/32 clip on speed nut
- 50 per pack

SPANNER DRIVERS

Driver handle with bit(s).

Model SD6 • #6

Model SD8 • #8

Model SD10 • #10

Model SD-SET3 • #6, #8, #10

Spanner replacement bit.

Model SHB6 • #6

Model SHB8 • #8

Model SHB10 • #10

Spanner driver with storage handle (no bits).

Model SHD

Torx driver with pin.

Model TD10

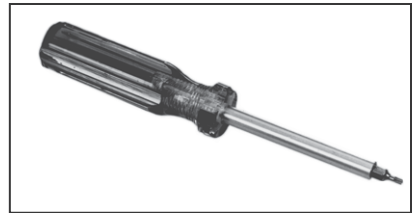
- Torx driver with pin for 6-32 screw

Model TD15

- Torx driver with pin for 8-32 screw

Model TD25

- Torx driver with pin for 10-32 screw



Model TD10

FILES, FILE HOLDER

FLEXIBLE ABRASIVE FILES

Burnish and polish hard metals such as tungsten, giving a longer lasting job.

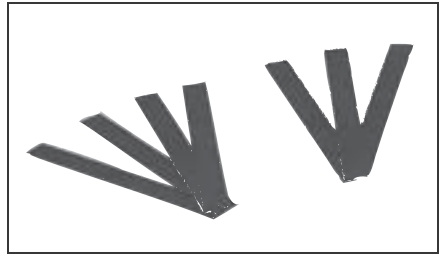
- Possible to work on live circuits, and avoid shutdown
- May be used wet or dry, with oil or water
- Non-chipping, non-conducting
- Made of super hard aluminum oxide impregnated in a flexible core
- Can be bent almost double without breaking
- Sold in packs of 10

Model FAF8028

- Width 3/8", length 4-1/2", thickness .020
- Grit - 240 Ex-Fine

Model FAF8011

- Width 1/2", length 4-3/4", thickness .040
- Grit - 320 Polish

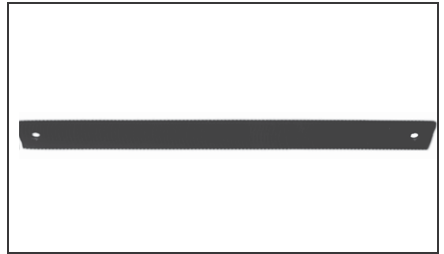


RAIL FILE

Model RF8

These 14" long, tangles files are constructed of curved milled tooth #1095 grade carbon steel. Both sides are milled, 8 teeth per inch, for longer use.

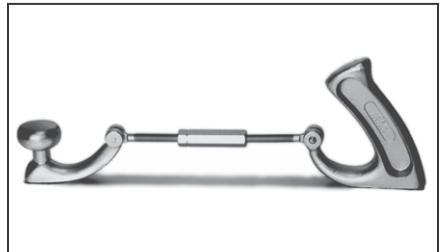
- Eliminates burrs on guide rails for better mating of male/female ends
- Corrects misalignments at the splice for smoother running.



RAIL FILE HOLDER

Model RFH

The metal file holder is adjustable for proper tension on both concave and convex surfaces.



PORTABLE FILTER SYSTEMS, FITTINGS (VICTAULIC)

PORTABLE FILTER SYSTEM

Model PFS87S-500

Portable Filter System with collapsible handle, fully automatic, operates unattended, welded steel frame, corrosion resistant chrome finish, monitor gauges for system pressure and element condition. Designed to meet OSHA requirements.

- Pump -- 2 GPM rotary steel gear positive displacement, quick priming, integral pressure relief valve
- Electrical -- 120VAC single phase 1/3 HP motor
- Power failure protection
- Low voltage protection, UL approved components
- Cleans oil fast and continuously
- Ultra fine contamination control (down to 1 micron) and water removal
- Moves easily from job to job
- Makes oil last longer, so it costs less
- Fully automatic operation
- System can handle emulsified water in oil

Model PFSR (for units before 1995)

- Replacement filters (1 micron) - 10" H

Model PFSR-1000

- Replacement filters for current units - 20" H

Dedicated filtering systems available: call for quote.

VICTAULIC FITTINGS

- Oil / Gas Applications
- Style 77 flexible coupling
- Maximum Working Pressure 1000 psi
- UL approved

VICTAULIC FITTINGS

- Model VF-15 (1-1/2")
- Model VF-2 (2")
- Model VF-25 (2-1/2")
- Model VF-3 (3")

VICTAULIC ELBOWS, 90°

- Model V90EL-1.5 (1-1/2")
- Model V90EL-2 (2")
- Model V90EL-2.5 (2-1/2")

GASKETS ONLY

- Model VFG-15
- Model VFG-2
- Model VFG-25
- Model VFG-3

VICTAULIC REDUCERS

- Model VR215 (2" to 1-1/2")
- Model VR32 (3" to 2")
- Model VR325 (3" to 2-1/2")



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

FIRE KEY BOXES

FIRE KEY BOXES

Red surface mounted and recess flush mount fire key boxes meet local code requirements. Covers are available in stainless steel and bronze, brushed (#4) or mirrored (#8) finishes. Equipped with mounting hooks for service and elevator keys. Rust proofed for outside use. Please specify lock number used in your area.

PERSONNEL KEY BOXES

Black surface mounted key boxes with all features of fire key boxes above, meet local code requirements. Locks can be substituted for this style box.

Model KBMN4176 - specified by the State of Minnesota

Model KB219 - specified by the LA School District



KBMN4176



FKBT

	KB	FKB	SKB
Stainless steel cover brushed (#4) or mirrored (#8) finish	✓	✓	✓
Bronze cover brushed (#4) or mirrored (#8) finish	✓	✓	✓
Red color fire key boxes		✓	✓
Black color personnel boxes	✓		
11 gauge steel	✓	✓	
16 gauge steel, vandal resistant design			✓
Surface mount	✓	✓	✓
Recess flush mount, with 1" frame	✓	✓	
Box dimensions 9"H x 5-3/8"W x 1-3/8"D	✓	✓	
Box dimensions 9"H x 5-3/8"W x 2"D	✓	✓	✓

Fire key boxes	Surface mount			Recess flush mount	
	1-3/8"	2"	2"	1-3/8"	2"
Stainless steel (#4) cover	FKB*	FKB*-2	SKB*	FKB*F	FKB*F-2
Stainless steel (#8) cover	FKB*SM	FKB*SM-2	SKB*SM	FKB*SMF	FKB*SMF-2
Bronze (#4) cover	FKB*B	FKB*B-2	-	FKB*BF	FKB*BF-2
Bronze (#8) cover	FKB*BM	FKB*BM-2	-	FKB*BMF	FKB*BMF-2

* To assign Model#, insert appropriate lock number, i.e. FKBV7825BF-2.

Lock numbers: 10404, 39504, 52219, 7803, A, C, DC, E14633, FEOK1, H, I, K, MM7802, T, V7801, V7803, V7804, V7825. Additional locks available, please inquire.



SKB-2011



SKBMM7802



Surface Mount



Flush Mount



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

FIRE KEY BOX REPLACEMENT PARTS

FIRE KEY BOXES REPLACEMENT PARTS

Key Box Locks Only

L02KB404	FKB10404
L02KB504	FKB39504
L02KB219	FKB52219
L02KB003	FKB7803
L02KB194	FKBA
L02KB004	FKBC, FKBT
L02KB005	FKBDC
L02KB633	FKBE14633
L02KB101	FKBH
L02KB002	FKBI
L02KB006	FKBK
L02KB802	FKBMM7802
L02KB801	FKBV7801
L02KB803	FKBV7803
L02KB804	FKBV7804
L02KB825	FKBV7825
L02KB4176	KBMN4176
L02KBFEOK1	FKBFEOK1

KEY BOXES ONLY

15KB001	FKBC box & cover
15KB002	FKBDC box & cover
15KB003	FKBI box & cover
15KB004	All other boxes & covers

KEY BOX KEYS ONLY

K01KB002	25460 key
K01KB001	52219 key
DCL	FKBDC key
K01KBS12	S12 key



Other keys available for Fire Department use only, upon request.

WASHINGTON D.C. LOCK KEY

Model DCL

- Solid Bronze key for use with FKBDC key box



FISH TAPES

Designed for working around energized panels, circuitry and telecommunications installations. Eyelet accommodates up to 6 No.10 wires.

Model FT-186

- 100' long
- S-class, non-conductive

Model FT-187

- 50' long
- S-class, non-conductive



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

FIRE/EVACUATION SIGNS

LOBBY ELEVATOR FIRE/SAFETY SIGNS

Designed for durability and ease of maintenance. Printed surface has 10 mil of clear, hard plastic fused to rigid 70 mil base. Signs have full adhesive back. (NOTE: ACTUAL SIGNS ARE ALL IN "CAPS")



F-200 6" x 7"
F-250 3" x 3-1/2"



*F-201 6" x 7"
*F-251 3" x 3-1/2"



F-225 6" x 7"



F-235 6" x 7"



F-243
5" x 8"



F-244-BLK
5" x 8"



F-245 3" x 3-1/2
F-246 6" x 7"



F-248
6" x 7"



*F-249
5" x 8"



F-900 (as shown)
F-900W (West)
6" x 7"



F-901 (as shown)
F-901E (East-West)
6" x 7"

Signs shown can be made in stainless steel or bronze, either silkscreened, or engraved, or in plastic, stainless, or bronze look.

*Also in stock in stainless steel, #4 finish, silkscreened.

PHASE I FIRE SIGNS

LOBBY ELEVATOR FIRE/SAFETY SIGNS

Signs stocked in plastic, black and white with red instructions and flame. Full adhesive back. Also available in stainless steel, bronze, or plastic with silver or gold look.

*Also in stock stainless steel, #4 finish, silkscreened.

F-1001-A*
6" x 6"



F-1001-B
6" x 6"



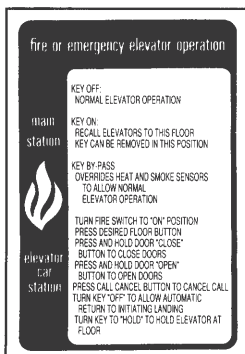
F-1004B225
6" x 6"



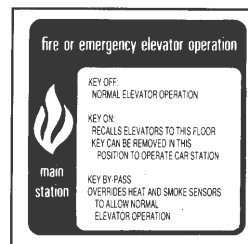
F-1004-D224*
6" x 6"
*F1004D224-1
("Reset" in place of Bypass)



F-1004-DX
6" x 9"



F-1004-FS*
6" x 6"
*F-1004-FS-1
("Reset" in place of Bypass)



PHASE II FIRE SIGNS

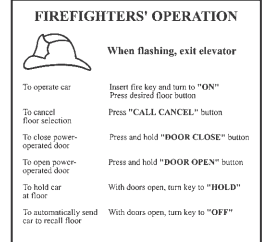
CAB ELEVATOR FIRE/EMERGENCY SIGNS

Signs are printed in black and white with flame and directional copy printed in highly visible red. Also available in silver or bronze metallic background with black lettering. Full adhesive back.

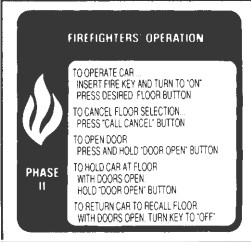
F-1002-A*
6" x 6"



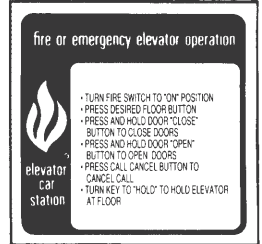
F-1002-FFO*
6" x 6"



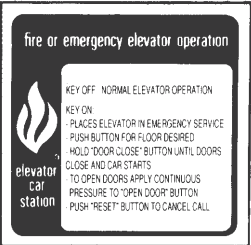
F-1002-B
6" x 6"



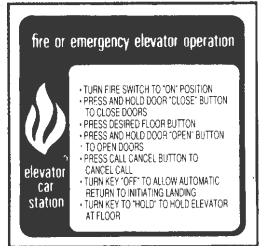
F-1005-AC
6" x 6"



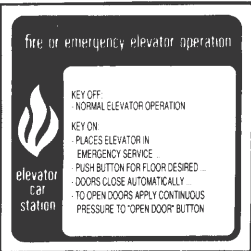
F-1005-AE
6" x 6"



F-1005-AH
6" x 6"



F-1005-B226
6" x 6"



F-1005-WD
6" x 6"



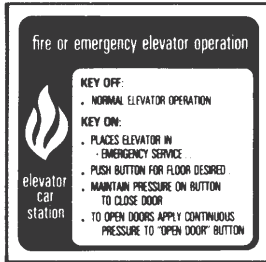
*In stock Stainless Steel, #4 Finish silk screened

**QUALITY
ELEVATOR PRODUCTS, INC.**

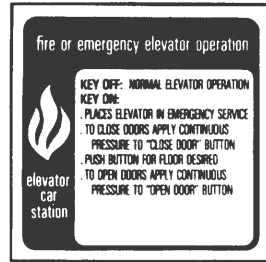
(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

PHASE II FIRE SIGNS

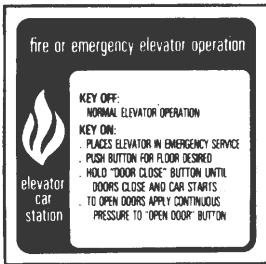
F-1005-C
6" x 6"



F-1005G-O
6" x 6"



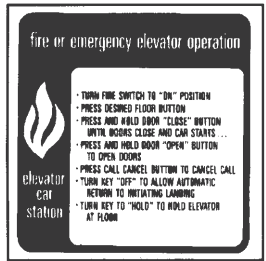
F-1005-W
6" x 6"



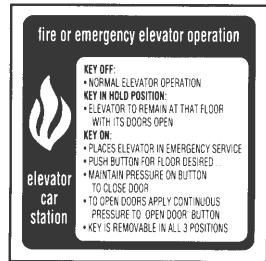
F-1005-X
6" x 6"



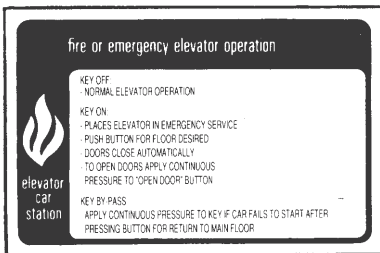
F-1005-XB
6" x 6"



F-1005-AK
6" x 6"



F-1005
9" x 6"



F-1005-FA
6" x 6"



FOLLOWER GUIDE ASSEMBLY, FORCE GAUGES

FOLLOWER GUIDE ASSEMBLY WORKSHEET

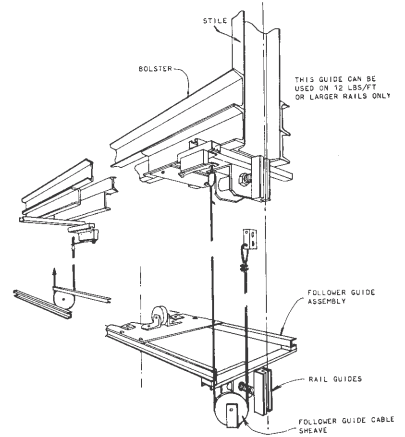
MODEL FGA (CUSTOM MADE)

D.B.G. _____

Plunger Size _____

Travel _____

Rail Size _____



FORCE GAUGES

Force gauges are suitable for use in numerous applications including door force, hoist cable tension and belt tension as well as on wire pull testing, wire crimps, springs, plungers, and many more.

DOOR FORCE GAUGE

Model DPG

- For push forces up to 35 lb.
- Light weight, pocket size, inexpensive



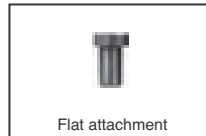
DIGITAL FORCE GAUGE

Model DFG50

- For push and pull forces
- Capacity 50 lb, 20 Kg, 200 N, user-selected units
- Accuracy of $\pm 0.2\%$
- Display can be reversed for inverted use
- Display "real-time" or "peak" force
- 200% overload protection
- 5.1"L x 2.9"W x 1.5"H / 1 lb.

Includes:

- AC Adapter/Charger
- 3 attachments (Hook, Flat Head & Hanger)
- Foam-fitted carrying case



Flat attachment



Hook attachment



Additional gauge capacities and attachments are available.

QUALITY
ELEVATOR PRODUCTS, INC.

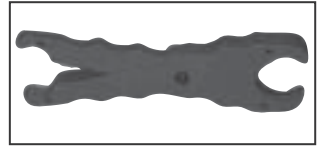
(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

FUSE PULLERS, FUSES

FUSE PULLERS

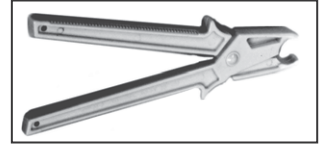
MODEL 91F001

Our 7-1/2" long fuse puller provides optimum ease with maximum efficiency when removing or replacing cartridge type fuses. Use for 100A Max., 250V and 600V fuses.



MODEL 91F002

This 5" long fuse puller is designed for smaller fuses. It provides ease of removal for 9/32" Dia. to 1/2" Dia. fuses, 0-30A, 250V.



FUSES

All Quality replacement fuses are UL listed, CSA certified, DC rated. Fuses listed are in stock. Other types can be provided for shipment in 2-3 days.

GGC (AGC)(311)**

250 Volt

Non-Time Delay

Glass Fuse, 1/4" x 1-1/4"



Model	AMP
91FAGC1/16	1/16
91FAGC1/8	1/8
91FAGC1/4	1/4
91FAGC3/10	3/10
91FAGC1/2	1/2
91FAGC3/4	3/4
91FAGC1	1
91FAGC1.5	1.5
91FAGC1.6	1.6
91FAGC2	2
91FAGC3	3
91FAGC3.2	3.2
91FAGC4	4
91FAGC5	5
91FAGC6	6
91FAGC7	7
91FAGC8	8
91FAGC9	9
91FAGC10	10
91FAGC15	15
91FAGC20	20
91FAGC25	25
91FAGC30	30

GGC (AGC)(311)**

250 Volt

Time Delay

Glass Fuse, 1/4" x 1-1/4"



Model	AMP
91FGDL1	1
91FGDL1.5	1.5
91FGDL1/10	1/10
91FGDL1/2	1/2
91FGDL2	2
91FGDL3	3
91FGDL4	4
91FGDL5	5
91FGDL6	6
91FGDL6-1/4	6-1/4
91FGDL7	7
91FGDL8	8

GAB (ABC)(314)*

250 Volt

Non-Time Delay

Ceramic Fuse, 1/4" x 1-1/4"



Model	AMP
91FABC1/4	1/4
91FABC1/2	1/2
91FABC1	1
91FABC2	2
91FABC3	3
91FABC4	4
91FABC5	5
91FABC6	6
91FABC7	7
91FABC9	9
91FABC10	10
91FABC15	15

Note:

* These are not rejection fuses DO NOT replace with lower rating fuse.

** These are rejection fuses. Replacement of this fuse with a lower voltage or lower interrupting rating is not possible with rejection fuse blocks.

FUSES

TRM (FNM)**
250 Volt, Time Delay
Midget Fuses



Model.	AMP.	Size (in.)
91FTRM1	1	0.41 x 1.5
91FTRM3	3	0.41 x 1.5
91FTRM5	5	0.41 x 1.5
91FTRM6	6	0.41 x 1.5
91FTRM10	10	0.41 x 1.5

TR-R (FRN-R)(FLNR)**
250 Volt, Time Delay
Current Limiting Fiberglass Body
Plated Contact Surfaces



Model.	AMP.	Size (in.)
91FTR310	3/10	0.53 x 2.0
91FTR.5	0.5	0.53 x 2.0
91FTR610	6/10	0.53 x 2.0
91FTR1	1	0.53 x 2.0
91FTR1.6	1.6	0.53 x 2.0
91FTR1.8	1.8	0.53 x 2.0
91FTR2	2	0.53 x 2.0
91FTR3	3	0.53 x 2.0
91FTR3.2	3.2	0.53 x 2.0
91FTR4	4	0.53 x 2.0
91FTR5	5	0.53 x 2.0
91FTR6	6	0.53 x 2.0
91FTR7	7	0.53 x 2.0
91FTR8	8	0.53 x 2.0
91FTR10	10	0.53 x 2.0
91FTR12	12	0.53 x 2.0
91FTR15	15	0.53 x 2.0
91FTR20	20	0.53 x 2.0
91FTR30	30	0.53 x 2.0
91FTR50	50	0.75 x 3.0
91FTR60	60	0.75 x 3.0
91FTR70	70	0.75 x 3.0
91FTR80	80	0.75 x 3.0



Model.	AMP.	Size (in.)
91FTR90	90	0.75 x 5.88

OTM (BLF)(BLN)(BAF)(BAN)
250 Volt, One-Time Delay
General Purpose Midget Fuse



Model.	AMP.	Size (in.)
91FOTM.5	0.5	0.41 x 1.5
91FBLF112	1.5	0.41 x 1.5
91FOTM1	1	0.41 x 1.5
91FOTM2	2	0.41 x 1.5
91FOTM3	3	0.41 x 1.5
91FOTM4	4	0.41 x 1.5
91FOTM5	5	0.41 x 1.5
91FOTM6	6	0.41 x 1.5
91FOTM7	7	0.41 x 1.5
91FOTM8	8	0.41 x 1.5
91FOTM10	10	0.41 x 1.5
91FOTM15	15	0.41 x 1.5
91FOTM20	20	0.41 x 1.5
91FOTM30	30	0.41 x 1.5

OT (NLN)(NON)*
250 Volt, One-Time Delay
General purpose plated contacts



Model.	AMP.	Size (in.)
91FOT1	1	0.53 x 2.0
91FOT2	2	0.53 x 2.0
91FOT3	3	0.53 x 2.0
91FOT4	4	0.53 x 2.0
91FOT5	5	0.53 x 2.0
91FOT6	6	0.53 x 2.0
91FOT7	7	0.53 x 2.0
91FOT8	8	0.53 x 2.0
91FOT10	10	0.53 x 2.0
91FOT12	12	0.53 x 2.0
91FOT15	15	0.53 x 2.0
91FOT20	20	0.53 x 2.0
91FOT25	25	0.53 x 2.0
91FOT30	30	0.53 x 2.0
91FOT35	35	0.75 x 3.0
91FOT40	40	0.75 x 3.0
91FOT60	60	0.75 x 3.0

*
 **

See notes on page 72

FUSES

ATM (KTK)(KLK)**

600 Volt, Non-Time Delay



Model.	AMP.	Size (in.)
91FATM1	1	13/32 x 1-1/2
91FATM2	2	13/32 x 1-1/2
91FATM3	3	13/32 x 1-1/2
91FATM4	4	13/32 x 1-1/2
91FATM5	5	13/32 x 1-1/2
91FATM6	6	13/32 x 1-1/2
91FATM10	10	13/32 x 1-1/2
91FATM15	15	13/32 x 1-1/2

ATQ (FNQ)(FLQ)**

600 Volt, Time Delay



Model.	AMP.	Size (in.)
91FATQR1	1	13/32 x 1-1/2
91FATQR1.5	1.5	13/32 x 1-1/2
91FATQR2	2	13/32 x 1-1/2
91FATQR3	3	13/32 x 1-1/2
91FATQR3.2	3.2	13/32 x 1-1/2
91FATQR3.5	3.5	13/32 x 1-1/2
91FATQR4	4	13/32 x 1-1/2
91FATQR5	5	13/32 x 1-1/2
91FATQR10	10	13/32 x 1-1/2

OT (NLS)(NOS)*

600 Volt, Non-Time Delay

General Purpose Plated Contacts



Model.	AMP.	Size (in.)
91FOTS1	1	0.75 x 5.0
91FOTS2	2	0.75 x 5.0
91FOTS3	3	0.75 x 5.0
91FOTS4	4	0.75 x 5.0
91FOTS5	5	0.75 x 5.0
91FOTS6	6	0.75 x 5.0
91FOTS7	7	0.75 x 5.0
91FOTS8	8	0.75 x 5.0
91FOTS10	10	0.75 x 5.0
91FOTS12	12	0.75 x 5.0
91FOTS15	15	0.75 x 5.0
91FOTS20	20	0.75 x 5.0
91FOTS25	25	0.75 x 5.0
91FOTS30	30	0.75 x 5.0
91FOTS35	35	1.00 x 5.5

TRS-R (FRS-R)**

600 Volt, Time Delay



Model.	AMP.	Size (in.)
91FTRS1.6	1.6	0.81 x 5.0
91FTRS6.25	6.25	0.81 x 5.0
91FTRS30	30	0.81 x 5.0
91FTRS40	40	0.81 x 5.0
91FTRS60	60	0.81 x 5.0

Note:

* These are not rejection fuses DO NOT replace with lower rating fuse.

** These are rejection fuses. Replacement of this fuse with a lower voltage or lower interrupting rating is not possible with rejection fuse blocks.

GATE SHOES, G.F.C.I. TESTER, GRILLS

GATE SHOES

Replacement manual car gate shoes.

Model GS

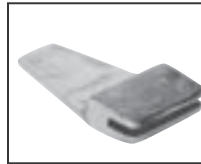
- Aluminum
- Replacement for White-Evans, Amco, Automatic

Model GSCK

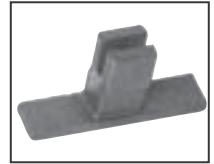
- Brass
- Replacement for Kafka

Model GSCE-B

- Replacement for Esco, and Automatic
- Brass



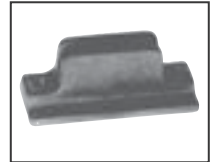
Model GS



Model GSCE-B



Model GFT



Model GSCK

GFCI TESTER

Tester checks GFCI's as well as checks for improper wiring conditions. Compact and inexpensive.

Model GFT

- 3 wire outlet
- CSA approved

GRILLS

Model ADG-10

- 10" diameter grille - white finish (12" O.D., 9.5" hole centers)

Model ADG-12

- 12" diameter grille - white finish (14" O.D., 10.5" hole centers)

Model ADG-16

- 16" diameter grille - white finish (16" O.D., 12.5" hole centers)

Model ADG-12B

- 12" diameter grille - bronze finish (14" O.D., 10.5" hole centers)

Model ADG-16B

- 16" diameter grille - bronze finish (16" O.D., 12.5" hole centers)

Model ADG-12S

- 12" diameter grille - silver finish (14" O.D., 10.5" hole centers)

Model ADG-16S

- 16" diameter grille - silver finish (16" O.D., 12.5" hole centers)



ADG-12S

LIGHTED GRILLS

Combination glare-free light and air distribution grille. Durable acrylic light diffuser. Mounts independent of fan.

For fans with 3 x 15W screw-in CFL lamps:

Model ADGE145SFL (Stainless), **Model ADGE145BFL** (Bronze)

For fans with 4 x 40W screw-in incandescent lamps:

Model ADGE145SI (Stainless), **Model ADGE145BI** (Bronze)

Model 31FG002 Replacement acrylic light diffuser



ADGE145SFL

FANS see pages 58, 59

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

GENERATOR FILTERS

MOTOR GENERATOR FILTERS

A simple "cost effective solution" to capture carbon dust caused from brush wear.



New Clean Installation
Imperial 366



Filters After 6 Weeks, with
normal brush wear

- ***Housekeeping***

Eliminate carbon dust cleanup which is expensive in man-hours and will help to promote customer satisfaction.

- ***Call Backs***

Prevent callbacks for circuit board failure and leveling problems are due to shorts and fouling by carbon dust.

- ***No Heat Build-up***

Designed to operate with "0" temperature increase, with filters fully loaded.

- ***Self Extinguishing***

Have passed a #302 automotive test for flammability.

- ***Complete system***

105 different filter systems designed specifically for each motor generator frame size and configuration.

**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

GENERATOR FILTERS

GENERATOR FILTERS

Product Line By Frame Number

General Electric

324 2 Cubes, 2 Panels
95 4 Cubes, 1 Panel

Imperial

I280T 2 Cubes, 2 Panels
I284A 2 Cubes, 2 Panels
I286A 2 Cubes, 2 Panels
I320T 2 Cubes, 2 Panels
I324T 2 Cubes, 2 Panels
I326 2 Cubes, 2 Panels
I360T 2 Cubes, 2 Panels
I365 2 Cubes
I366 2 Cubes, 2 Panels
I367T 2 Cubes
I368 2 Cubes, 2 Panels
I407A 2 Cubes
I409A 2 Cubes
ID37YT 2 Cubes

Leroy Somer

LS280 1 Wrist Band
LS375 1 Wrist Band
LS46 1 Wrist Band
LS50Rev 1 End Cube
LS500 1 Wrist Band
LS57Rev 1 End Cube
LS64 1 Wrist Band

Reliance

R100 6 Cubes
R150 6 Cubes
R50/60 6 Cubes

Westinghouse

W113-10.5 4 Cubes
W113-7.5 4 Cubes
W123 4 Cubes
W143 4 Cubes
W153 4 Cubes
W2810A 4 Cubes, 1 Panel
W286A 4 Cubes, 1 Panel
W360-9 1 Wrist Band
W3609.5 4 Cubes, 1 Panel
W3609A 4 Cubes, 1 Panel
W3609L 1 Wrist Band
W405 4 Cubes
W44 4 Cubes
W444 4 Cubes, 1 Panel
W444A 4 Cubes, 1 Panel
W444L 4 Cubes, 1 Panel
W44BH 4 Cubes
W45 4 Cubes
W46 1 Wrist Band
W5010A 4 Cubes, 1 Panel
W5012A 4 Cubes, 1 Panel
W5014A 4 Cubes, 1 Panel
W587 4 Cubes, 1 Panel
W63.9 4 Cubes
W63-9A 4 Cubes
W63A 4 Cubes
W63AH 4 Cubes
W63AY 4 Cubes
W64 1 Wrist Band
W64AY 4 Cubes
W66-9A 4 Cubes
W685A 4 Cubes, 1 Panel

Westinghouse Exciters

W256E 4 Cubes, 1 Panel
W3609E 4 Cubes, 1 Panel
W444E 4 Cubes, 1 Panel

Dover

D2500AC 1 Cube
D2500DC 1 Cube
D35000C 1 Cube
D3500AC 1 Cube
D36504 1 Cube
D750C 4 Cubes

Otis

O115 1 Cube
O71 1 Cube
O82 1 Cube
O95 1 Cresnet Cube

US

324 2 Cubes, 2 Panels

All Styles

Small Bag B15
Medium Bag B18
Large Bag B40
Velcro V20'

If you do not see the MG set you require, contact us and we will add it to our product line.

When ordering, specify generator manufacturer and frame size, i.e. Imperial, I286A.

**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

SELF-RESETTING / REMOTE-SET GOVERNOR

SELF-SETTING / REMOTE-SET GOVERNOR

DESCRIPTION

Our Self-Resetting/Remote-Set Governor is designed to test the safeties from the machine room. A momentary switch on the controller trips the governor. The governor and the safeties are then unlocked by upward movement of the car.

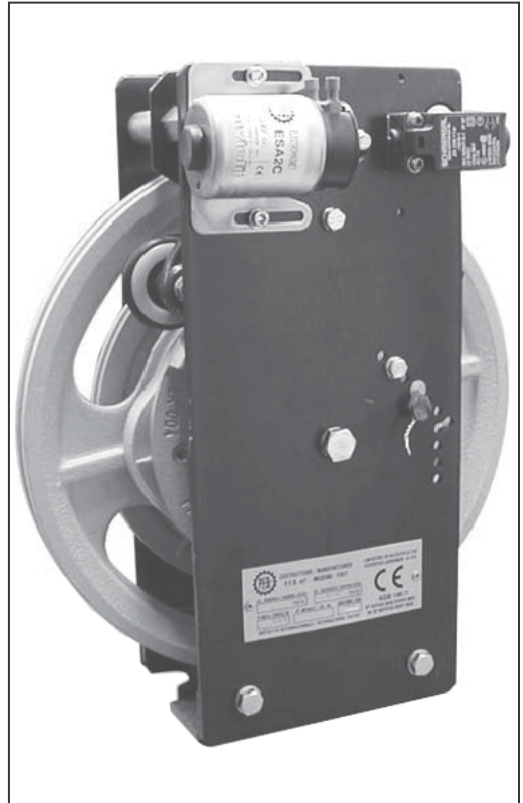
APPLICATION

This governor is most effective on Roped Hydraulic projects where the use of a governor access door is impossible or undesirable. Normally mounted in the overhead, this type of governor may also be mounted in the pit when clearances allow. State and local codes for the project area must allow self-resetting/remote-set governors without access doors.* In addition, certain large capacity cars or elevators with high speeds may not be able to utilize this style of governor. Please contact a sales representative for more details.

FEATURES

- Trips in both directions
- Safety circuit switch standard
- 24 volt remote set solenoid
- Works with 3/8" ropes
- Rope direction is optional

*Not approved in all US states.
Certifications available upon request.



- Dimensions: 12 3/8"W x 14 3/8"H x 6 1/2"D
- Available for trip speeds up to 452 FPM

Model LK 315	175 FPM Trip
Model LK 315-210	210 FPM Trip
Model LK 315-280	280 FPM Trip
Model LK 315-415	415 FPM Trip
Model LK 315-452	452 FPM Trip

GOVERNORS

7.875" Sheave diameter for 1/4" cable.

Model LK 200 63	63 FPM Trip
Model LK 200 75	75 FPM Trip

REPLACEMENT SWITCHES

Model LK-REMOTE	24VDC solenoid switch
Model LK-SWITCH	Governor switch with manual reset

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

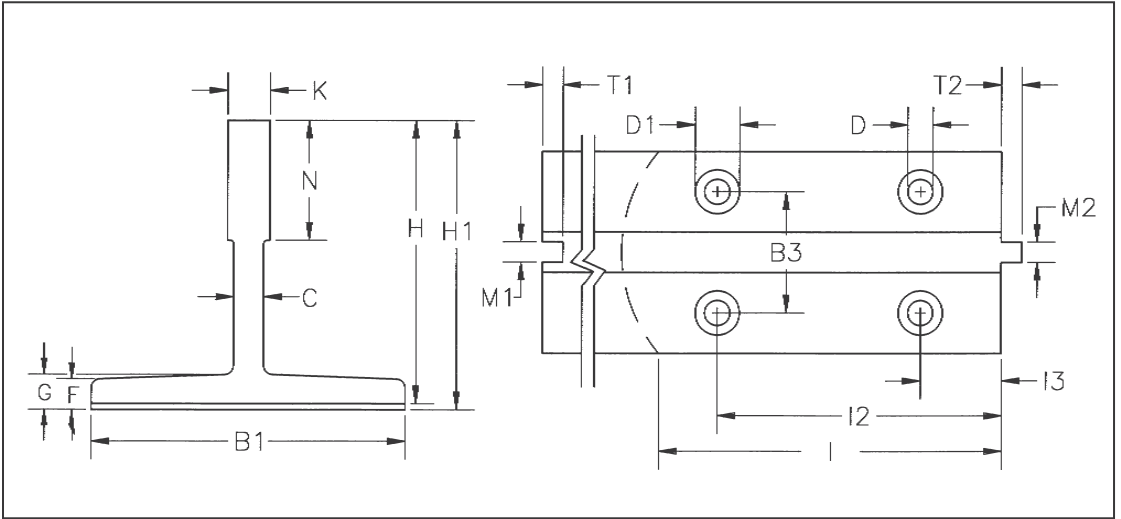
GUIDE RAIL

GUIDE RAIL

Machined Guide Rails in stock.

Available in full Lengths 8'-2" to 16'-4", 8# per ft., 12# per ft., 15# per ft.

Additional sizes and lengths are readily available.



Model	Rail Size (lb./ft.)	Length
GR8-8'2"	8	8'-2"
GR8-16'4"	8	16'-4"
GR12-8'2"	12	8'-2"
GR12-16'4"	12	16'-4"
GR15-8'2"	15	8'-2"
GR15-16'4"	15	16'-4"
GR15-8'2"	15	8'-2"

	H1	B1	K	N	G
8#	2-7/16"	3-1/2"	5/8"	1-5/16"	5/16"
12#	3-1/2"	5"	5/8"	1-3/4"	5/16"
15#	3-1/2"	5"	5/8"	2"	1/2"

FP-12/15 Fishplates for 12#/15#

FP-8 Fishplate for 8#

RAIL BRACKETS, RAIL CLIPS see page 202

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

GUIDE SHOES

RAIL GUIDE SHOES

Swivel type with base plates manufactured for 5" and 6" styles. 2-1/2" adjustments in and out on each guide shoe. Sold in sets of 4.

See work sheet for dimensions.

Custom plates available.

Model GS8-5

- 5" style

Model GS8-6

- 6" style

Model GS8S

- For 8, 12, and 15 lb. rail to mount sling stiles

Model GS8L

- Replacement nylon liners for GS8-5, GS8-6 and GS8S shoes
- 8-1/2"L x 1-21/32"W x 1-1/2"D

Model GSM815

- Guide shoe mounted oilers (set of 2)
- Oiler only, shoe not included

JUMBO GUIDE SHOES

Designed for rails 18.5, 22.5, and 30 lb.
Liner made from Nylatron GS material.

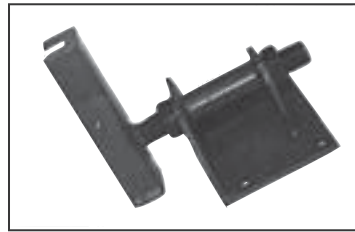
Model GS18-18.5 • For 18.5 lb. rails

Model GS18-22.5 • For 22.5 lb. rails

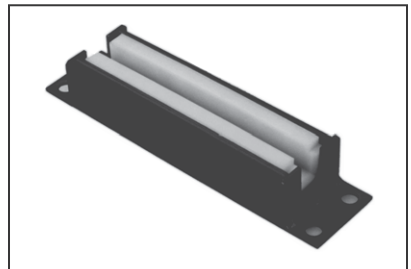
Model GS18-30.0 • For 30.0 lb. rails

Custom bases and liner lengths available.

ROLLER GUIDES see page 80



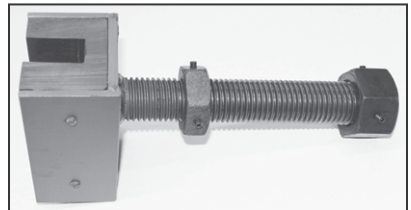
GS8-5, GS8-6



GS8S



GSM815

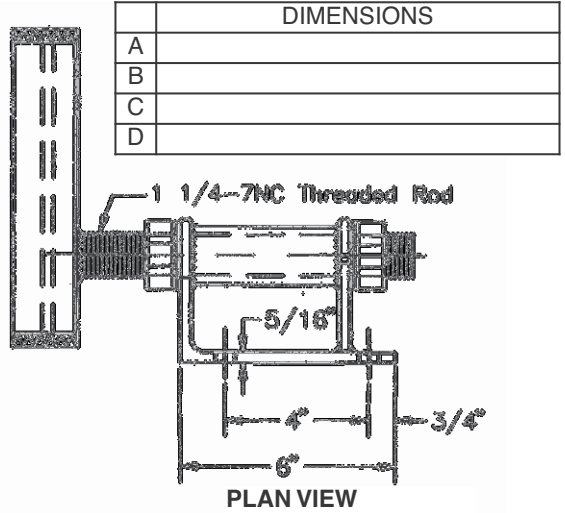
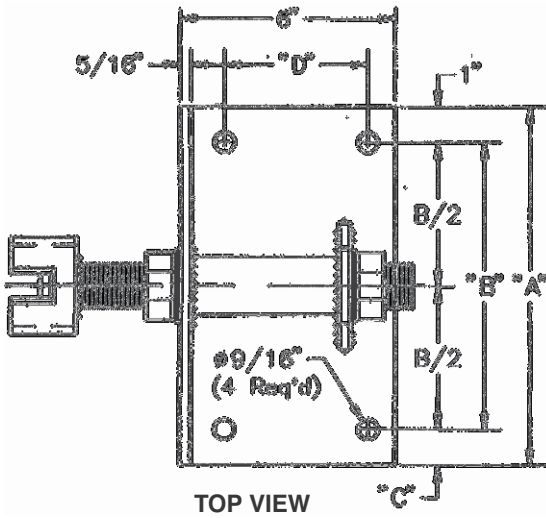


GS18-22.5

GUIDE SHOES

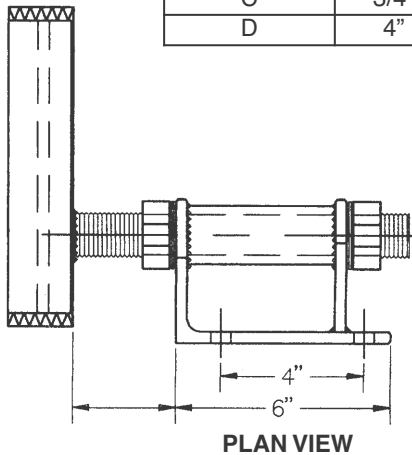
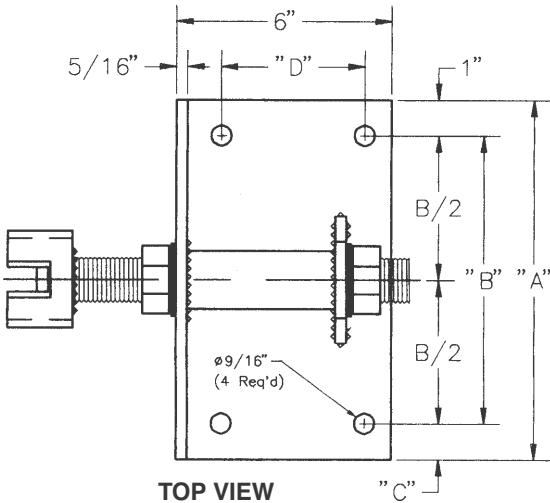
GUIDE SHOE WORK SHEET

MASTER COPY -
PLEASE MAKE A PHOTO COPY



DIMENSIONS	
A	
B	
C	
D	

STANDARD GUIDE SHOE SIZES



DIMENSIONS	GS8-5	GS8-6
A	8-1/2"	10"
B	7"	8"
C	3/4"	1"
D	4"	4"

QUALITY
ELEVATOR PRODUCTS, INC.

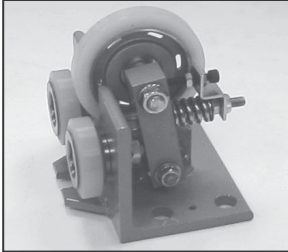
(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

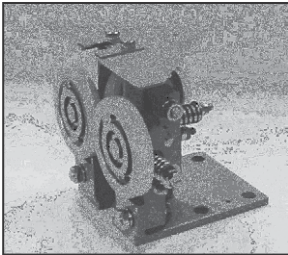
ROLLER GUIDE ASSEMBLIES

Roller Guide assemblies in stock for capacities up to 6,500 lb. and speeds of up to 200 fpm.



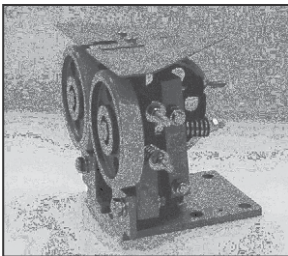
Model CETSR405

- For 8 and 15 lb. rail
- Maximum capacity 2,500 lb.
- Maximum car speed 100 fpm.
- Wheels 2-3" diameter and 1-4 7/8" diameter
- Face roller spring loaded



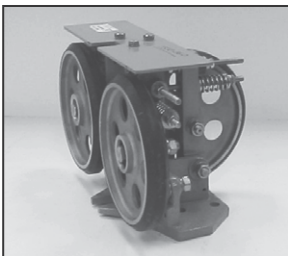
Model CETSR125

- For 15 lb. rail
- Maximum capacity 5,000 lb.
- Maximum car speed 200 fpm.
- Wheels 4 7/8" diameter
- All rollers spring loaded



Model CETSR160

- For 15 and 18 lb. rail
- Maximum capacity 6,500 lb.
- Maximum car speed 200 fpm.
- Wheels 6 1/4" diameter
- All rollers spring loaded



Model CETSR260

- For 15 and 18 lb. rail
- Maximum car speed 200 fpm.
- Wheels 10" diameter
- All rollers spring loaded

HANDRAILS, FLAT

These stainless steel and bronze handrails are manufactured from solid bar stock. The ends are turned in at approximately 3". Included are 5/16" x 3-5/8" studs, and standard spacers (one standard spacer for every 2 feet of handrail) of 1-1/2" x 1" round polished steel. Advise model spacer required, SSHRA, SSHRRA, BRHRA, BRHRRRA. Custom spacing available.

SEE WORKSHEET FOR DETAILS page 83

Straight Flat Handrails

1/4" x 1-1/2"	Stainless Steel	Brushed	SSHRT*
1/4" x 1-1/2"	Stainless Steel	Polished	MSHRT*
3/8" x 2"	Stainless Steel	Brushed	SSHR*
3/8" x 2"	Stainless Steel	Polished	MSHR*
3/8" x 2"	S/S Aluminum	Brushed	SAHR*
3/8" x 2"	Bronze	Brushed	BRHR*
3/8" x 2"	Bronze	Polished	MBHR*

S/S Aluminum - stainless steel rectangular tubing, aluminum filled, lighter and less expensive than the solid bar stock.

Additional brushed stainless steel stock material for custom handrails: 3/8" x 3", 3/8" x 4, 3/8" x 6".

* To assign Model# Insert appropriate length (up to 24, 36, 48, 60, 72, 84, 96, 108, or 120 inches) i.e. - SSHRT36. For removable spacers, add "R" to model, i.e. - SSHRT36R.

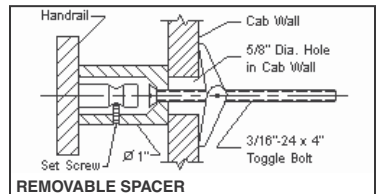
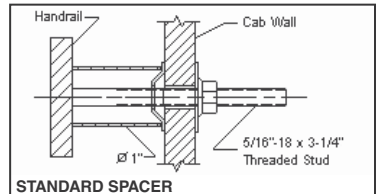
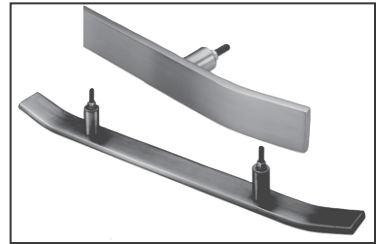
Flat Handrail Parts

		Stainless Steel		Bronze	
		Brushed	Polished	Brushed	Polished
Standard spacer	1-1/2" L x 1" Dia.	SSHRA	MSHRA	BRHRA	MBHRA
Removable spacer	1-1/2" L x 1" Dia.	SSHRRRA	MSHRRRA	BRHRRRA	MBHRRRA
Removable spacer	2-1/2" L x 1" Dia.	SSHRR25	MSHRR25		

Toggle bolts for use with removable spacer

- HTB** • 3/16" x 4" screw, for wall up to 3-1/4" thick
HTB1 • 1/4-20 x 4" screw, for wall up to 3-1/4" thick
HTB2 • 1/4-20 x 2" screw, for wall 3/8" – 1-1/4" thick,
 (with optional 4" screw, for wall 3/8" – 3-1/4" thick)

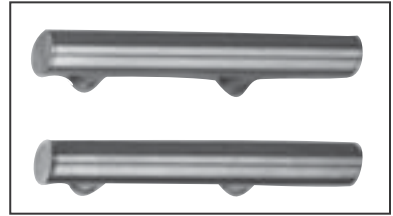
CALL FOR A QUOTE!!



SSHRRRA

HANDRAILS, ROUND

Stainless steel and bronze handrails shown are manufactured from 1-1/2" diameter tubing. Stainless steel has a 14 gauge wall, bronze a 1/8" wall. These handrails are made straight or bent. Round handrails can be provided with standard spacers or removable spacers (for in car installation) (one spacer for every two feet). Advise type spacer required, SSHRCA, SSHRCA, BRHRCA, or BRHRCRCA.

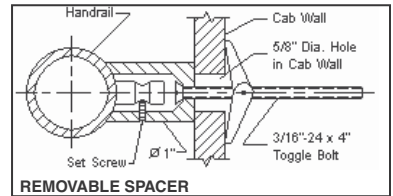
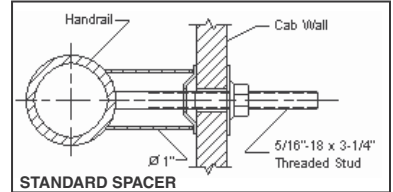


SEE WORKSHEET FOR DETAILS page 84

Straight Round Handrails

1-1/2" Diameter	Stainless Steel	Brushed	SSHR*C
1-1/2" Diameter	Stainless Steel	Polished	MSHR*C
1-1/2" Diameter	Bronze	Brushed	BRHR*C
1-1/2" Diameter	Bronze	Polished	MBHR*C

* To assign Model# Insert appropriate length (up to 24, 36, 48, 60, 72, 84, 96, 108, or 120 inches) i.e. - SSHR36C.
For removable spacers, add "R" to model, i.e. - SSHR36CR.



Round Handrail Parts

		Stainless Steel		Bronze	
		Brushed	Polished	Brushed	Polished
Standard spacer	1-1/2" L x 1" Dia.	SSHRCA	MSHRCA	BRHRCA	MBHRCA
Removable spacer	1-1/2" L x 1" Dia.	SSHRRCA	MSHRRCA	BRHRRCA	MBHRRCA
Removable spacer	2-1/2" L x 1" Dia.	SSHRRC25	MSHRRC25	BRHRRC25	MBHRRC25
End cap	1-1/2" Dia.	SSHR-CAP	MSHR-CAP	BRHRRC-CAP	MBHRRC-CAP

Toggle bolts for use with removable spacer

- HTB** • 3/16" x 4" screw, for wall up to 3-1/4" thick
HTB1 • 1/4-20 x 4" screw, for wall up to 3-1/4" thick
HTB2 • 1/4-20 x 2" screw, for wall 3/8" – 1-1/4" thick,
 (with optional 4" screw, for wall 3/8" – 3-1/4" thick)



HTB, HTB2

CALL FOR A QUOTE!!



HTB1

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
 Fax (847) 581-0095
 7760 N. Merrimac Ave. • Niles, IL 60714

HANDRAILS, FLAT

HANDRAIL WORKSHEET

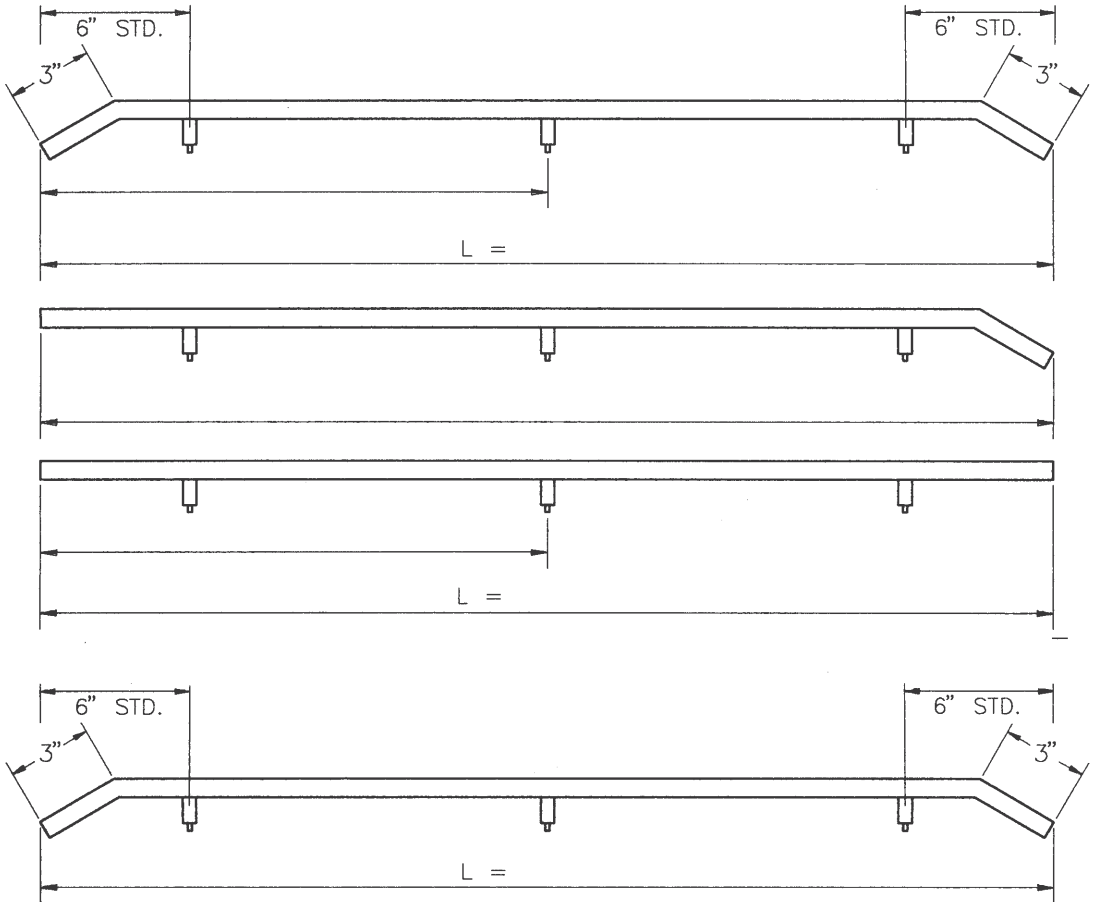
(For Bar Stock Handrails)

**Please Fill In Your Required Spacing Below
MASTER COPY - PLEASE PHOTOCOPY

Choose Handrail Type

- Model SSHR --> 3/8" x 2"
- Model SSHRT --> 1/4" x 1-1/2"
- Model BRHR --> 3/8" x 2"
- Model SAHR --> 3/8" x 2"

- Removable Spacers (In Car Inst.)
- Standard Spacers
- Number Of Handrails Required
 (S/S tubing filled with Aluminum bar)



HANDRAILS, ROUND

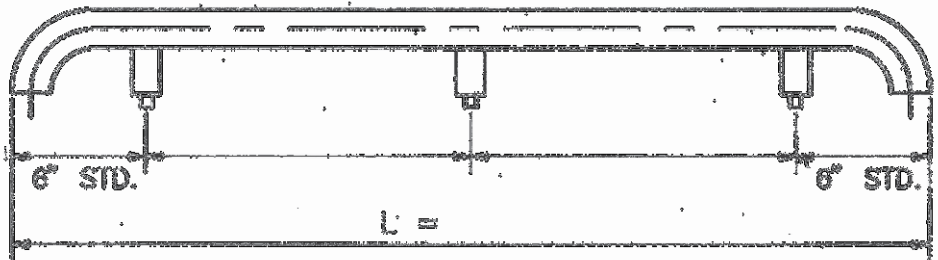
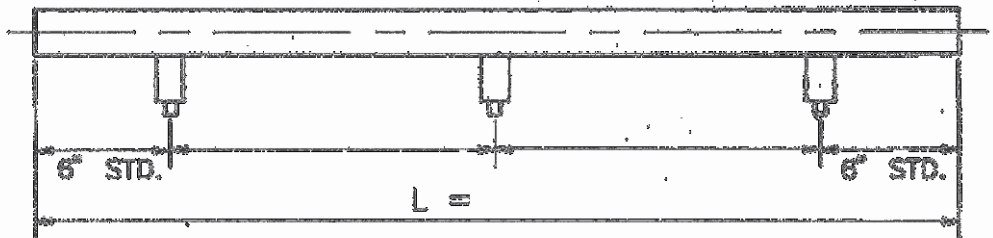
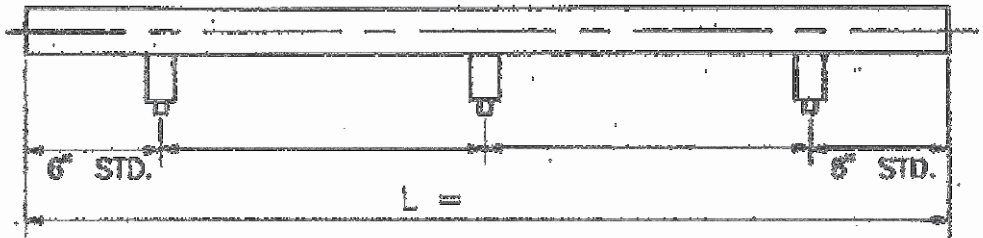
HANDRAIL WORK SHEET

(For Round Handrails)

**Please Fill In Your Required Spacing Below
MASTER COPY - PLEASE PHOTOCOPY

Choose Handrail Type

- Model SSHRC --> 1-1/2" Diameter
- Model BRHRC --> 1-1/2" Diameter
- Removable Spacers (In Car Inst.)
- Standard Spacers
- Number Of Handrails Required



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

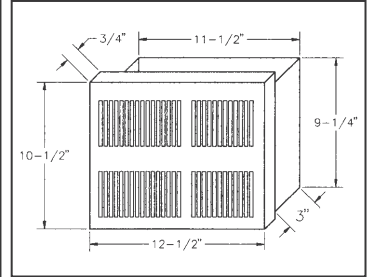
HEATER, HOISTWAY ACCESS KEY BOX, HATCH

HEATER, ELEVATOR CAB

Ceiling mounted fan forced heater is ideal for parking garages and other area installations.

Model QCH-1151

- Navajo white steel faceplate
- Lightweight, 8 lb.
- 1500W, 5120 BTU/HR
- 120VAC power, 12.4A
- Remote thermostat
- Thermal cutout to prevent overheating



QCH-1151

Model QCH-M

Replacement motor for QCH-1151.

HOISTWAY ACCESS KEY BOX

Key box is designed to hold all sizes of emergency door keys. Available in brushed stainless steel and bronze. Box painted silver for surface mounting.

Model HAB311 (Stainless)

Model HAB311B (Bronze)

- Cover 3-3/4"W x 11- 3/4"L
- Glass Window 2-1/4"W x 7"L
- Box 3"W x 11"L x 1"D

Model G01KB001 Replacement glass



HATCH SWITCH

Model CD4NS-3CF

Omron interlock switch, tongue operated.

- Contact type 2NC/1NO
- Contact rating 5A/240VAC
- Opening force 60N (13.5lbf)
- Dimensions 3.77"H x 1.18"D x 1.22"W

HATCH SWITCH ACTUATORS

Model CD4DSK1

- Horizontal arm
- Dimensions 0.07"L x 1.79"D x 1.18"W

Model CD4DSK5

- Adjustable horizontal or vertical arm
- Dimensions 0.96"L x 1.92"D x 2.16"W



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

GATE OPERATOR (FOLDING GATE), IDENTIFICATION TAGS

IDEAL FOR MODERNIZATIONS/RETROFITS, DOES NOT REQUIRE ADDITIONAL HATCH AND OVERHEAD CLEARANCES

- Fully automatic car door opening and closing
- Smooth and quiet operation
- Automatic reversing if door comes in contact with obstruction
- Complies with ANSI A17.1 Section 112 Rule 112.5 (Limit of 2-1/2 FT-LBF Kinetic Energy Closing)
- Utilizes rotary to linear drive
- Unique drive rod and bearing design has a fully adjustable torque setting
- Door open, door close and slow close speed all fully adjustable

Model CECPH10040L (Left hand)

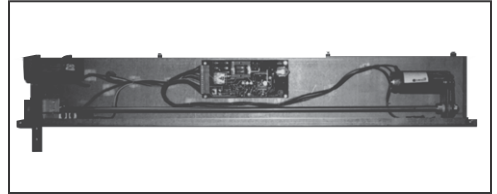
Model CECPH10040R (Right hand)

- Minimum opening width 22-1/2"
- Maximum opening width 33-1/4"

Model CECPH10043L (Left hand)

Model CECPH10043R (Right hand)

- Minimum opening width 25-1/2"
- Maximum opening width 36-1/4"



ELEVATOR IDENTIFICATION TAGS

- All tags have adhesive backs
- Metal tags in stock
- Plastic tags and different sizes can be made



ELEV 1-3X2B



ELEV 2-3X2



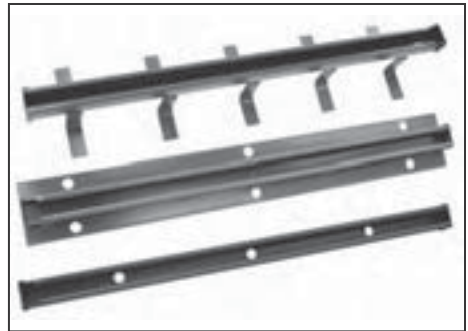
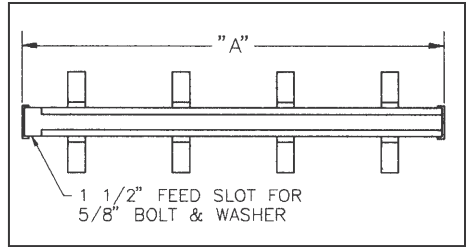
CAR 2-3X1

INSERTS

RAIL INSERTS

Designed for maximum strength and guide rail installation ease. Independent test results have proven a shear load of 2,100 lb. and pull out load in excess of 5,000 lb. All inserts are made from 12 gauge rolled steel with legs and end caps made from 10 gauge steel.

- Grey enamel finish
- Insert washers are included (2 per unit)
- 5/8" washers shipped unless otherwise requested
- Complete test results available upon request



Model	Size	No. Legs	Dim. "A"
G112	12"	2	12"
G118	18"	3	18"
G124	24"	4	24"
G130	30"	5	30"
G136	36"	6	36"
G148	48"	8	48"
G160	60"	10	60"

Special sizes can be custom ordered

Model ICS Plastic closure strip inserts 2.2 mm

- | | |
|---------------------------|---------------------------|
| Model ICS-12 • 12" | Model ICS-30 • 30" |
| Model ICS-18 • 18" | Model ICS-36 • 36" |
| Model ICS-24 • 24" | Model ICS-48 • 48" |

Inserts now available without legs. Holes provided in back of unistrut or a flat plate can be welded to unistrut.

WASHER

Model W01RI011

- For use with 5/8" bolt
- Designed specifically for use with 15# rails

Model W01RI012

- For use with 1/2" bolt
- Designed specifically for use with 8# rails



W01RI011

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

INSPECTION STATIONS

Designed to meet ASME A17.1 Elevator Safety Code Requirements. CSA approved.

Standard Features:

- "Up" Button (2NO-2NC)
- "Down" Button (2NO-2NC)
- "Run"/"Stop" Switch (1NO)
- "Light" On/Off" Switch (1NO)
- 6 Mounting Holes, 0.3"Dia.
- Box Size 12"L x 4.1"H, 4"D for No Bell Stations, 6"D for Top Bell Stations
- "Enable"/"Safe" Button (1NO-1NC)
- "Normal Operate"/"Inspection" Switch (2NO-2NC)
- Ceramic Incandescent Light Bulb Socket
- 3 Prong Duplex Electrical GFCI Outlet

Optional Features:

- Rough Service Lamp and Guard
- Pushbutton And Switch Safety Guards
- 3 Prong Duplex Electrical Outlet

Contact arrangement can be modified upon request. Permanently attached work light w/GFCI, lamp and strain relief available. Stations could be prewired according to customer specifications with multi-cable and optional flexible metal conduit.

Inspection stations include standard features and features specified below.

Model TCIDG

- See Standard Features

Model TCIDG-A

- 6VDC Top Mounted Alarm Bell

Model TCIDG-A120

- 120VAC Top Mounted Alarm Bell

Model TCIG-24

- Fire Service 24-48VDC (Buzzer & Jewel)

Model TCIG

- Fire Service 115VAC (Buzzer & Jewel)

Model TCIG-A24

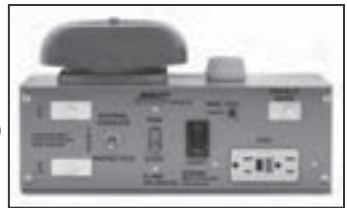
- Fire Service 24-48VDC (Buzzer & Jewel)
- 6VDC Top Mounted Alarm Bell

Model TCIG-A

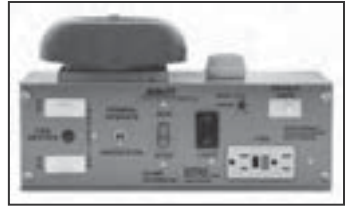
- Fire Service 115VAC (Buzzer & Jewel)
- 6VDC Top Mounted Alarm Bell

Model TCIG-A120

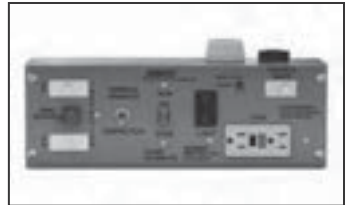
- Fire Service 115VAC (Buzzer & Jewel)
- 120VAC Top Mounted Alarm Bell



TCIDG-A



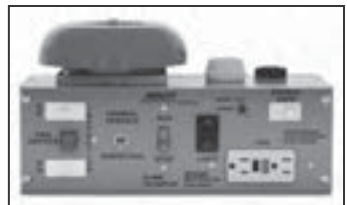
TCIG-A



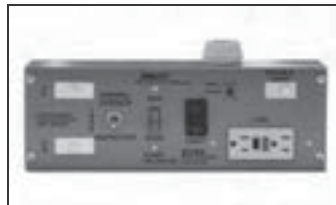
TCIG-24



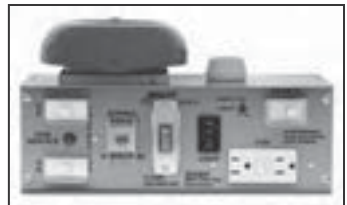
TCIG



TCIG-A-24



TCIDG



TCIG-A (with optional guards)

LAMP GUARDS see page 100

CAR TOP INSPECTION AND PENDANT STATIONS



MODEL TCIGNS
(CSA APPROVED)

- Complete with electronic audible signal in box
- Industrial rated switches for Up/Down/Run and Inspect/Operate
- 110VAC fire service light and buzzer
- GFCI provided
- Stop switch to comply with A17.1, Rule 210.2 (e)
- Car top light switch with On/Off switch, fused for 5A
- 16"W x 6"D x 4-5/8"H

Options Available: Rough lamp service, Metal lamp guard, Low-Voltage fire service signals, Pre-wired to terminal blocks on back of box.

Customize your Car Top Inspection Stations. Reduce field labor! We can "pre-wire" stations to your requirements. You specify the length of multi-cable and greenfield, (or just multi-cable).

Never remove the cover!! Select the station, page 88, tell us how you want it "pre-wired" and we'll do the work.

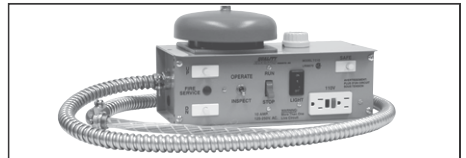
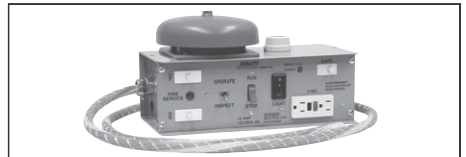
Stations are provided with a connection diagram for easy hook-up.

Model TCIG-4X

- NEMA 4X
- GFCI outlet
- 24VDC fire service



Model TCIG-4X



Pendant Stations (Temporary Inspection/Run Stations)

- UL/CSA approved
- Bright yellow finish
- Pre-wired with 15 ft. cable
(Longer lengths available)



Model PS-40083



Model PS-40133
(With On/Off key)

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

INSPECTION STATION PARTS

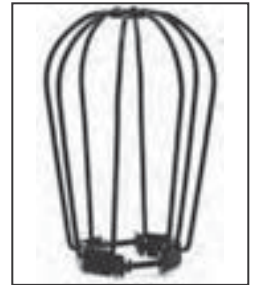
LIGHT/BUZZER

Add-on box with fire service buzzer and jewel to bring old inspection stations up to fire codes.

- Model TCILB** 115VAC buzzer and lamp
Model TCILB-24 24VDC buzzer and lamp
Model TCILB-48 48VDC buzzer and lamp



TCILB



LG-NC

INSPECTION STATION REPLACEMENT PARTS

- AB6I** Alarm bell (interrupter), 6" Dia., 6VDC
AB6 Alarm bell, 6" Dia., 6VDC
AB120 Alarm bell, 6" Dia., 120VDC

- 21IS002** Buzzer 120VAC
21IS018 Buzzer (vibrating), 24VAC
21IS019 Buzzer (vibrating), 120VAC
21IS024 Buzzer (vibrating), 6-16VDC
21IS014 Buzzer (warble), 10-48VDC
21IS015 Buzzer (warble), 30-120VAC/DC

- 41IS002** Guard for "Safe" (run/enable) switch
41PS001 Guard for "Stop" switch
41IS003 Guard for "Up" and "Down" switch
41IS001 Guard for toggle switch

- 21IS007** Jewel

- LG** Lamp guard, metal
LGP Lamp guard, plastic
LG-NC Lamp guard, non-conductive PVC coated metal



41PS001 41IS003 41IS002 41IS001

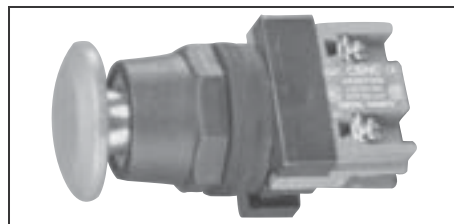
- S01IS001** Light socket, porcelain
15IS004 Light with leads only for TCID-EL2

- 21IS001** Outlet, 3 prong w/ wires
21IS005 Outlet, double GFCI

- 21IS003** On/Off light switch
21IS004 Push button switch, single pole
21IS008 Push button switch, double pole
21IS021 Rocker switch, red, 14A@14VAC
21PS001 Stop switch, red, single pole
21IS011 Stop switch, red, double pole
21IS006 Toggle switch, double pole
21IS025 Mushroom switch assembly with one NC contact

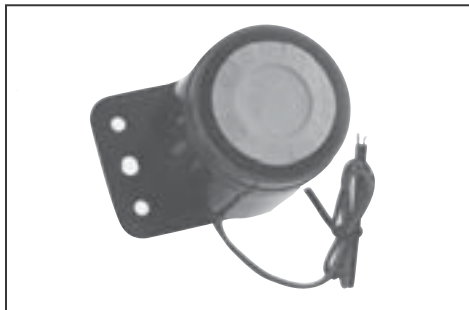
- Additional contacts only for 21IS025
21PS003 normally open
21PS004 normally closed

- 71LB0084** 75W rough service lamp for use with inspection station



21IS025

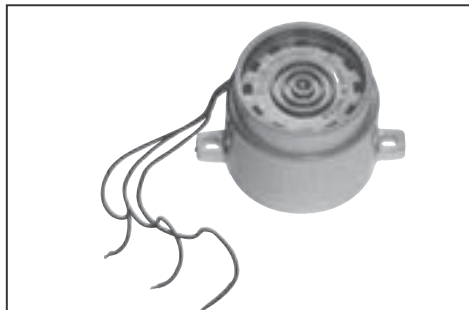
AUDIO SIGNALS



Model SXL-1600
Extremely Loud Piezo Siren

Features:

- Siren Tones
- Flat Mounting Bracket
- 6 -16VDC Operating Voltage
- 1500 - 4000 Hz Frequency
- 120 db at 1'
- 250 Ma Current Draw at 12VDC
- 2.15" Diameter, 2.13" High



Model SXL-600
Electro-Mechanical Audio Indicator

Features:

- Continuous and Pulsating Tones
- Flange Mount
- 9 - 28VDC Operating Voltage
- 2700 - 3100 Hz Frequency
- 98 db at 3.28'
- 15 Ma Current Draw at 12VDC
- 2" Diameter, 1.70" High



Model AI-430
Electro-Mechanical Audio Indicator

Features:

- Continuous Tone
- Flange Mount
- 3-28VDC Operating Voltage
- 2800 Hz Frequency
- 100 dBA @ 4"
- 7 Ma Current Draw at 12VDC
- 1 5/8" Diameter, 5/8" High

INSPECTION STATION/EMERGENCY LIGHTS

INSPECTION STATION/EMERGENCY LIGHT COMBO

Inspection station, emergency light, and alarm bell combined into one cost-effective unit. Reduces field installation time. CSA approved.

- Designed to meet ANSI A17.1 Elevator Safety Code requirements
- Up and down buttons have 2NO contacts for universal compatibility. Safe button has 1NO contact
- Pre-drilled mounting brackets
- Ceramic incandescent light bulb socket
- 6VDC alarm bell
- Remote light source with 5 feet of lead wire
- Nickel cadmium battery and solid state circuitry

Model TCI-EL2

- Features fire service buzzer, jewel and 3 prong electric cord outlet

Model TCID-EL2

- Duplex 3 prong electric cord outlet

Model TCI-EL2I*

- Same as TCI-EL2, but with AB6I interrupter bell

Model TCID-EL2I*

- Same as TCID-EL2, but with AB6I interrupter bell

Model TCID-EL2-NB

- Inspection station / emergency light without bell

Model TCIG-EL2

- Same as TCI-EL2, with Ground Fault Circuit Interrupter GFCI

Model TCIDG-EL2

- Same as TCID-EL2, with GFCI

Model 21EL005

- NICAD stick replacement battery

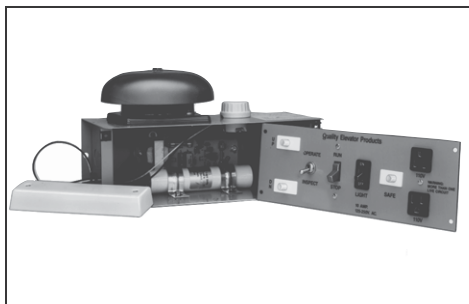
Model 21EL001B

- Replacement circuit board

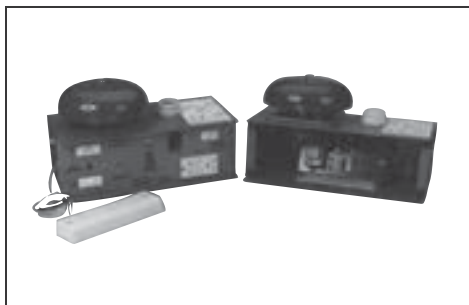
* Designed for Canadian market



TCI-EL2



TCID-EL2



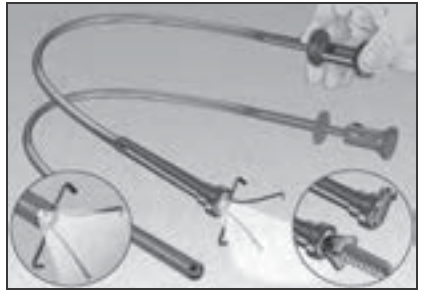
TCIG-EL2

INSPECTION MIRRORS, PICK-UP TOOLS

Model LPT

Set of magnetic and non-magnetic, flexible, lighted pick-up tools for small objects.

- Both with LED light and On/Off button
- Spring steel claws
- Approximately 24 inches long
- Storage case and batteries included



Model CPUT

Flexible pick-up tool for small objects.

- Spring steel claws
- Approximately 24 inches long



Model PUT

Telescopic pick-up tool for ferrous metal parts, to up to 18 oz.

- Telescopes to 26-3/4"



Model PAL

Pocket area light with 18 super-bright floodlight style LED's. Three AA batteries (included) provide 6 hours of run time.

- Ratcheting hinge and powerful case magnet
- Foldable hanging hook swivels 360 degrees
- Open/Close - On/Off switch
- Convenient pouch with clip



Model IMPT

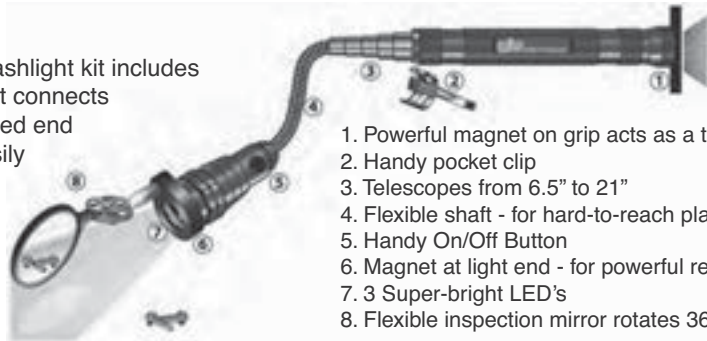
Inspection mirror for hidden areas. Double ball joint allows mirror to swivel to any angle.

- Magnet for retrieving nuts and bolts
- 7-1/2" length, telescopes to 19-7/8"
- Pocket clip to fit easily in pocket



Model EMF

Extendable magnetic flashlight kit includes an inspection mirror that connects magnetically to the lighted end of the flashlight and easily adjusts to any angle.



1. Powerful magnet on grip acts as a third hand
2. Handy pocket clip
3. Telescopes from 6.5" to 21"
4. Flexible shaft - for hard-to-reach places
5. Handy On/Off Button
6. Magnet at light end - for powerful retrieval
7. 3 Super-bright LED's
8. Flexible inspection mirror rotates 360 degrees

**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

INTERCOMS

MASTER STATION INTERCOMS

Model KB-LC-2

- Master station for non-ADA intercom systems for up to 1 sub-station
 - Model KB-LC-2W
 - Master station for non-ADA intercom systems for up to 1 sub-station
 - Incoming calls announced by tone
- Dimensions: 10.5"W x 3.13" H x 8.75"D
Weight: 7 lb.
Power: 24VDC, 600mA power supply



KB-LC-2



KB-LC-2W



KB-ML-5WA



KB-ML-10WA

Model KB-ML-5WA

- Master station for non-ADA intercom systems for up to 5 sub-stations
 - Built-in background music and announcement capability
 - Model KB-ML-10WA
 - Master station for non-ADA intercom systems for up to 10 sub-stations
 - Built-in background music and announcement capability
- Dimensions: 10.5"W x 3.13"H x 8.75"D
Weight: 7 lb.
Power: 24VDC, 1A power supply

MASTER STATION INTERCOMS

Model TAP-LR-3W

- Sub-station with Call Button
 - Requires no separate power source
 - Weather-proof speaker
- Dimensions: Faceplate: 4.81"W x 7.19"H
Wall Opening: 4.13"W x 6.50"H x 2"D
Weight: 3 lb.



TAP-LR-3W



K-S-112X MOD 14

Model K-S-112X MOD 14

- Cradle Phone Sub-station, powered by Master station
 - Automatically calls master by lifting phone from cradle
- Dimensions: 4.00"W x 9.50"H x 5.00"D

MACHINE ROOM INTERCOM

Model ETP-EMRI

Allows local, intercom-style communication between the Elevator Emergency Telephone and the machine room. When not in use, the Emergency Telephone automatically returns to its standard capabilities.

- Handset (included) equipped with "Push to Communicate" button. Depress button for communication with Emergency Telephone. Releasing button for standard operation.
- In case of power failure, power provided to the Emergency Telephone phone line

Dimensions: 4.125"W x 5.5"D x 1.5"H
Specifications: 24VDC Power required



ETP-EMRI

QUALITY
ELEVATOR PRODUCTS, INC.

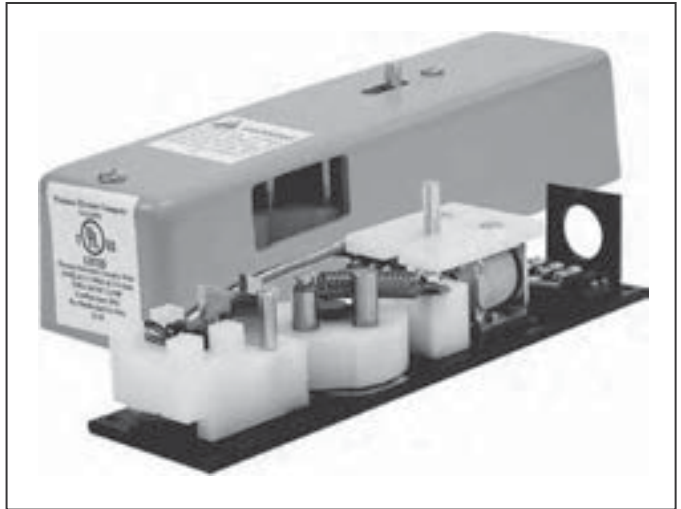
(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

INTERLOCKS, LUBRICATOR (CHAIN)

DOOR INTERLOCK

Model EMI-3

- Positive safety interlock
- Adaptable to all types of swing doors
- UL approved
- Compact, no protruding armature
- Available in AC and DC voltage, right and left hand models
- 10-1/4"H x 2-7/8"W x 2-1/4"D



CHAIN LUBRICATOR

Model CL100

- For lubrication of step, handrail and drive chain
- Constant feed lubricating system
- Different brush sizes and cartridges (multiple uses)
- Lubricates and cleans chain
- Reduces labor costs
- (Specify chain length and width at time of order)
- **CL100C-1** 1 month cartridge
- **CL100C-3** 3 month cartridge
- **CL100C-6** 6 month cartridge
- **CL100C-12** 12 month cartridge
- **CLB1.5** 1-1/2" long brush
- **CLB2.5** 2-1/2" long brush
- **CLB4.0** 4" long brush



JACK ALIGNING SYSTEM

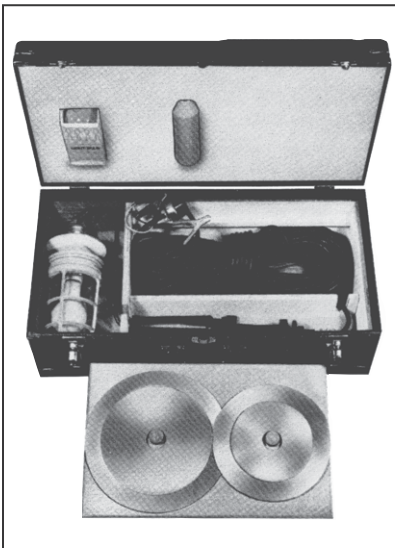
ALIGNING SYSTEM PAT. PENDING MODEL TAL-1PB001

Quick, Accurate Alignment of hydraulic elevator casings

MINUTES vs. HOURS—quick, easy alignment lowers high man-hour costs.

FOR ACCURATE CENTERING, AND—prevents problems caused by out-of-plumb jacks. Where casings have been joined, any dog legs can be quickly spotted and corrected.

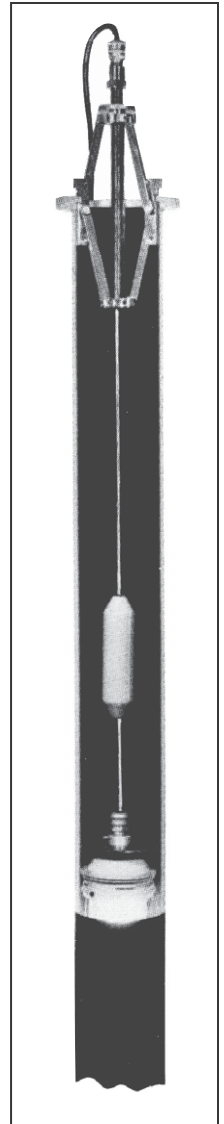
EASY TO USE—Mechanically centered by a unique device, a vapor proof light is lowered the full length of the casing. The “halo” of light appearing around the outer diameter of the centering disk indicates when perfect alignment is achieved. The compact, custom-fitted carrying case allows for easy portability and quick re-assembly of unit.



BEFORE ANY BUILDING STRUCTURE IS PUT UP—cylinder can be aligned, saving the time and expense of having to take out the piston later.

**Any Length
Any diameter casing up to 12"
with Standard System
110VAC or 12VDC**

**EXTENSIONS AVAILABLE
FOR
LARGER DIAMETERS
(greater than 12")**



**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

JANITORIAL SUPPLIES



OIL DRY ABSORBENT

Highly absorbent and nonflammable, Montmorillonite clay naturally cleans up spills and reduces hazards. It absorbs liquids, including most oils, water, mixtures of soluble oils and water, grease, gas, acids, inks and paints.

Model 82BS014

- Bag weight: 50 lb.



PIT PADS

The economical choice to soak up hydraulic oil, diesel fuel or any petroleum-based fluid. Can be used indoors or out because it does not absorb water. Absorbs oil up to 25 times of its own weight. Polypropylene, 12 oz.

Model OP-700

- Package of 100, 18" x 15" x 3/8" pads



TASK WIPERS

A cellulose based disposable wiper has a binder infused in it to provide incredible wet strength and durability while maintaining great absorbency and unmatched softness on your hands and face. Recommended for cleaning grease, grime, etc. Works like cloth. White color. Made in USA.

Delicate Task Wipers

Packaged in a cardboard dispenser box that protects the towels and allows for single sheet dispensing. Made with 25% recycled cellulose fibers.

Model 82BS015

- Perfect for medium-duty wet or dry wiping applications
- Sheet size: 9.5" x 16.5"
- Package qty: 126



Critical Task Wipers

¼ Fold wipers are stacked on top of the other in a poly wrapper and can be stacked out on a workbench or counter top. Made with 45% recycled cellulose fibers.

Model 82BS016

- Ideal for all light-duty general purpose wiping applications
- Sheet size: 12.5" x 13"
- Package qty: 90



STICKY MATS

Sticky Mats® are multi sheet mats manufactured from a polyethylene film that is coated with a high tack adhesive. Mats are made with individual 2-mil thick adhesive layer sheets that face upward effectively capturing dust and dirt from foot traffic and equipment wheels. Once used, each of the numbered sheets peels off easily to reveal the next sheet.

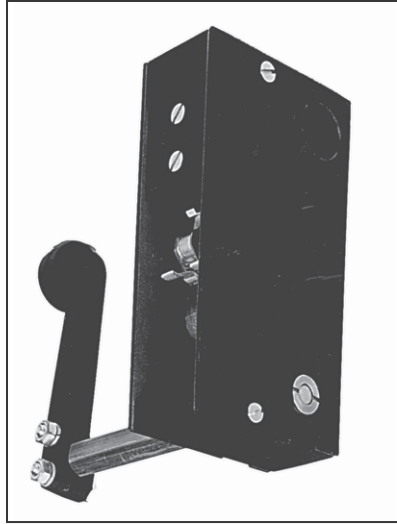
Model SM200

- Mat size: 24" x 30", white color
- Sheets per mat: 30

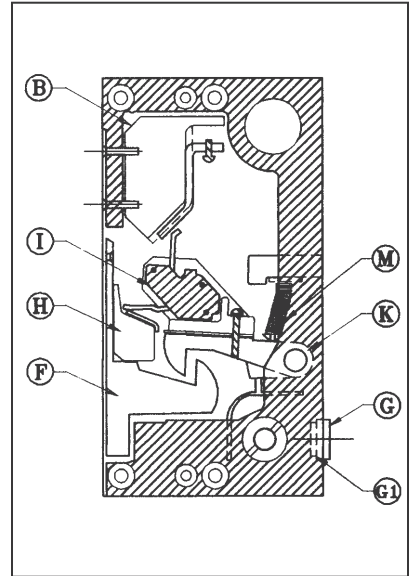
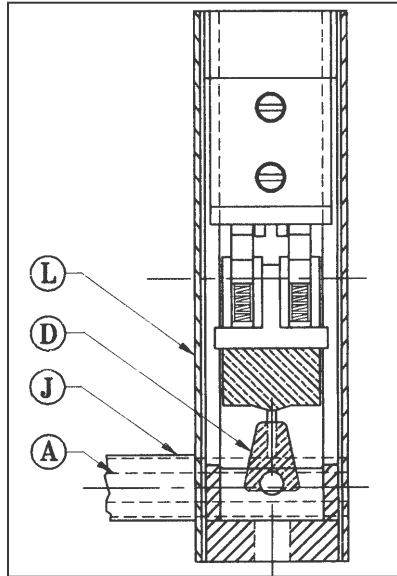
DOOR LOCK

OTIS "L" DOOR LOCK

Model ODL-100
 OEM No.144404
 (Right hand shown)
 Handing can be reversed





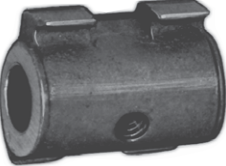


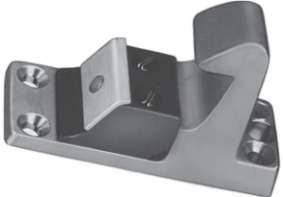

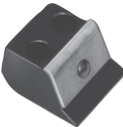


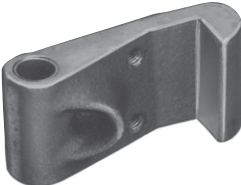
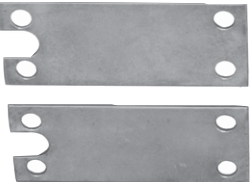
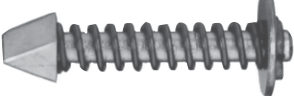

View with keeper removed for "L" door lock



"L" DOOR LOCK

"L" LOCK REPLACEMENT PARTS

REPLACEMENT PARTS FOR OTIS "L" DOOR LOCK

<p>A Steel lock shaft 7-1/2" long Model ODL-3 OEM No.132038</p> 	<p>B Terminal block with two copper contacts with silver plated tips Model ODL-8 OEM No.167594</p> 	<p>C Bronze tumbler cam Model ODL-19 OEM No.327AZ1</p> 	<p>D Bronze tumbler Model ODL-20 OEM No.430FA2</p> 
<p>E Lever arm aluminum Model ODL-16 OEM No.132042</p> 	<p>F Contact assembly keeper OEM NO. 132027 and OEM No. 140233 Model ODL-17 OEM No.143447</p> 		
<p>G G1 Bronze bushing .625 O.D. .321 O/A length Model ODL-32 (w/hole) Model ODL-31 (w/o hole) OEM No.140391</p> 	<p>H Silver contact assembly with base Model ODL-6 OEM No.140233</p> 	<p>I Contact support assembly with OEM No. 132037 and two OEM No. 147976 Model ODL-22</p> 	<p>J Brass lock shaft bearing 5/8"hex. 4 -3/8" long Model ODL-1 OEM No.147451</p> 
<p>K Bronze hook Model ODL-14 OEM No.132038</p> 	<p>L Door keeper shims (2) 22 GA. (2) 16 GA. Model ODL-13</p> 	<p>M Hardened steel spring spindle to disengage OEM No. 132028 with spring, cotter pin & washer Model ODL-12 OEM No.132033</p> 	<p>N Roller 1.22 O.D. x .60 .337 bore Model ODL-23 OEM No.456AA1</p> 

ISOLATION COUPLINGS, LAMP GUARDS

ISOLATION COUPLING

- Reduces mechanically transmitted noise between power unit and car
- Use with muffler for maximum sound reduction
- Dielectric strength of 25KV

- Model ISC2GN** • 2" grooved ends
Model ISC25GN • 2-1/2" grooved ends
Model ISC3GN • 3" grooved ends
Model ISC4G • 4" grooved ends
Model ISC2T • 2" threaded ends
Model ISC25T • 2-1/2" threaded ends
Model ISC3T • 3" threaded ends

Model ISCN

- 2" extra heavy nipple
- Threaded one end/grooved other end
- 5" O.A. length
- Custom lengths available, in 2", 2-1/2" or 3"

ISOLATION PAD

Model ISP

- Buna "N" motor mount made for submersible power units

Model ISOLATOR

Neoprene mounting anti vibration pad. Package quantity 2.

- Size 4" x 4" x 3/8"
- Maximum load 720 lb.

Model ISOLATOR-2

Neoprene/steel anti vibration pad.

- Size 6" x 4" x 1-1/4"
- Maximum load 1200 lb.

LAMP GUARDS

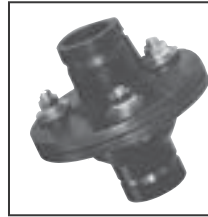
Model LG

- Heavy duty 12 gauge construction firmly grips the light socket and is designed for service and standard bulbs
- Meets OSHA requirements
- Extra long screws

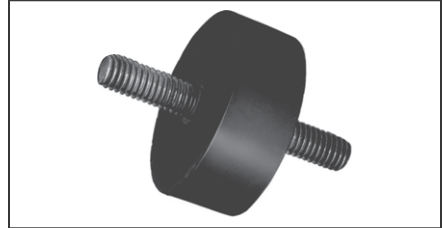
Model LG-NC

- LG coated to be non-conductive

Model LGP



ISCN



ISP



ISOLATOR, ISOLATOR-2



LG



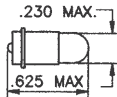
LGP

LAMPS, NOW SUPPLIED BY AES

LAMPS

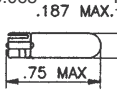
T-1 3/4 Midget Flange Lamp No.

House	Ref.	Volts	Amps	Watts
71LB0049	380	6.3	0.04	0.25
71LBSP10	349	6.3	0.2	1.25
71LB0050	344	10	0.014	0.14
71LBSP64	327	28	0.04	1.12
71LBSP05	7341	28	0.065	1.82



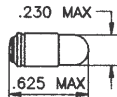
T-1 3/4 Wedge Base Lamp No.

House	GE/Sylv	Ref.	Volts	Amps	Watts
71LB0048	71LB5048	85	28	0.04	1.12
71LBSP191		17	28	0.065	1.82



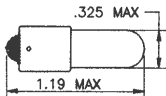
T-L-1 3/4 Midget Grooved Lamp No.

House	Ref.	Volts	Amps	Watts
71LB0062	253X	2.5	.350	.87



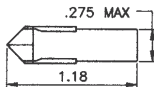
T-2 Miniature Bayonet Lamp No.

House	GE/Sylv	Ref.	Volts	Amps	Watts
71LB0106		6MB	6	0.14	0.84
71LB0073	71LB5073	24MB	24	0.07	1.68
71LB0074	71LB5074	28MB	28	0.04	1.12
71LB0042	71LB5042	48MB	48	0.053	2.5
71LB0017	71LB5017	60MB	60	0.05	3
71LB0025	71LB5025	90MB	90	0.03	2.7
71LB0016	71LB5016	120MB	120	0.025	3
71LB0028	NE120MB	120MB NE 120	Neon w/rstr. to replace 120MB		3.86
71LB0082		155MB	155	0.025	3.86



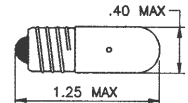
T-2 Telephone Lamp No.

House	GE/Sylv	Ref.	Volts	Amps	Watts
71LB0041		6PSB	6	0.14	0.84
71LB0019	71LB5019	2PSB	12	0.170	2.0
71LB0063		24CSB	24	0.017	0.40
71LB0008	71LB5008	24PSB	24	0.073	1.7
71LB0009	71LB5009	28PSB	28	0.040	1.1
71LB0089		35PSB	35	0.045	1.6
71LB0010	71LB5010	48PSB	48	0.053	2.5
71LB0011	71LB5011	60PSB	60	0.050	3.0
71LB0012	71LB5012	120PSB	120	0.025	3.0
71LB0027		120PSB NE 120	Neon w/rstr. to replace 120PSB		3.88
71LB0081		155PSB	155	0.025	3.88



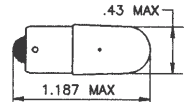
T-3 Miniature Screw Lamp No.

House	Ref.	Volts	Amps	Watts
71LB0109	46	6.3	.250	1.58
71LB0071	1476	18	.170	3



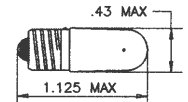
T-3 1/4 Miniature Bayonet Lamp No.

House	GE/Sylv	Ref.	Volts	Amps	Watts
71LBSP87		1850	5	0.09	0.5
71LB0077		755	6.3	0.15	1.0
71LB0076		1847	6.3	0.15	1.0
71LB0044	71LB5044	44	6.3	0.25	1.5
71LB1810		1810	6.3	0.4	2.6
71LB0056		238	6.3	0.5	3.15
71LB0066		756	14	0.08	1.12
71LB0001	71LB5001	1815	14	0.2	2.8
71LB0046	71LB5046	1893	14	0.33	4.62
71LB0052		1892	14.4	0.12	1.72
71LBSP145		1450	24	0.035	0.84
71LB0004	71LB5004	1843	28	0.022	0.6
71LB0040	71LB5040	1829	28	0.07	1.96
71LB0078		757	28	0.08	2.0
71LB0070		1820	28	0.1	2.8
71LB0002	71LB5002	1864/313	28	0.17	4.76
71LBSP03		1821	28	0.17	4.76
71LB0003		313	28	0.17	4.8
71LB0079		1873	28	0.2	5.6
71LB0045	71LB5045	1822	36	0.1	3.6
71LB0026		1828	37.5	0.05	1.85
71LB0055		1835	55	0.05	2.75
71LB3995		3995	120	0.025	3.0
71LBSP55		967	120/130	0.025	3.0



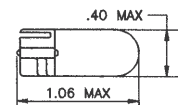
T-3 1/4 Miniature Screw Lamp No.

House	Ref.	Volts	Amps	Watts
71LB0005	1487	14	.20	2.8



T-3 1/4 Wedge Lamp No.

House	GE/Sylv	Ref.	Volts	Amps	Watts
71LB0096		259	6.3	0.25	1.6
71LB0051	71LB5051	161	14	0.19	2.66
71LB0022	71LB5022	657	28	0.08	2.25



QUALITY
ELEVATOR PRODUCTS, INC.

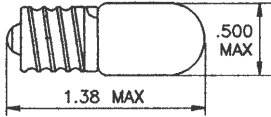
(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

LAMPS, NOW SUPPLIED BY AES

LAMPS

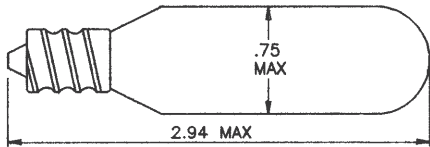
T-4 1/2 Candelabra Screw

Lamp No.	Ref.	Volts	Amps	Watts
House				
71LBSP75	6T4.5/48CS	48	0.125	6
71LB0013	6T4-1/2	48	0.125	6
71LB0054	6T4-1/2	120	0.05	6
71LBSP44	SOLREX	250	0.028	7



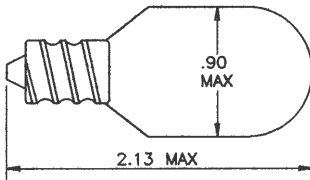
T-6 Candelabra Screw

Lamp No.	Ref.	Volts	Amps	Watts
House				
71LB0057	15T6	125	.115	15



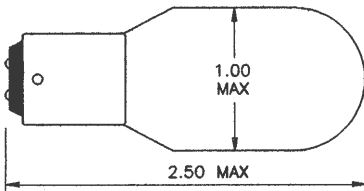
T-7 Candelabra Screw

Lamp No.	Ref.	Volts	Amps	Watts
House				
71LB0043	15T7C	130	.115	15



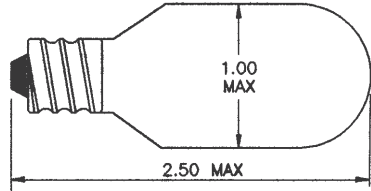
T-8 D.C. Bayonet

Lamp No.	Ref.	Volts	Amps	Watts
House				
71LB0032	25T8DC	115-125	.2	25
71LB0118	25T8DC	115-125	.2	25 (Red)



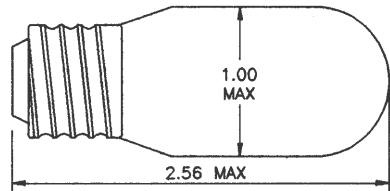
T-8 Candelabra Screw

Lamp No.	GE/Sylv Ref.	Ref.	Volts	Amps	Watts
House					
71LB0031	71B5031	25T8C	115-125	.20	25



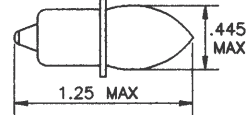
T-8 Intermediate Screw

Lamp No.	Ref.	Volts	Amps	Watts
House				
71LB0033	25T8N	115-125	.2	25



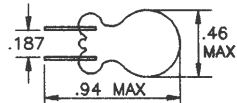
B-3 1/2 S.C. Miniature Flange

Lamp No.	Ref.	Volts	Amps	Watts
House				
71LB0047	PR2	2.38	.50	1.19



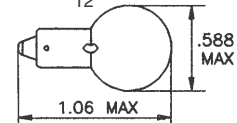
G-3 1/2 Two Pin

Lamp No.	Ref.	Volts	Amps	Watts
House				
71LB0058	19	14.4	.1	1.44



G-4 1/2 Miniature Bayonet

Lamp No.	Ref.	Volts	Amps	Watts
House				
71LB0036	503	5.1	.15	.75
71LB0088	57	12		



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

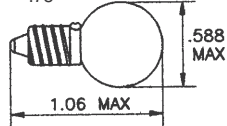
7760 N. Merrimac Ave. • Niles, IL 60714

LAMPS, NOW SUPPLIED BY AES

LAMPS

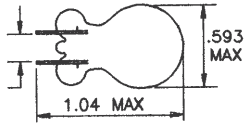
G-4 1/2 Miniature Screw
Lamp No.

House	Ref.	Volts	Amps	Watts
71LB0035	502	5.1	.15	.75



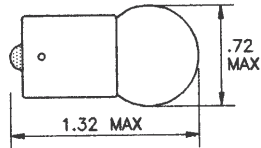
G-4 1/2 Two Pin
Lamp No.

House	Ref.	Volts	Amps	Watts
71LB0068	15	7	.40	2.80



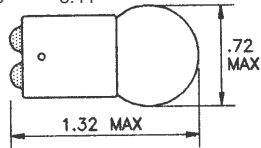
G-6 S.C. Bayonet (Single Contact)
Lamp No.

House	GE/Sylv	Ref.	Volts	Amps	Watts
71LB0030		97	12	0.59	7
71LB0023		67	13.5	0.59	8
71LB0007	71LB5007	1251	28	0.23	7



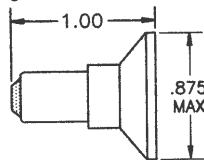
G-6 D.C. Bayonet (Double Contact)
Lamp No.

House	Ref.	Volts	Amps	Watts
71LB0091	1224	34	.16	5.44



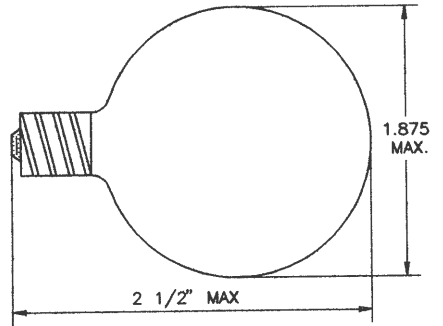
Reflective Bayonet
Lamp No.

House	Ref.	Volts	Amps	Watts
71LB0069	60RB	60	.050	3



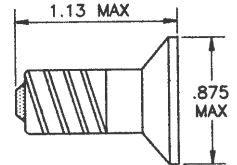
RG-16 Candelabra
Lamp No.

House	Ref.	Volts	Amps	Watts
71LB0020	25G16-1/2/120	120	.20	25



Reflective Candelabra
Lamp No.

House	Ref.	Volts	Amps	Watts
71LB0072	60RC	60	0.05	3
71LB0029	120RC	120	0.025	3
71LB0075	120RC NE	120		Neon w/Rstr. to replace 120RC



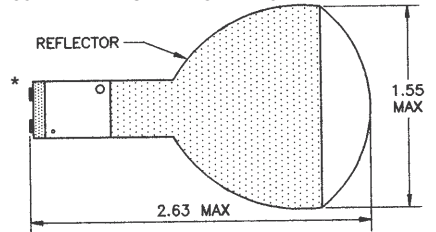
R-12 S.C. Bayonet
Lamp No.

House	Ref.	Volts	Amps	Watts
71LB0080	1383	13	1.54	20
71LBSP118	1383 TUF COAT	13	1.54	20

*

R-12 D.C. BAYONET
Lamp No.

House	Ref.	Volts	Amps	Watts
71LB0126	1196	13	1.54	20



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

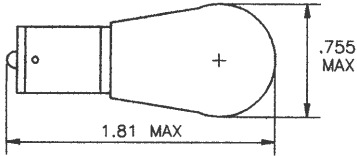
LAMPS, NOW SUPPLIED BY AES

LAMPS

S-6 S.C. Bayonet

Lamp No.

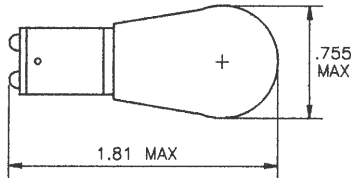
House	Ref.	Volts	Amps	Watts
71LB0061	6S6/145	145	.042	6



S-6-S-10 D.C. Bayonet (Double Contact)

Lamp No.

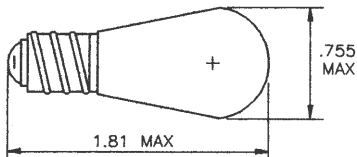
House	GE/Sylv	Ref.	Volts	Amps	Watts
71LB0060	71LB5060	6S6/30	30	0.20	6
71LB0039		6S6/60	60	0.10	6
71LB0059	71LB5059	6S6/120	120	0.05	6
71LB0006	71LB5006	6S6/145	145	0.04	6
71LBP63		10S6/230	230	0.04	9.2
71LB0037		10S6/250	230-250	0.07	10



S-6-S-10 Candelabra

Lamp No.

House	GE/Sylv	Ref.	Volts	Amps	Watts
71LB0065	71LB5060	6S6/12	12	0.5	6
71LB0024	71LB5024	6S6/30	30	0.2	6
71LB0038		6S6/60	60	0.1	6
71LB0014	71LB0014	6S6/115-130	115-130	0.05	6
71LB0094		10S6/120	120	0.08	10
71LB0015	71LB5015	6S6/155	155	0.04	6
71LB0018	71LB5018	10S6/250	230-250	0.04	10

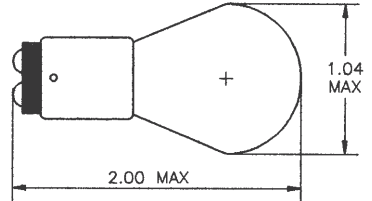


75W Rough Service Lamp, Model 71LB0084, See Page 90

S-8 D.C. Bayonet

Lamp No.

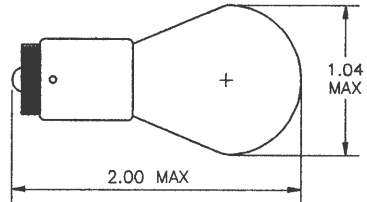
House	Ref.	Volts	Amps	Watts
71LB0053	1493	6.5	2.75	17.9
71LB0064	88	6.8	1.91	13



S-8 S.C. Bayonet

Lamp No.

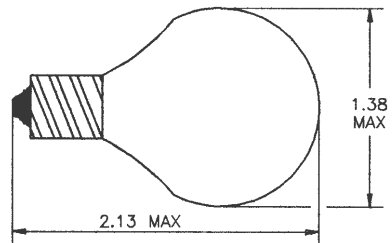
House	Ref.	Volts	Amps	Watts
71LBSP01	1651	5.0	.60	3
71LBSP124	308	28	0.67	19



S-11 Candelabra

Lamp No.

House	Ref.	Volts	Amps	Watts
71LB0034 (Clear)	25S11/2C	120	.2	25
71LB0083 (Frosted)	25S11/2C	120	.2	25



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

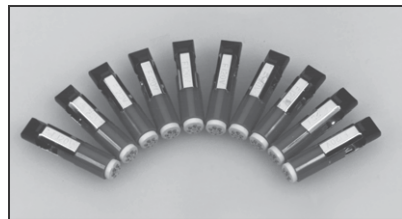
LED INDICATORS, NOW SUPPLIED BY AES

LED INDICATOR LAMPS

Model	Description	Color	Model	Description	Color
71LB0041LW	6V PSB LED	WHITE	71LB0054G	120V CSB LED 6 T4-1/2	GREEN
71LBSP197	24V PSB LED	RED	71LB00014LW	120V CSB LED 6S6	WHITE
71LBSP197W	24V PSB LED	WHITE			
71LBSP174	28V PSB LED	RED	71LB0014L	120V LED 6S6 Candelabra screw	RED
71LB0009LW	28V PSB LED	WHITE	71LB0059L	120V LED 6S6 DC Bayonet	RED
71LB0009LA	28V PSB LED	AMBER			
71LB0009LG	28V PSB LED	GREEN	71LB0035LW	5.1V MB LED 502	WHITE
71LB0009L	28V PSB LED	RED	71LB0073L	24V MB LED	RED
71LBSP177	48V PSB LED	AMBER	71LB0073LW	24V MB LED	WHITE
71LBSP178	48V PSB LED	WARM WHITE	71LB0074L	28V MB LED	RED
71LB0010L	48V PSB LED	RED	71LB0074LW	28V MB LED	WHITE
71LB0102	120V PSB LED	RED	71LB0042L	48V MB LED	RED
71LB0103	120V PSB LED	WHITE	71LB0016L	120V MB LED	RED
71LB0104	120V PSB LED	GREEN	71LB0016LW	120V MB LED	WHITE
71LB0108	120V PSB LED	YELLOW			
			71LB0115D	24V DC BAY LED	WHITE
71LBSP46	28V LED 85	RED	71LBSP124L	28V DC BAY LED 308	WHITE
71LBSP48	28V LED 85	GREEN			
71LBSP47	28V LED 85	WHITE	71LB0022L	28V WEDGE BASE LED 657	WARM WHITE
71LBSP199	28V LED 85	YELLOW	71LB0022LR	28V WEDGE BASE LED 657	RED



Model 71LBSP46



Model 71LB0102

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

LEVELING PACKAGE, LIMIT SWITCHES

LEVELING DEVICE PACKAGE

This "bullet" style package has proven to be more reliable than the magnetic switch/vane type package previously sold. Less installation time required.

The package consists of:

- One limit switch cam complete with mounting brackets
- Two limit switches with mounting brackets
- One 6 lane car top selector bow complete with mounting bracket. The two outside lanes are for leveling and door zone. The four single switch lanes are for "stepping" and slow down.
- Four bullets per floor
- .039 diameter wire (coiled)
- Complete installation instructions

Model LD2B • 2 Stop leveling

Model LD3B • 3 Stop leveling

Model LD4B • 4 Stop leveling

Model LD5B • 5 Stop leveling

Model LD6B • 6 Stop leveling

Model LD7B • 7 Stop leveling

LIMIT SWITCHES

Direct replacement for Westinghouse Type E switch.

Model WLSE-NC • One normally closed contact

Model WLSE-NO (Type G2) • One normally open contact

Manual reset limit switch.

Model NZZ1R23611Z

- DPST, 1NC, 1NO
- 230VAC@4A, 400VAC@2.5A, 500VAC@1A

Model SN6118-SP

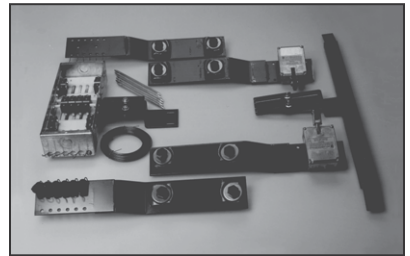
- Adjustable lever, rubber roller, 1.97" Dia.
- DPST, 1NC positive opening, 1NO
- 600VAC@10A

Model SN6118-SL2

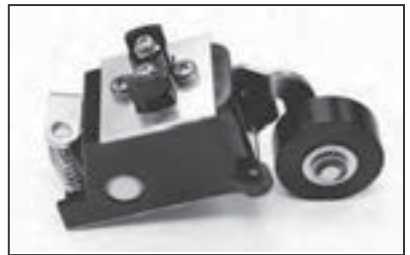
- Adjustable lever, rubber roller, 1.97" Dia.
- DPST, 2NC positive opening
- 600VAC@10A

Model SN6118-01

- Adjustable lever, rubber roller, 1.97" Dia.
- Use with SN6118 and CD4B switches



Car Top Inspections Stations, Alarm Bells, and Emergency Lighting Packages Are Also Available. See Pages 3, 43, 88, 89, and 92



Model WLSE-NC



Model NZZ1R23611Z



Model SN6118

**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

LIMIT SWITCHES/BRACKETS, LIQUID PRESSURE GAUGES

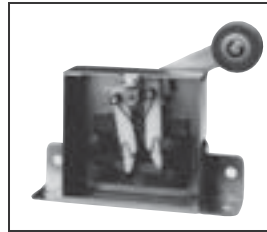
LIMIT SWITCHES

Models LS1, LS1-L

- Direct replacement for C.J. Anderson, Maxton, and Virginia Controls limit switches.
- Rubber roller for dependable operation
- Contacts self wiping, maintenance free, copper to carbon
- One set of normally open and one set of normally closed contacts.
- See through cover
- CSA approved

Model LS1-WP

- Same as LS1, Moisture resistant



Model LS1



Model LS1-L

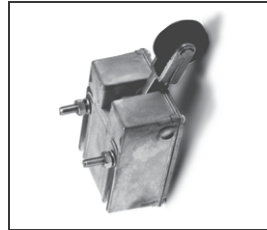
EECO LS1B

Model DW19

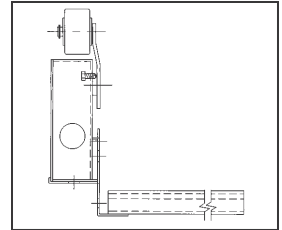
- Specifically for use in the elevator hatchway as zoning, normal, and final limits
- One set of normally open and one set of normally closed contacts

Model DW19-D

- Double contact switch



DW19



L-008 (switch bracket)

“OMRON” LIMIT SWITCHES

Model CD4B-3111N

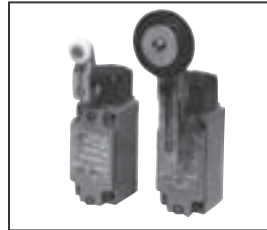
- Lever, nylon roller, 0.69” Dia.
- DPST, 1NO, 1NC

Model CD4B-3113N

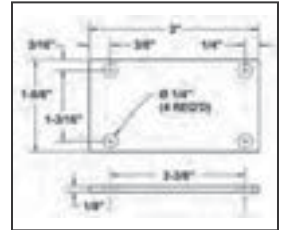
- Adjustable lever, rubber roller, 1.97” Dia.
- DPST, 1NO, 1NC

Model CD4B-3A13N

- Adjustable lever, rubber roller, 1.97” Dia.
- DPST, 2NC



CD4B



OMLSB (CD4B “back plate”)

LIQUID PRESSURE GAUGES

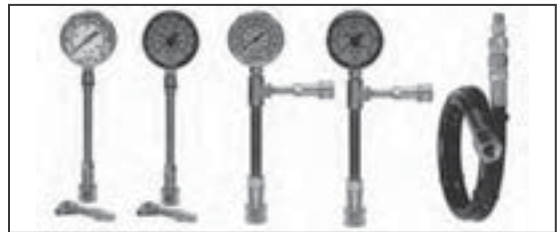
Oil filled gauges for setting up hydraulic relief valves.

Options:

- Scale max. psi: 600, 1000, 3000, 5000
- Gauge peak pressure pointer, “P” option
- 1/8” or 1/4” quick connects
- 1/8” and 1/4” quick connects
- Flexible hose

Model LPGH

- 36” flexible hose with fittings, 2500 psi



LPG

LPG1-P

LPG1-2QC

LPG-2QCP

LPGH

LUBRICANTS

LUBRICANTS

Our top quality lubricants are bottled in special, easy-to-use plastic containers. All lubricants are stocked in gallons only, except Q-30 Guide Rail Lube, and Q-80 Cable Lube, which are also sold in quarts. Pricing for larger containers available upon request.

Q-10 No Drip Oil

Designed for lubrication of overhead door assemblies. Will not drip or run off. Viscosity: 50 SUS @ 100°F.

Q-20 Chain Lube

Medium viscosity adhesive oil to penetrate and lubricate chains. Excellent anti-wear properties. Will not readily wash off. Low pour points allow for low temperatures use. Viscosity: 300 SUS @ 100°F. Can be substituted for Westinghouse #16 and Otis #40 oil.

Q-28 Dash Pot Oil

Not a carcinogen, gold liquid, mild petroleum odor, boiling point 500°F.

Q-30 Guide Rail Lube

High viscosity, low pour lubricating oil with metal adhesive qualities to keep guide rails isolated from metal wear. Viscosity: 700 SUS @ 100°F.

Q-40 Electric Motor Oil

Virgin mineral oil with good dielectric properties used to lubricate electric motors. SAE 20. Viscosity: 300 SUS @ 100°F. Can be substituted for Westinghouse #2 oil.

Q-50 Worm Gear Oil

Designed for low ambient temperatures and intermittent operations. Viscosity: 3000 SUS @ 100°F. Can be substituted for Westinghouse #12 and Otis #33 gear oils.

Q-60 Worm Gear Oil

For applications where high temperature, excessive leakage or continuous operation necessitates a heavy-duty, high-flash oil. Viscosity: 6000 SUS @ 100°F.

Q-70 Brake Pot Oil

High dielectric, highly refined oil with a very low pour point. Used in dash pot reservoirs. Dyed red to distinguish it from other oils. Viscosity: 115 SUS @ 100°F.

Q-80 Cable Lube

Designed to clean, lubricate and protect wire ropes and cables. This non-volatile oil removes excess dirt and reduces frictional forces. 30°F pour point. Dyed bright green to distinguish it from other oils.

Q-85

Wire rope lubricant, sold in one gallon containers. Lubricant recommended by Wire Works Messilot and compatible with all wire rope manufacturers requirements. Lubricant will penetrate to rope core. Apply light coat with roller brush while running elevator on inspection speed.

GCC

Transparent contact cleaner. Boiling point 318°F. Dissolves dirt, grease, flux, and other contaminants. Use for electrical contacts, relays, precision mechanical or electrical equipment. Container size 11 oz.



**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

LUBRICANTS

LUBRICANTS

Model MOB

Machine Oil, 4 oz. bottles

Model SLP

11 oz. Aerosol Can Multi-purpose lubricant for industrial, office and home use.

Model SLP-QSC

One quart sliding compound with silicones.

Model WA-9

Anti-Chatter Additive

Is a powerful additive designed to be added to hydraulic oil in elevators, fork lifts, and hydraulic presses to reduce chattering and sticking of multi-mast hydraulic assemblies. Improves the film strength of the oil while increasing the ability to fully wet metallic surfaces. This results in smoother and cooler operation of all hydraulic systems. It is a nonvolatile oil which will not contribute to seal deterioration or corrosion of metallic surfaces. The moderate viscosity, amber color, and excellent odor characteristics will not change the appearance or physical properties of the current hydraulic oil. WA-9 is intended to be used at 0.5% in any petroleum based hydraulic oil. Over treating will not harm the system, but is not recommended due to cost efficiencies. Gallon container, ratio 1 gallon per 200 gallons oil, viscosity, SUS 100°F - 350, flash point, F-400, odor - mild.

Model A-1

Odor Diffuser

A blend of plant extracts designed to neutralize the odors associated with hydraulic oil. Can be used at any time to mask the oily odors. Imparts a slightly fruity fragrance which is much more pleasant than burnt oil. It is designed to be used at a treat level of 1 pint per 200 gallons of hydraulic oil. Addition of higher levels may be necessary in some cases to adequately mask the oil odor. Is completely compatible with petroleum oils, additives as well as the seals, paints, and metals found in conventional hydraulic systems.

Viscosity: SUS 100°F -60, flash point, F-320, Color Gold, Odor - Fruity, Pint container.

Valves may have to be readjusted after use.

The information given herein is believed to be reliable, but no guarantee is made or liability assumed by the manufacturer.

Model CR-HO32

Hydraulic Oil (5 Gallon) # 32.

Model Q-7215

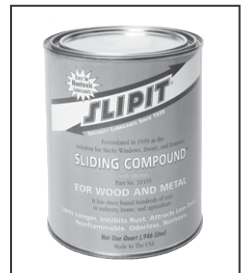
Buffer oil sold by the gallon.



Model MOB



Model SLP



Model SLP-QSC

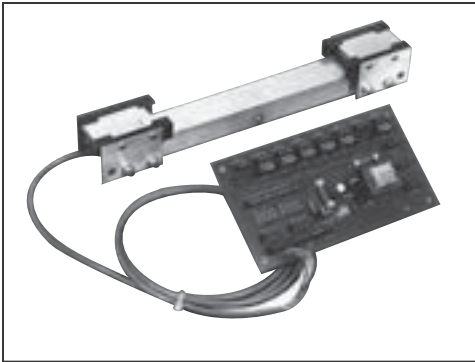
**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

MAGNETIC LANDING SYSTEM



MAGNETIC LANDING SYSTEM

Model MAGLV1

- Versatile
- Dependable
- Affordable

Our model MAGLV1 hall effect level sensor is designed for versatility and ease of installation. It is designed to interface directly with many different controller types. The sensor is a bipolar hall effect sensor with dual outputs and built in pull-ups, allowing a single sensor to independently sense and signal

north and south pole magnets. The sensors control the input to darlington quad sink drivers, which can directly drive most PLC 12 - 24VDC sink inputs, as well as on-board relays that can be used to drive virtually any type of input up to 60 watts. The built in power supply provides 5VDC sensor power as well as 12VDC relay power from 14-24VDC power, or from standard 120VAC power when the on-board transformer is installed. On board LED indicators show when an output is turned on. The standard unit can provide up to 8 separate signals.

The MAGLV1 sensor is very compact with a footprint of approximately 2" x 3". The interface board is approximately 5" x 8". The 2" steel tape can accommodate up to 3 lanes. Tape and sensor mounting is designed to accommodate a wide range of configurations with minimal hardware. Tap mounting kits are available.

Sensor Type:	Hall Effect - bipolar
Driver Type:	Quad darlington
No. of inputs:	8 per interface board
No. of outputs:	16 per interface board; 1 sink output and 1 relay output per input
Sink output:	1.8A 50V Max. per output; 720W total per interface board
Relay output:	5 relays with parallel DPDT contacts for 120VA capacity 3 relays with separate DPDT contacts for 60VA capacity
Supply power:	24-24VAC, optional 120VAC with transformer
Sensor power:	5VDC (onboard)
Relay power:	12VDC (onboard)
Tape size:	2"
No. of lanes:	3
Fusing:	1 A (AC input) and 4 A (DC supply with sensors)

QUALITY
ELEVATOR PRODUCTS, INC.

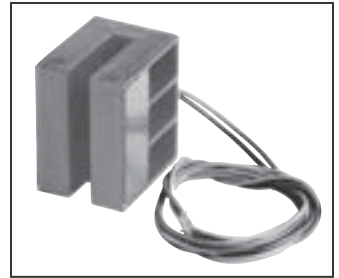
(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

MAGNETIC SWITCHES, MAINTENANCE BARRICADES

MAGNETIC SWITCH

Model DW18

- 1/2A at 240VAC
- Each switch individually tested after assembly
- Contact is completely sealed and is not affected by humidity or other contaminants in the air
- Vane position in gap can vary
- Each switch is individually mounted
- Directly replaces ERM switch
- Easy to mount



Also available -- vanes, vane mounting brackets, and switch mounting box

MV-4C MAGNETIC SWITCH

MV-4C EECO Magnetic Switch is designed primarily for elevator leveling control units, elevator zone switches lift hoists, conveyer transfer systems, and other applications requiring trouble free service. Consistent accuracy can be easily and economically produced by these units where mechanical contact is not desired between the actuating vane and switch.

- Model DW7** 1NO contact
Model DW7D 2NO contacts



“THE BOYS”

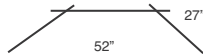
“The Boys” are now being used to alert people of hazardous situations with maximum visibility. This individual free standing “Boy” warns Caution ... Out Of Service. “The Boys” give you 1271 square inches of visible warning, 80% larger than the standard tent sign, being 31” wide by 41” high. If you need “The Boys” as a solid wall temporary maintenance barricade, just join them at the hands, as the wire stand on the back will not interfere. Two maintenance uses within one product.



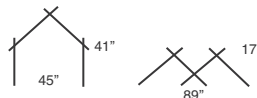
Model THE BOYS



TWO BOYS



THREE BOYS



FOUR BOYS



SIX BOYS

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
 Fax (847) 581-0095
 7760 N. Merrimac Ave. • Niles, IL 60714

MAINTENANCE SIGNS, TAPE

MAINTENANCE SIGNS

Model EOS45

- Made from 65# card stock
- 5-1/2"W x 4-1/4"H
- Sold in packs of 50



SELF-STICKING PADS

Model EOS46, EIS46, EOS48

- Available in pads of 50
- Easy to apply to elevator door
- 4" x 6" Pad



EOS46



EIS46

CAUTION TAPE

Model CTAP

- Alert workers and bystanders about hazardous work areas or dangerous conditions
- Marked "Caution - Do Not Enter" Black letters on yellow, light adhesive, thickness 3.3 mil
- Each roll 3" x 55 yards
- Available by roll or case



EOS48

METERS

TRIPLETT METERS

Model Q-A260T (Triplet Model #630-PLK)

DC Voltages:

Ranges: 0.25 (K Ω /Volt) 2.5, 10, 250, 250, 1000 (20K Ω /Volt)
Accuracy: \pm 1.5% of Full Scale

AC Voltages:

Ranges: 3, 10, 50, 250, 1000 (K Ω /Volt)
Accuracy: \pm 3% of Full Scale

Resistance:

Ranges: 1K Ω , 10K Ω , 1M Ω , 100M Ω
Center Scale: 4.4 Ω , on lowest range
Accuracy: \pm 1.5% of Scale Length

Model Q-A160T (Triplet Model #310)

DC Voltages:

Ranges: 3, 12, 60, 300, 1200 (K Ω /Volt)
Accuracy: \pm 3% of Full Scale

AC Voltages:

Ranges: 3, 12, 60, 300, 1200 (K Ω /Volt)
Accuracy: \pm 4% of Full Scale

Resistance:

Ranges: 20K Ω , 200K Ω , 2M Ω , 20M Ω
Center Scale: 200 Ω , on lowest range
Accuracy: \pm 3% of Scale Length

Model Q-D493T (Triplet Model #4404)

Display: 3-3/4 digit LCD (0.55" digits) with a maximum reading of 3999

Polarity: Automatic polarity, (-) negative polarity indication

Over Range Indication: LCD will display "4" or "-4" accompanied with a continuous beep

Low Battery Indication: Replace battery when (BATT) is displayed

Capacitance:

Ranges: 4nF, 40nF, 400nF, 4 μ F, 40 μ F
Basic Accuracy: 3% rdg +10 dgt
Overload Protection: AC/DC 500 Volts

Frequency:

Ranges: 100Hz, 1KHz, 10KHz, 100KHz, 1MHz
Basic Accuracy: 0.5% rdg +1 dgt
Overload Protection: AC/DC 500 Volts

Measurement Rate: LCD Value Display 2 times per second
Capacitance Test 1 time per second
Bargraph 20 times per second

All meters include batteries, test leads and operation instructions.
Carrying cases and replacement test leads also in stock



Q-A260T



Q-A160T



Q-D493T

**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

METERS, RELEASES, MINIATURE SWITCH

LIGHT METER

Model LMD100

Measures light intensity.

- 0-200/2000/5000 Fc
- 0-2000/20000/50000 Lux
- Data hold button
- Resolution 0.1 Fc or 1 Lux
- Accuracy 5%
- Complete with 9V battery

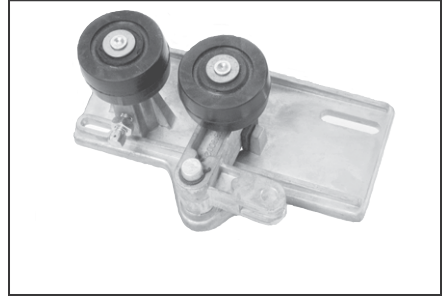


MOH HORIZONTAL RELEASE

Complete assembly with aluminum mounting base.

Model HRINTRH Right hand

Model HRINTLH Left hand



SOUND METER

Model SM100

Measures two ranges.

- 40-80dB
- 80-120dB



MINIATURE SWITCH

Model V10G31C24K

- SPST (normally open)
- 10A at 250VAC
- Quick connect terminals



THERMOMETER

Model TI100

Infrared, non-contact meter.

- Range -30 °C - 500 °C
-20 °F - 932 °F
- Selectable °C or °F
- Data hold 7 Sec
- Accuracy ± 1.5 %
- Response time < 0.5 Sec
- Distance up to 2 m (6 ft)
- Case and 9V battery included

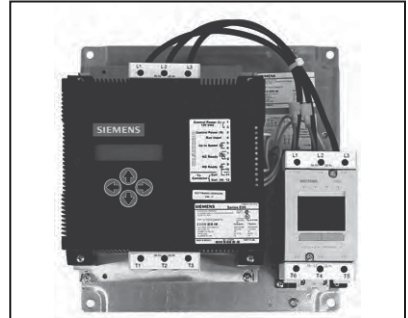


STARTERS, SUPPLIED BY AES

SOLID STATE MOTOR STARTERS

Siemens class 72 Soft Starter - alternative to electromechanical Wye-Delta and across the line motor starters.

- Easy to install, simple wiring, no contacts to replace
- LCD display for parameter settings and fault messages
- Motor up to speed output and overload protection
- Shorter SCR detection
- Phase loss protection

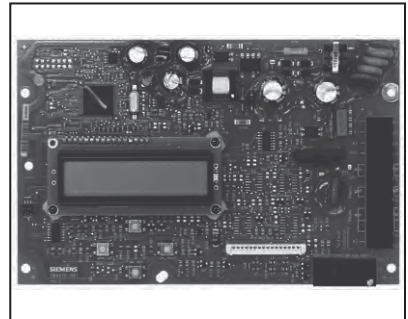


	FOR 6 OR 12 LEAD MOTORS			FOR 3 OR 9 LEAD MOTORS		
	HP@ 200V	HP@ 230V	HP@ 460V	HP@ 200V	HP@ 230V	HP@ 460V
7246025	7.5	10	25	-	5	10
7246030	10	15	30	5	7.5	15
7223020	15	20	40	7.5	10	20
7223025	20	25	50	7.5	10	25
7223030	25	30	60	10	15	30
7223040	40	50	100	20	25	50
7223050	50	60	125	25	30	60
72230100	75	100	-	40	50	-

REPLACEMENT LOGIC BOARD

Model 72GBD01

Replacement logic board for Siemens class 72 Soft Starter.



MAGNETIC MOTOR STARTERS

With solid state overload, full voltage, non-reversing, opening type.

Model ESP14HSK32A

30 HP @ 230V
50 HP @ 460V
(Nema size 3)

Model ESP14ESG32A

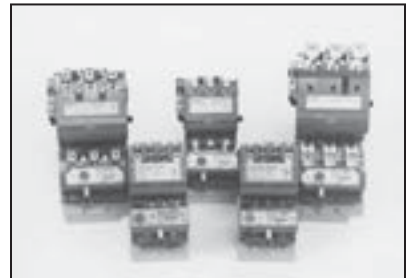
7.5 HP @ 200V
10 HP @ 230V
(Nema size 1-3/4)

Model ESP14JTM32A

50 HP @ 230V
100 HP @ 460V
(Nema size 4)

Model ESP14GSJ32A

15 HP @ 200V
20 HP @ 230V
(Nema size 2-1/2)



PHASE MONITORS see page 185

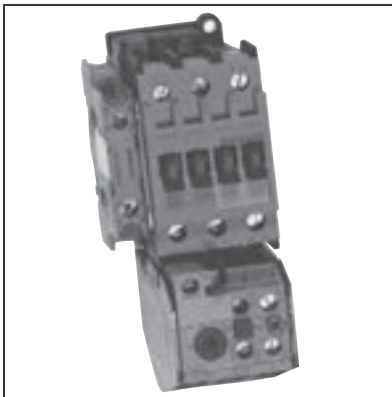
QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

STARTERS, MAGNETIC CONTACTORS



SIEMENS 3TF3200 SERIES AC CONTACTORS

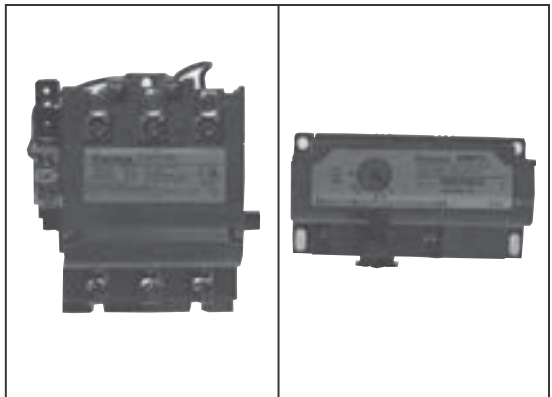
- Fast, safe terminal access
- Each terminal accepts 2 wires
- Inrush capacity of 8.4 times rated full load current
- Snap on Din Rail or panel mount
- Cadmium free contacts
- 1NO/1NC auxiliary contacts
- Snap on accessories available
 - Up to 4 auxiliary contacts
 - Electronic or pneumatic timer
 - Mechanical interlock

Model 3TF3211OAK6	10 HP @ 460V
Model 3TF3311OAK6	15 HP @ 460V
Model 3TF3511OAK6	25 HP @ 460V

SIEMENS 3UA5 SERIES OVERLOADS

- Class 10 tripping characteristics
- Phase loss and unbalanced load protection
- Trip indicator
- Manual/auto reset

Model 3UA5200-2B	12.5-20A
Model 3UA5200-2C	16-25A
Model 3UA5500-2Q	25-36A
Model 3UA5500-2R	32-40A
Model 3UA5500-8M	36-45A



FURNAS CLASS 40 FULL VOLTAGE, HEAVY DUTY, MAGNETIC CONTACTORS

- Rugged industrial design
- Easy coil access
- Straight thru wiring
- Gravity dropout
- Dual voltage coils

Model 40FP32AA	Starter, Size 2
Model 40GP32AA	Starter, Size 2.5
Model 40HP32AA	Starter, Size 3
Model 40IP32AA	Starter, Size 3.5

SOLID STATE OVERLOADS

- Phase loss protection
- 2% repeat trip accuracy
- Manual reset
- FLA adjustment dial with wide adjustment range
- Heaterless design

Model 48BSF3M10	Overload, 13-27A
Model 48BSH3M10	Overload, 22-45A
Model 48BSJ3M10	Overload, 30-60A
Model 48BSK3M10	Overload, 45-90A
Model 48BSL3M10	Overload, 57-115A
Model 48BSM3M10	Overload, 67-135A

MECHANICAL INTERLOCKS

Model 49GGF22H	Mechanical Interlock
Model 49HHP22H	Mechanical Interlock

MOTORS, SUBMERSIBLE

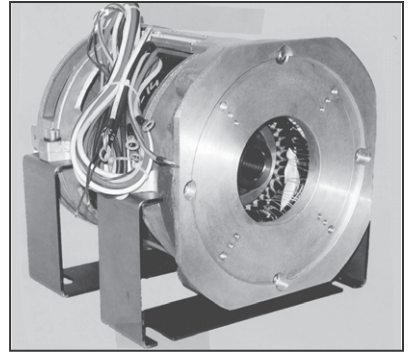
MOTORS SUBMERSIBLE SB MOTORS

SB motors are directly interchangeable with the US Electric, AO Smith and Imperial Electric motors and have been used in North America by companies that import from Europe.

SB SRL Motori Elettrici di Milan, Italy was established in 1972. We have been successfully using these motors on our pumping units since 2002.

Our inventory of motors range from 2.9HP to 60 HP. 70 HP and 100 HP motors also available.

S.B. Motors are also available from AES in Emeryville, Las Vegas, and Chicago.



Model	HP	FL RPM	Frame	Phase	Voltage
SB2.9/220	2.9	1725	SB-150	1	220
SB3.5/1	3.5	1800	SB-150	1	230
SB5/220	5	1725	SB-150	1	220
SB10/220	10	3400	SB-150	1	208/230
SB10/220-3	10.5	3400	SB-150	3	230/460
SB15/200	15	3600	SB-200	3	200
SB15/230/46	15	3600	SB-200	3	230/460
SB20/200	20	3600	SB-200	3	200
SB20/230/46	20	3600	SB-200	3	230/460
SB25/200	25	3600	SB-200	3	200
SB25/230/46	25	3600	SB-200	3	230/460
SB30/200	30	3600	SB-200	3	200
SB30/230/46	30	3600	SB-200	3	230/460
SB40/200	40	3600	SB-200	3	200
SB40/230/46	40	3600	SB-200	3	230/460
SB50/200	50	3600	SB-250	3	200
SB50/230/46	50	3600	SB-250	3	230/460
SB60/460	60	3600	SB-250	3	460

MOTORS, SUBMERSIBLE & DRY

MOTORS SUBMERSIBLE, IMPERIAL ELECTRIC

In stock Imperial Electric motors 3600 RPM, rated for 80 or 120 starts per hour, 200V, 230/460V, 575V. Advise power supply.

- 200V motors are designed for operation at 208V
- All motors have connections for Wye-Delta or across the line starting
- Windings are protected by built-in thermal protection elements
- Oil temperature is monitored by a thermal protection element
- External leads 87" in length
- IM40 and IM50 has 38 mm shaft, all others are 32 mm

Model	HP	FL RPM	Frame	Phase	Voltage
IM15/208	15	3400	217Z	3	200V
IM15/230/46	15	3400	217Z	3	230/460V
IM20/200	20	3395	217Z	3	200V
IM20/230/46	20	3395	217Z	3	230/460V
IM25/200	25	3400	217Z	3	200V
IM25/230/46	25	3400	217Z	3	230/460V
IM25/575	25	3400	217Z	3	575V
IM30/200	30	3390	217Z	3	200V
IM30/230/46	30	3390	217Z	3	230/460V
IM40/200	40	3410	L217Z	3	200V
IM40/230/46	40	3410	L217Z	3	230/460V
IM50/208	50	3380	L217Z	3	200V
IM50/230/46	50	3380	L217Z	3	230/460V
IM50/575	50	3380	L217Z	3	575V



MOTORS DRY HYDRAULIC, IMPERIAL ELECTRIC

In stock Imperial Electric motors. Rated for 80 or 120 starts per hour, 1800 RPM, ball bearing design, 200V, 230/460V. 3600 RPM motors also available.

Model	HP	FL RPM	Frame	Phase	Voltage
ML20D-2	20	1750	254T	3	230/460V
ML20D/200	20	1750	254T	3	200V
ML25D	25	1755	256T	3	230/460V
ML25D/200	25	1755	256T	3	200V
ML30D	30	1760	284T	3	230/460V
ML30D/200	30	1760	284T	3	200V
ML30D/230	30	1760	284T	3	230/460V
ML40D	40	1760	286T	3	230/460V
ML50D	50	1760	324T	3	230/460V
ML50D-200	50	1760	324T	3	200V
ML60D	60	1760	326T	3	230/460V



MUFFLERS

MUFFLERS

Quality mufflers operate with maximum efficiency to minimize noise under all conditions. Easily installed, quality constructed with maintenance free operation. Custom lengths available.

- Dimensions - 8-5/8" D x 18" OAL
- Weight - 58 lb.

Model MUF-1.5G

- 1-1/2" grooved

Model MUF-2.5G

- 2-1/2" grooved

Model MUF-1.5

- 1-1/2" threaded

Model MUF-2.5

- 2-1/2" threaded

Model MUF-2G

- 2" grooved

Model MUF-3G

- 3" grooved

Model MUF-2

- 2" threaded

Model MUF-3

- 3" threaded



Smaller diameter, lighter weight mufflers. Composed of sound deadening compound with a compression resistant core.

- Dimensions - 2", 2-1/2": 4" Dia. x 20" OAL
- 3": 6" Dia. x 20" OAL
- Weight - 2", 2-1/2": 25 lb.
- 3" : 40 lb.

Model MUFS-2G

- 2" grooved

Model MUFS-3G

- 3" grooved

Model MUFS-2.5

- 2-1/2" threaded

Model MUFS 2.5G

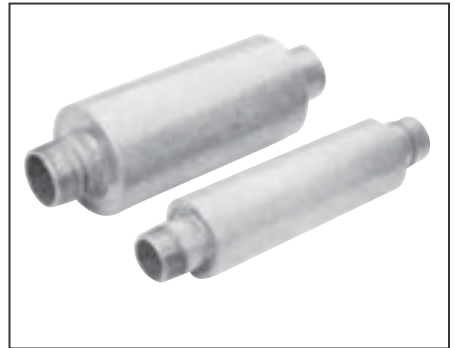
- 2-1/2" grooved

Model MUFS-2

- 2" threaded

Model MUFS-3

- 3" threaded



Model MUF-A2G

- Air bladder muffler
- 2", both ends grooved

Model MUF-A2GT

- Air bladder muffler
- 2", one end grooved, one end threaded



NO SMOKING SIGNS, OIL LEVEL GAUGE

NO SMOKING SIGNS

Great for use in elevators, lobbies and other no smoking areas. Easy to read plastic signs 8"W x 2"H with large etched graphics. Designed with 3/16" mounting holes, full back adhesive.

Model	Color
NSR-1	Red
NSW-2	Walnut
NSB-3	Bronze
NSS-4	Stainless

Model F-741

Easy to read 10" x 4", made from durable 80 mil. rigid vinyl with sub surface graphics. No hardware or frames are necessary, full adhesive back for easy installation. Black lettering on a white background.

Model F-740

10" x 4", Plastic with black lettering on white background. Full back adhesive. Available in stainless steel with silk screened lettering.

Model F-740-S

Model L.A.M.C. 41.51

2" x 8" brushed silver plastic with black lettering. No Smoking 1/2" letters.

OIL LEVEL GAUGE

Model OLG100

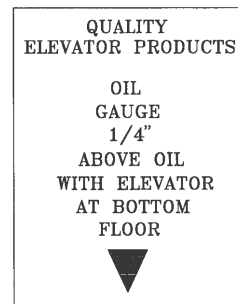
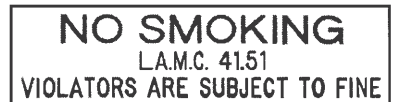
Magnet 3" W x 4" H, mount in tank as directed to check for oil leaks. Black letters on white background.



Model F-741



Model F-740



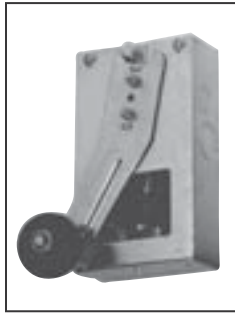
QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

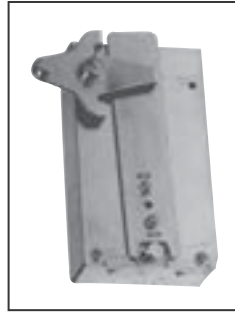
REPLACEMENT MECHANICAL SWITCHES



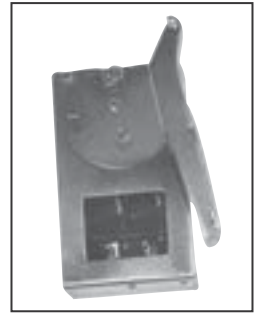
Floor Stop Switch
Model JMHM-2026
(OTIS A6098A1)
Single Pole
Double Throw



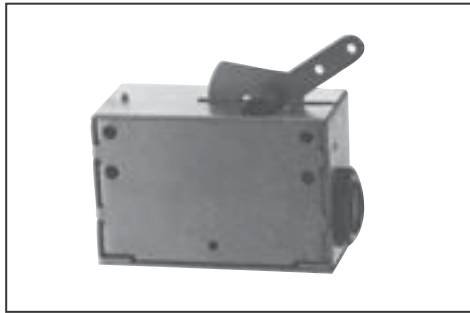
Limit Switch
Model JMHM-2025
(OTIS A6098B5)
Single Pole
Normally Closed
Model JMHM-2025R
(Right Hand)



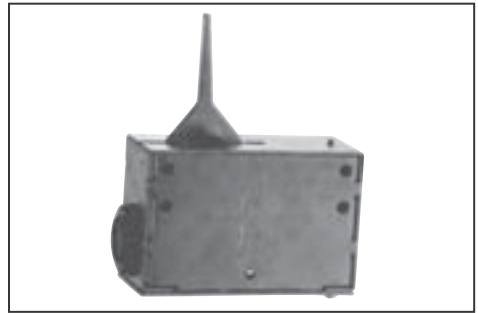
Tripper Switch
Model JMHM-2027
(OTIS A6098D6)
Single Pole
Normally Closed
Model JMHM-2027R
(Right Hand)



Car Gate Switch
Model JMHM-2024
(OTIS A6098E5)
Double Pole
Two Normally Open



Safety Switch
Model JMHM-2029
One Normally Open Contact
Switch Body:
3-1/2"W x 2-3/8"H x 1-1/2"D



Governor Switch
Model JMHM-2028
One Normally Closed Contact
Switch Body:
3-1/2"W x 2-3/8"H x 1-1/2"D

FLOOR, CARPET PROTECTION



CARPET MASK®

- Roll it on, stays in place
- Easy to use and to move
- Clear tough 2 mil. non-skid surface
- Temporary protection, up to 30 days
- Great for hallways and stairs
- Use on all types of synthetic carpets
- Tear and puncture resistant

Model CM24X200 24" X 200'

Model CM36X200 36" X 200'



FLOOR MASK®

- Specially formulated 3 mil. self-adhesive poly runner
- Durable protection
- Resistant to tearing and scuffing
- Ideal for countertops
- Protects hard surfaces such as linoleum, ceramic tile, cultured marble, etc.
- Temporary protection, up to 30 days

Model FM24X200 24" X 200'

Other lengths and widths available



APPLICATOR

- Fast and easy application of carpet protection for large areas
- Durable, heavy duty construction
- Saves time and labor
- Fits 200' and 1000' rolls in both widths

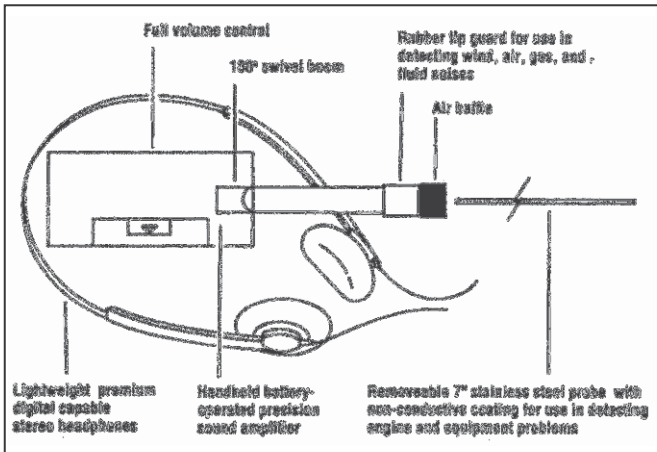
Model CMA24 24" Applicator

Model CMA36 36" Applicator

LISTENING TOOL, DIAGNOSTIC

MODEL AT100 DIAGNOSTIC LISTENING TOOL

For motors, reducers, compressors, pumps or other machinery where there is movement of mechanical parts, air, gas, or fluid.



Specific Applications:

- Air flow and air leak detection
- Bearing and bushing wear
- Chipped, broken or worn gears
- Compressed air and gas leaks
- Fluids movement
- Hydraulic valves
- Hydronic systems
- Instrument failure
- Location of structural pests
- Malfunctioning fuel injectors
- Motor brush wear
- Noisy valves or lifters
- Pump impeller wear
- Refrigerant charging
- Solenoid function
- Valve operation
- Wind leaks...etc.



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

OIL TRANSFER PUMP, ORANGE STICKS

OIL TRANSFER PUMP

Model OTP-1

Transfer oil from drums to tank. Will empty a 55 gallon drum in 8 minutes. Can also be used for pumping out pits.

- 1/2 HP, 115VAC, 8A motor
- 10 GPM pump
- Light weight, 14 lb.
- 3/4" oil line NPT
- 25 foot hose included



ORANGE STICKS

Model MOS

Non-conductive, 10 per pack.



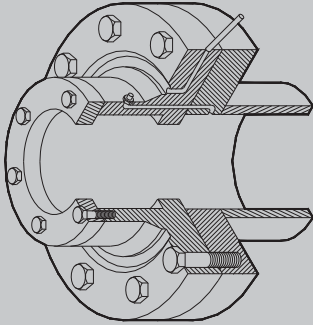
QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

American Crescent Commercial



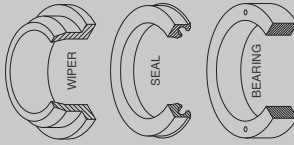
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
3-1/2	9EA109-06	9E029
4-1/2	9EA109-07	9E079
5-1/2	9EA109-08	9E087
6	9EA109-10*	9E081
6-1/2	9EA109-11*	9E083
7-1/2	9EA109-14*	9E129
8-1/2	9EA109-13*	9E087
12-1/2	9EA109-12*	9E113

NOTES

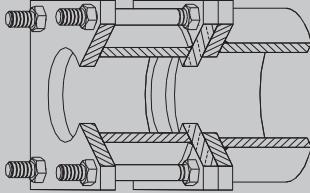
- Additional seal and lantern ring included.
- Assembled as wiper, seal, lantern, seal, bearing.
- May require gasket (not included) if completely disassembled.

Packing Set



SOLID PACKING SET

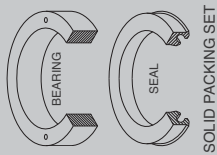
ABP International



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
3	9EA143-01	9E022

Packing Set



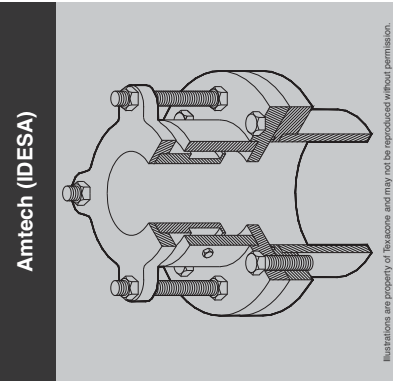
SOLID PACKING SET

Gorman packing and seals also available at AES and Quality as well, for most applications!

Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

© 2012 THE TEXACONE COMPANY, INC.

PACKING TEXACONE® CYLINDER HEAD IDENTIFICATION SYSTEM

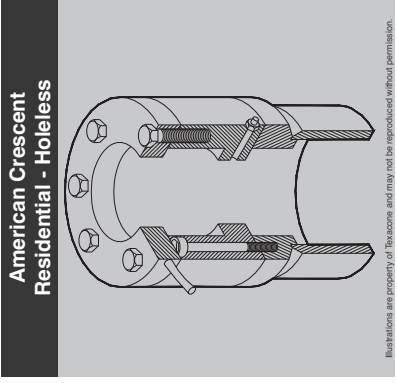
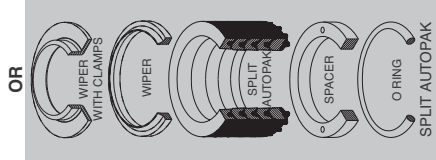
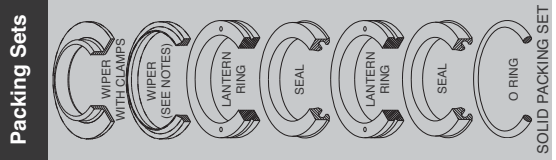


Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number ¹	Replacement Seal Number (2 Required)	Split Autopak Set Number ²
3	6EA116-11	8E021	1AT114-11
3-7/8	6EA116-06	8E001	1AT114-09
4	6EA116-07	8E009	1AT114-0
4-3/8	6EA116-07	8E009	1AT114-0
4-1/2	6EA116-02	8E050	1AT114-02
5	6EA116-03	8E051	1AT114-03
5-7/16	6EA116-08	8E023	1AT114-04
6	6EA116-04	8E056	1AT114-05
7-1/2	6EA116-09	8E036	1AT114-06
8	6EA116-05	8E045	1AT114-07
	6EA116-13	8E037	1AT114-13
	6EA116-12	8E104	1AT114-12

NOTES

- Split Packing Set, 6EA107-xx is available.
- Autopak is the recommended replacement packing
- Manufactured since the 1970's.
- WIPER: Units made after 2003 use snap-in wiper, older units use external wiper with clamps.

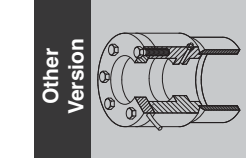
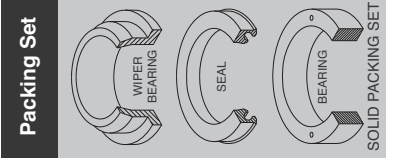


Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
2-1/2	9EA109-01	9E101
2-7/8	9EA109-02	9E035
3-1/8	9EA109-03	9E086
3-1/2	9EA109-06	9E029
3-7/8	9EA109-04	9E002

NOTES

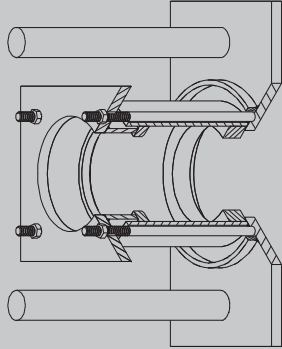
Heads used with multi-piece plungers may require O Ring.



QUALITY ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
 Fax (847) 581-0095
 7760 N. Merrimac Ave. • Niles, IL 60714

ATLAS

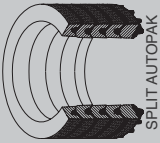


Illustrations are property of Texacone and may not be reproduced without permission.

NOTES

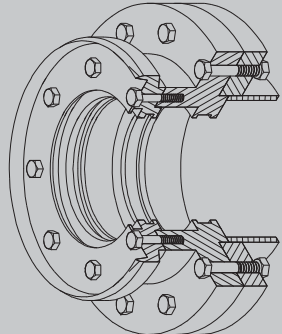
Call with plunger size and cross section for availability.

Packing Set



SPLITAUTOPAK

Armor



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
3	2EA003-23	6E227SF
3-1/2	2EA003-24	6E274SF
4	2EA003-25	6E003-16
4-1/4	2EA003-17	6E100
4-7/16	2EA003-01	6E032
4-1/2	2EA003-25	6E003
5	2EA003-18	6E020
5-1/2	2EA003-02	6E221SF
6	2EA003-19	6E028
6-1/2	2EA003-03	6E003
7-9/16	2EA003-04	6E059
8-9/16	2EA003-05	6E064
9-9/16	2EA003-06	2E007
10-11/16	2EA003-07	6E069
12-11/16	2EA003-08	6E068

NOTES

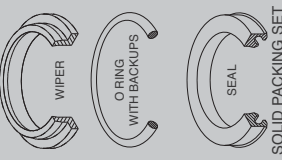
In Canada - "Schindler", In USA - "Kone"

Some units may require lantern. Specify 1/2 or 3/4 tall.

Set includes two backups for O Ring.

May require gasket (not included) if completely disassembled.

Packing Set



WIPER

O RING WITH BACKUPS

SEAL

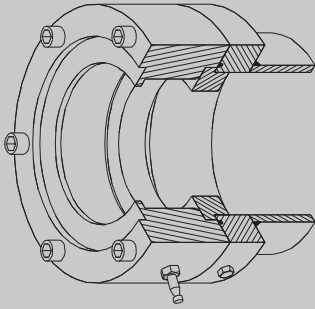
SOLID PACKING SET



Gorman packing and seals also available at AES and Quality as well, for most applications!

PACKING TEXACONE® CYLINDER HEAD IDENTIFICATION SYSTEM

Canton



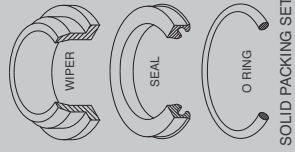
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
3	9EA015-01	9E051
3-1/2	9EA015-02	9E029
4	9EA015-03	9E034
4-1/2	9EA015-04	9E034
5	9EA015-05	9E020
5-1/2	9EA015-06	9E019
6	9EA015-07	9E032
6-1/2	9EA015-08	9E024
6-9/16	6EA015-09	6E031
7	9EA015-10	9E035
7-1/2	9EA015-11	9E037
8	6EA015-12	6E037
8-1/2	6EA015-13	6E037
8-9/16	6EA015-14	6E064
9	9EA015-15	9E055
9-1/2	6EA015-16	6E039
10	6EA015-17	6E033
10-1/2	9EA015-18	9E139

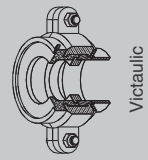
NOTES
Manufactured since the 1960's.

Also manufactured a telescopic in the 1980's.
Looks similar to standard head. Call for availability.

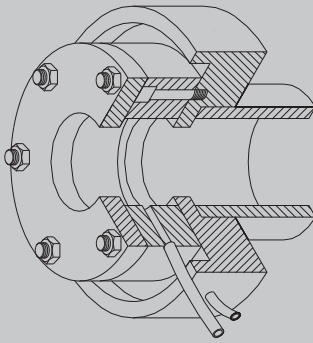
Packing Set



Other Versions



Bore - Max



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seats Only Set Number (1 Required)	Split Autopak Set Number
2-1/2	9EA006-01	9RF006-01	1AT083-01
3	9EA006-19	9RF006-19	1AT083-19
3-1/2	9EA006-20	9RF006-20	1AT083-20
4	9EA006-15	9RF006-15	1AT083-15
4-3/8	9EA006-03	9RF006-03	1AT083-03
4-1/2	9EA006-21	9RF006-21	1AT083-21
5	9EA006-04	9RF006-04	1AT083-04
5-1/8	9EA006-05	9RF006-05	1AT083-05
5-1/2	9EA006-06	9RF006-06	1AT083-06
6	9EA006-14	9RF006-14	1AT083-14
6-1/2	9EA006-07	9RF006-07	1AT083-07
6-9/16	9EA006-08	9RF006-08	1AT083-08
7	9EA006-09	9RF006-09	1AT083-09
7-1/2	9EA006-10	9RF006-10	1AT083-10
8	9EA006-16	9RF006-16	1AT083-16
8-1/2	9EA006-11	9RF006-11	1AT083-11
9	9EA006-17	9RF006-17	1AT083-17
9-1/2	9EA006-12	9RF006-12	1AT083-12
10	9EA006-18	9RF006-18	1AT083-18
10-1/2	9EA006-13	9RF006-13	1AT083-13
10-5/8	9EA006-13	9RF006-13	1AT083-13

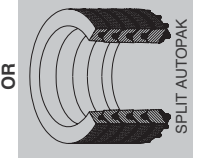
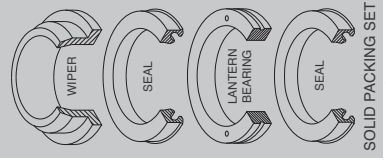
NOTES

Use the existing lantern bearing with Autopak Set. Place on top of packing set.

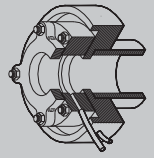
May require gasket or O Ring (for 10" casings and above) if completely disassembled (not included).

Plunger > 6" normally has round cover plate.

Packing Sets



Other Versions

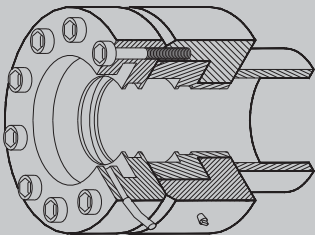


QUALITY ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

PACKING TEXACONE® CYLINDER HEAD IDENTIFICATION SYSTEM

Cemco Welded - Single Seal



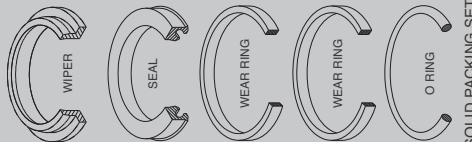
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
70mm(2.94)	6EA106-08	8E003
100mm(4.0)	6EA106-07	8E002
120mm(4.93)**	6EA106-07	8E003
120mm(4.72)	6EA106-07	8E030
3-7/16	6EA106-03	8E019
4-1/2**	6EA106-04	8E024
5-1/2**	6EA106-05	8E025
6	6EA106-09	8E027
7-1/2	6EA106-10	8E006
8	6EA106-11	8E009
8-1/2	6EA106-12	8E104
9	9EA106-13	9E096

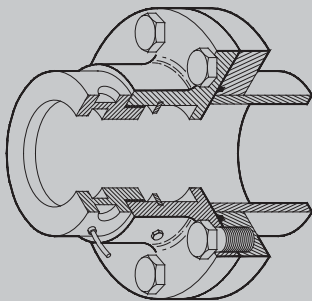
NOTES
 *These 2 sizes can be easily confused with the Otis/Cemco head packing.
 **Contains additional O Ring.

All dimensions in inches unless otherwise stated.

Packing Set



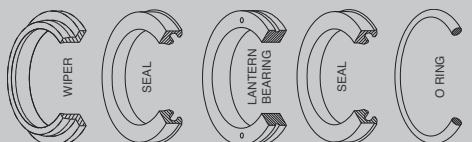
Cemco Flange - Screw on



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seats Only Set Number (1 Required)
3-7/16	9EA019-11	8RF019-11
4	9EA019-11	8RF019-11
4-1/2	9EA019-12	8RF019-12
3-7/8	6EA019-24	8RF019-24
4	6EA019-03	8RF019-03
4-3/8	6EA019-12	8RF019-12
4-7/16	6EA019-13	8RF019-13
4-1/2	6EA019-04	8RF019-04
5	6EA019-05	8RF019-05
5-1/8	6EA019-06	8RF019-06
5-1/2	6EA019-06	8RF019-06
6	6EA019-07	8RF019-07
6-1/2	6EA019-08	8RF019-08
7	6EA019-09	8RF019-09
7-1/2	6EA019-15	8RF019-15
8	9EA019-16	8RF019-16
8-1/2	9EA019-17	8RF019-17
9	9EA019-17	8RF019-17
9-1/2	6EA019-18	8RF019-18
10	6EA019-19	8RF019-19
10-1/2	9EA019-20	8RF019-20
10-5/8	6EA019-21	8RF019-21
12-5/8	6EA019-23	8RF019-23

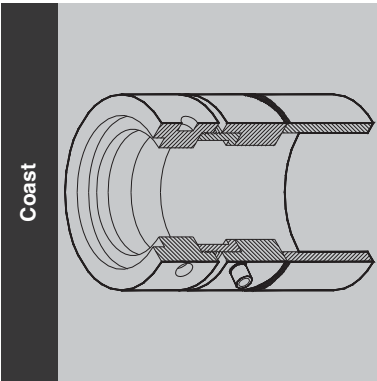
Packing Set



Gorman packing and seals also available at AES and Quality as well, for most applications!

Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

© 2012 THE TEXACONE COMPANY, INC.

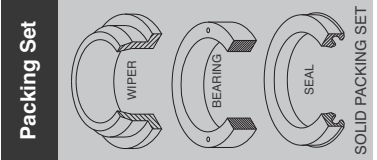


Coast

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
4	6EA035-01	6E035
4-3/8	6EA035-02	6E035F
5	6EA035-03	6E020
5-7/16	6EA035-04	6E2119SF
5-1/2	6EA035-05	6E221SF
6	6EA035-06	6E028
6-1/8	6EA035-07	6E037
6-1/2	6EA035-08	6E038F
7	6EA035-09	6E035
7-1/2	6EA035-10	6E029
8	6EA035-11	6E037
8-1/2	6EA035-12	6E030
10	6EA035-13	3ET13

NOTES
 Recommend O Ring Splicing Kit - IRA027

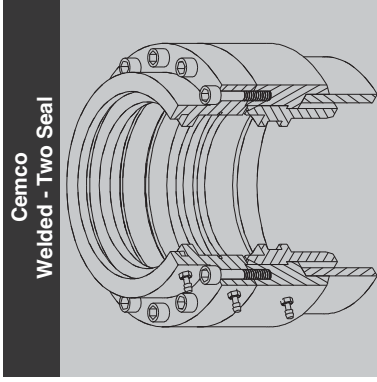


Packing Set

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
4	6EA126-01	8RF126-01
4-1/2	6EA126-02	8RF126-02
5	6EA126-03	8RF126-03
5-1/2	6EA126-04	8RF126-04
6	6EA126-05	8RF126-05
6-1/2	6EA126-06	8RF126-06
7	6EA126-07	8RF126-07
7-1/2	6EA126-08	8RF126-08
8	6EA126-09	9RF126-09
8-1/2	9EA126-10	9RF126-10

NOTES
 More sizes available. Please call for part number.

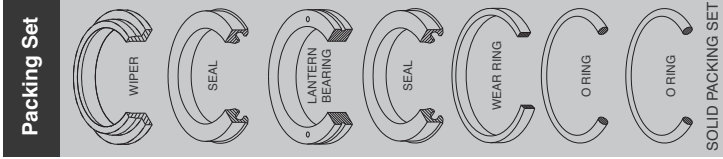


**Cimco
 Welded - Two Seal**

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
4	6EA126-01	8RF126-01
4-1/2	6EA126-02	8RF126-02
5	6EA126-03	8RF126-03
5-1/2	6EA126-04	8RF126-04
6	6EA126-05	8RF126-05
6-1/2	6EA126-06	8RF126-06
7	6EA126-07	8RF126-07
7-1/2	6EA126-08	8RF126-08
8	6EA126-09	9RF126-09
8-1/2	9EA126-10	9RF126-10

NOTES
 More sizes available. Please call for part number.

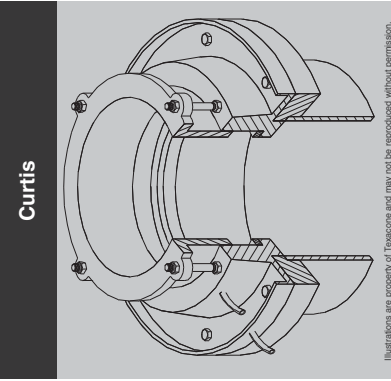


Packing Set

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
4	6EA126-01	8RF126-01
4-1/2	6EA126-02	8RF126-02
5	6EA126-03	8RF126-03
5-1/2	6EA126-04	8RF126-04
6	6EA126-05	8RF126-05
6-1/2	6EA126-06	8RF126-06
7	6EA126-07	8RF126-07
7-1/2	6EA126-08	8RF126-08
8	6EA126-09	9RF126-09
8-1/2	9EA126-10	9RF126-10

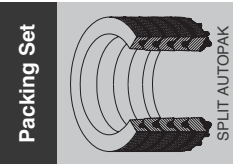
NOTES
 More sizes available. Please call for part number.



Curtis

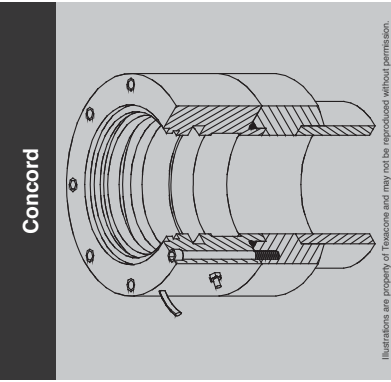
Illustrations are property of Texacone and may not be reproduced without permission.

NOTES
Call with plunger size and cross section for availability.



Packing Set

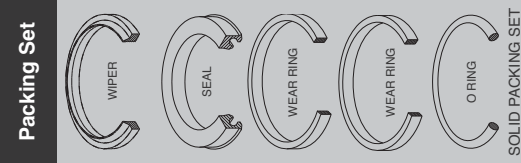
SPLIT AUTOPAK



Concord

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
1-1/2	8EA152-01	9E008
2	8EA152-02	9E058
2-1/2	8EA152-03	9E058
2-3/4	8EA152-04	9E154
3-1/4	8EA152-05	6E278



Packing Set

WIPER

SEAL

WEAR RING

WEAR RING

O RING

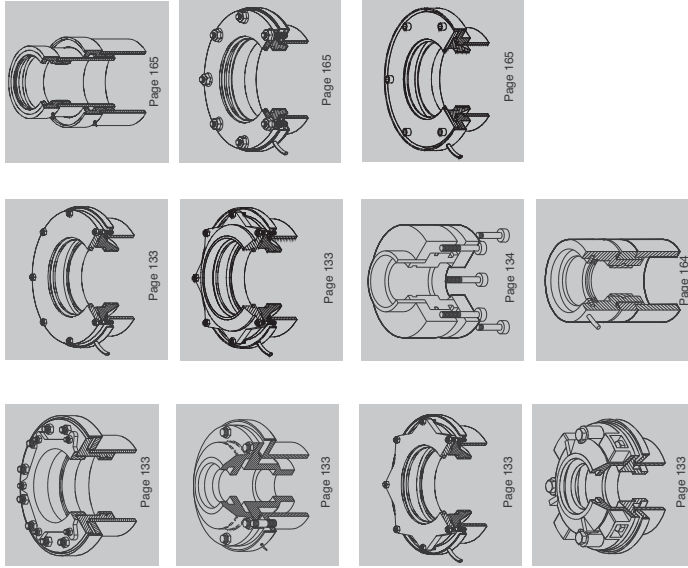
SOLID PACKING SET

Gorman packing and seals also available at AES and Quality as well, for most applications!

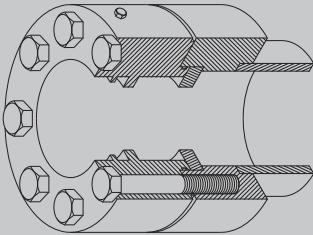
Dover (ThyssenKrupp)

NOTES

Dover was purchased by ThyssenKrupp in 1999. Units manufactured under both names can be found on the corresponding pages in the catalog.



Custom Elevator Mfg. Co.



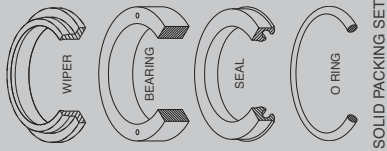
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
2-3/4	9EA139-01	9E011
3-1/2	9EA139-02	9E012
4	9EA139-03	9E034

NOTES

May be confused with EECO PU which has fewer bolts. Custom 2-3/4 has (6) bolts; 3-1/2 has (8) bolts.

Packing Set



Doher (ThyssenKrupp) - Rota

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement* Seal Number (1 Required)	Steel Spacer
3-1/2 (3S)	3EA023-11**	4E002	-
4-3/8 (4S)	3EA023-12**	4E002	-
5-7/16 (5S)	9EA023-13	9E092	-
6-1/2 (6S)	9EA023-14	9E093	-
7-1/2 (7S)	-	4E014	-

Two Seal Unit***
(Use Solid Set Plus Steel Spacer)

4-3/8 (4S)	9EA023-13	9E092	1S212
5-7/16 (5S)	9EA023-13	9E092	1S213
6-1/2 (6S)	9EA023-14	9E093	1S214

NOTES

- *Replacement seal no longer includes O Ring - included only in complete set.
- **O Ring not available.
- ***Do Not use two Rota Seals in tandem. Do not use standard 1/2 cross section seal below Rota Seal as this may result in excessive friction.
- Manufactured until January 2005. After 2005, see ThyssenKrupp, page 165.
- Older units use babbitted bearing. Newer units use split plastic wear ring which is available on request.
- May require gasket on units manufactured before mid 80's, available on request.

Packing Set

OPTIONAL

Other Versions

Doher (ThyssenKrupp) - Rotary

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement* Seal Number (2 Required)	Autotek Set Number*
4-3/8**	3EA023-01	6E205SF	1AT084-01
5-7/16**	3EA023-02	6E205SF	1AT084-02
6-1/2**	3EA023-03	6E205SF	1AT084-03
7-1/2(7S)	3EA023-04	6E029	1AT084-04
8-1/2(8S)	3EA023-05	6E030	1AT084-05
9-5/8(9S)	3EA023-06	6E039	1AT084-06
10-7/8(10S)	3EA023-08	6E042	1AT084-07
11-3/4(11S)	3EA023-09***	3E042	1AT084-08***

NOTES

- *Autopak is the recommended replacement packing.
- ** 4-3/8, 5-7/16, and 6-1/2, packing sets and seals are for Rotary Lift manufactured prior to 1955. After 1955, see Doher-Rota.
- ***Wiper not available.
- Older units use babbitted bearing. Newer units use split plastic wear ring which is available on request.
- After 2006, packing box is shorter and requires one seal.
- May require gasket (not included) if completely disassembled.

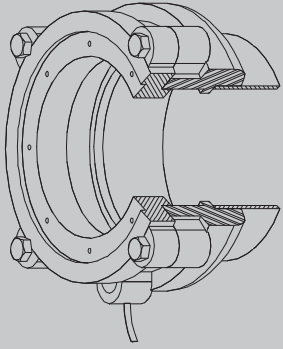
Packing Sets

OR

OPTIONAL

Other Versions

ECCO CJ



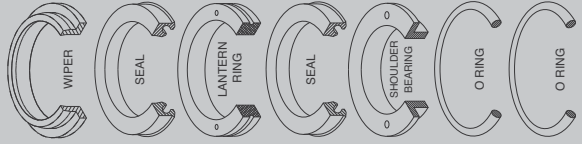
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seals Only Set (1 Required)
2-3/4 (275)	6EA008-06	8RF008-16
3-7/16 (38)	6EA008-10	8RF008-18
3-1/2 (3)	6EA008-19	8RF008-19
3-7/8 (387)	6EA008-11	8RF008-11
4 (4NET)	6EA008-12	8RF008-12
4-3/8 (4)	6EA008-01	8RF008-01
5 (5NET)	6EA008-02	8RF008-02
6 (6NET)	6EA008-04	8RF008-04
6-1/2 (6)	6EA008-05	8RF008-05
7-1/2 (7)	6EA008-06	8RF008-06
8-1/2 (8)	6EA008-07	8RF008-07
10-3/8 (10)	6EA008-08*	8RF008-08
12-5/8 (12)	6EA008-09*	8RF008-09

NOTES

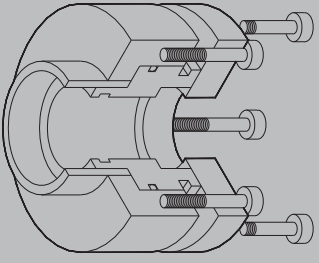
- Bearing used in set instead of shoulder bearing.
- Manufactured before 1965.

Packing Set



SOLID PACKING SET

Dover (ThyssenKrupp) - IVO



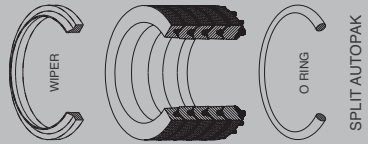
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Split Autopak Set Number
3-7/8	1A084-10*

NOTES

- Autopak is the recommended replacement packing.
- Inverted cylinder. Unit extremely difficult to disassemble to install solid seals. Specify if solid set is preferred.

Packing Sets



SPLIT AUTOPAK

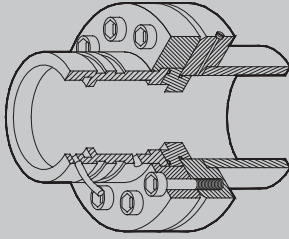


Gorman packing and seals also available at AES and Quality as well, for most applications!

© 2012 THE TEXACONE COMPANY, INC.

Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

EECO HJ



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
4-3/8 (4)	6EA008-13	6E208SF
5 (5 NET)	6EA008-15	6E208SF
5-7/16 (5)	6EA008-15	6E219SF
6 (6 NET)	6EA008-16	6E208SF
6-1/2 (6)	6EA008-17	6E208SF

NOTES

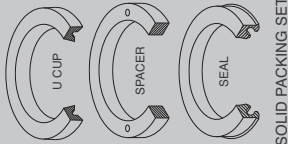
EECO recommends calling for replacement cylinder head.

Very few exist. Looks identical to LJ on outside.

Gorman packing and seals also available at AES and Quality as well, for most applications!

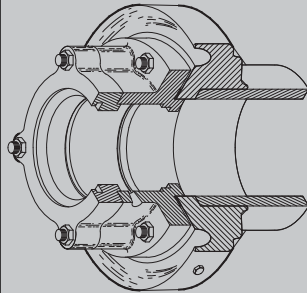
© 2012 THE TEXACONE COMPANY, INC.

Packing Set



SOLID PACKING SET

EECO FJ



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seals Only Set Number (1 Required)	Split Autopak Set Number
2-3/4 (257)	6EA008-16	8RF008-18	1AT089-13
3-7/16 (38)	6EA008-16	8RF008-18	1AT089-10
3-1/2 (3)	6EA008-19	8RF008-19	1AT089-14
3-7/8 (387)	6EA008-11	8RF008-11	1AT089-11
4 (4NET)	6EA008-12	8RF008-12	1AT089-12
4-3/8 (4)	6EA008-01	8RF008-01	1AT089-01
5 (5 NET)	6EA008-02	8RF008-02	1AT089-02
5-1/2 (5)	6EA008-02	8RF008-02	1AT089-02
6 (6 NET)	6EA008-04	8RF008-04	1AT089-04
6-1/2 (6)	6EA008-05	8RF008-05	1AT089-05
7-1/2 (7)	6EA008-06	8RF008-06	1AT089-06
8-1/2 (8)	6EA008-07	8RF008-07	1AT089-07
10-3/8 (10)	6EA008-08*	8RF008-08	1AT089-08
12-3/8 (12)	6EA008-09*	8RF008-09	1AT089-09

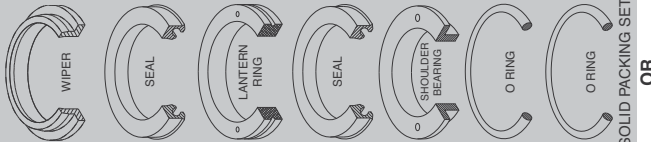
NOTES

*Bearing used in set instead of shoulder bearing.

Must reuse shoulder bearing with Autopak Set.

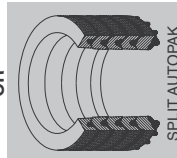
"FJ" is cast into head by bleeder valve.

Packing Set



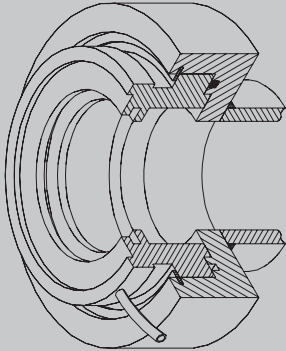
SOLID PACKING SET

OR



SPLIT AUTOPAK

EECO NJ



Illustrations are property of Texacone and may not be reproduced without permission.

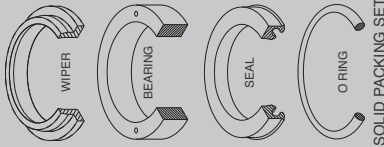
Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
2-3/4 (275)	6EA115-01	8EC62
3-1/8 (NET)	6EA115-02	8EC41
3-7/16 (3R)	6EA115-03	8EC30
3-7/8 (387)	6EA115-04	8EC01
4 (4 NET)	6EA115-05	8EC58
4-3/8 (4)	6EA115-06	8EC07
5 (5 NET)	6EA115-07	8EC11
5-1/2 (NET)	6EA115-08	8EC23
6 (6 NET)	6EA115-09	8EC36
6-1/2 (6)	6EA115-10	8EC28
7 (7 NET)	6EA115-14	8E117
7-1/2 (7)	6EA115-15	8EC37
8 (8 NET)	6EA115-16	8E104
8-1/2 (8)	6EA115-17	8E118

NOTES

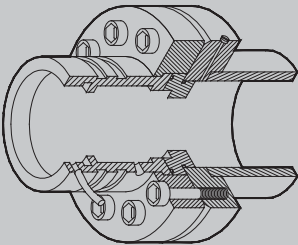
NJ manufactured from 1989 to 1996.

Some sets include O Ring for PJ units.

Packing Set



EECO LJ



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seals Only Set Number (1 Required)
2-3/4(275)	6EA008-18*	8RF008-18
3-1/8(3R)	6EA008-10	8RF008-10
3-7/16(3R)	6EA008-11	8RF008-11
3-7/8(387)	6EA008-11	8RF008-11
4(4 NET)	6EA008-12	8RF008-12
4-3/8(4)	6EA008-01	8RF008-01
5(5 NET)	6EA008-02	8RF008-02
5-7/16(5)	6EA008-03	8RF008-03
6(6 NET)	6EA008-04	8RF008-04
6-1/2(6)	6EA008-05	8RF008-05
7-1/2(7)	6EA008-06	8RF008-06
8(8 NET)	6EA008-21	8RF008-21
8-1/2(8)	9EA008-07	8RF008-07
9-1/2(9)	9EA008-20	8RF008-20
10-5/8(10)	6EA008-08*	8RF008-08
12-5/8(12)	6EA008-09*	8RF008-09

TLJ - Telescopic**

3-1/2 / 5-716	6EA008-19	9E081 (PISTON)
	6EA008-13	6E063 (PISTON)
4-3/8 / 6-1/2	6EA008-01	
	6EA008-05	

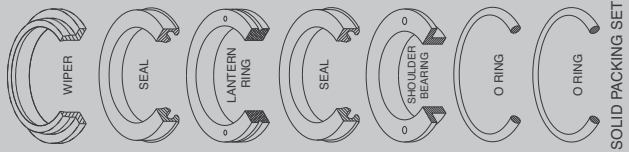
NOTES

*Bearing used in set instead of shoulder bearing.

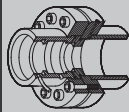
**Telescopic units require (2) sets plus piston seal.

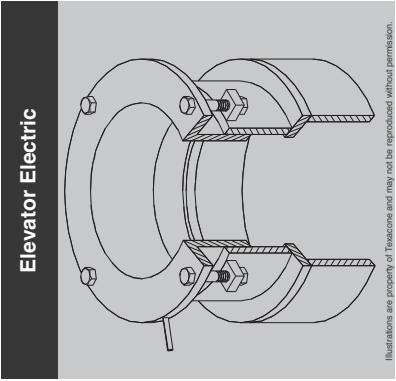
Some units may not have grooves on outside of barrel.

Packing Set



Other Version





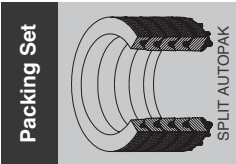
Elevator Electric

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Split Autopak Set Number
4	1AT121-05
5	1AT121-01
6-1/2	1AT121-06
6-1/2	1AT121-03
7	1AT121-04

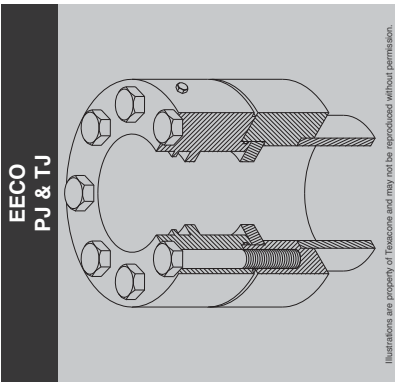


© 2012 THE TEXACONE COMPANY, INC.



Packing Set

SPLIT AUTOPAK



EEOC PJ & TJ

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
2-3/4(275)	9EA120-01	9E011
3(275)	9EA120-02	9E012
3-1/8(38)	9EA120-03	9E015
3-7/8(387)	9EA120-04	9E002
4(4 NET)	9EA120-05	9E034
4-3/8(4&4R)	9EA120-06	9E003
4-1/2(4.5)	9EA120-12	9E012
5(6 NET)	9EA120-07	9E020
5-1/2(5)	9EA120-20	9E019
6(6 NET)	9EA120-08	9E018
6(6 NET)	9EA120-09	9E032
6-1/2(6)	9EA120-10	9E024
7(7 NET)	9EA120-14	9E105
7-1/2(7)	9EA120-15	9E054
8(8 NET)	9EA120-19	9E103
8-1/2(8)	9EA120-13	9E087

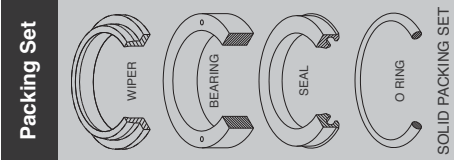
TJ - Telescopic*

2-1/2 / 3.7	9EA120-16	9E046
		9E053
		9E042
2-3/4 / 4.2	9EA120-11	9E011
		8E115
4 / 5.7	9EA120-17	9E078
		9E066
		9E095
		9E082
4-1/2	9EA120-18**	9E012
		9E032
		9E083

NOTES

*Complete TJ set includes (3) bearings and (3) seals & (2) O Rings. For replacement seals only, order the (3) seals listed. Some wipers available.

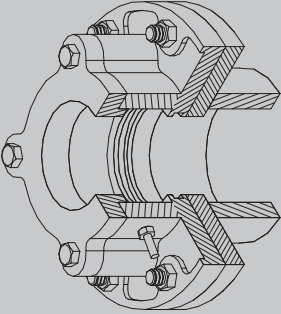
PJ manufactured after 1996.
2-3/4 & 3-7/16 may be confused with custom Elev. Mtg. (see page 134)



Packing Set

SOLID PACKING SET

ESCO P3 & P7



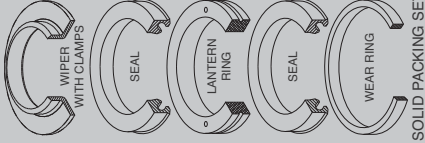
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seats Only Set Number (1 Required)	Split Autopak Set Number
2-1/2	9EA024-01	9RF024-01	1AT092-01
3	9EA024-02	9RF024-02	1AT092-02
4	3EA024-03	8RF024-03	1AT092-03
4-1/2	3EA024-04	8RF024-04	1AT092-04
5	3EA024-05	8RF024-05	1AT092-05
6	3EA024-06	8RF024-06	1AT092-06
6-1/2	3EA024-07	8RF024-07	1AT092-07
7	3EA024-08	8RF024-08	1AT092-08
7-1/2	3EA024-09	8RF024-09	1AT092-09
8	3EA024-10	8RF024-10	1AT092-10
10-5/8	3EA024-11	8RF024-11	1AT092-11
13-7/8	3EA024-12	8RF024-12	1AT092-12
15-7/8	3EA024-13	8RF024-13	1AT092-13
17-7/8	3EA024-14	8RF024-14	1AT092-14
17-7/8	3EA024-34*	8RF024-34*	1AT092-16*

NOTES

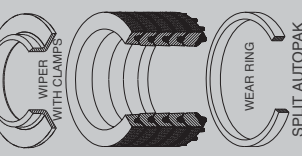
- Wiper not available.
- May require gasket (not included) if completely disassembled.

Packing Sets

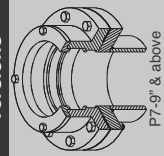


SOLID PACKING SET

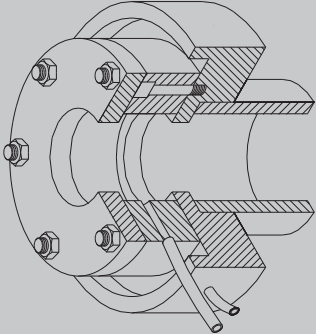
OR



Other Versions



Elevator Manufacturing



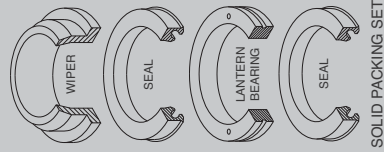
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seats Only Set Number (1 Required)
3	9EA137-19	9RF137-19
3-1/2	9EA137-02	9RF137-02
4	9EA137-15	9RF137-15
4-3/8	9EA137-15	9RF137-15
4-1/2	9EA137-21	9RF137-21
5	9EA137-04	9RF137-04
5-7/16	9EA137-05	9RF137-05
5-1/2	9EA137-06	9RF137-06
6	9EA137-14	9RF137-14
6-1/2	9EA137-09	9RF137-09
7	9EA137-09	9RF137-09
7-1/2	9EA137-10	9RF137-10
8-1/2	9EA137-11	9RF137-11
10-1/2	9EA137-22	9RF137-22
10-5/8	9EA137-13	9RF137-13

NOTES

- May require gasket (not included) if completely disassembled.
- Plunger > 5-1/2 normally has round cover plate.

Packing Set



ESCO P6 Victaulic

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
4	9EA024-22*	9E034
4 1/2	9EA024-23	9E035
5	9EA024-24	9E036
5-1/2	9EA024-25	9E019
6	9EA024-26	9E032
6-1/2	9EA024-30	9E024
7	9EA024-27	9E105

NOTES

- * O Ring included. Required for holeless units only.
- Optional Victaulic Gasket available. Call with cylinder size.
- For plungers larger than 7" the Victaulic head requires the same configuration as P-3 & P-7 head. (Solid packing set only, not Split Autopak)

Packing Set

WIPER
SEAL
WEAR RING
SOLID PACKING SET

OPTIONAL

VICTAULIC GASKET

Other Versions

Above 7"

ESCO P - 4 - Line Seal

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
4	3EA024-13	6E165SF
4 1/2	3EA024-14	6E166SF
5	3EA024-15	6E168SF
5-1/2	3EA024-16	6E171SF
6	3EA024-17	6E104
6-1/2	3EA024-18	6E174SF
7	3EA024-19	6E176SF
7 1/2	3EA024-20	6E175SF
10-5/8	3EA024-21	6E042

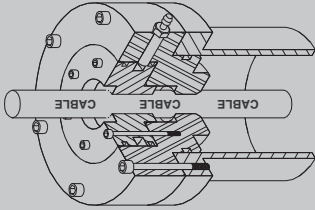
NOTES

- The conventional seal replaces the line seals used between 1966 and 1972. To install the conventional seal simply flip the top flange over so that the machined groove is facing upward.
- May require gasket (not included) if completely disassembled.

Packing Set

WIPER WITH CLAMPS
SEAL
WEAR RING
SOLID PACKING SET

ESCO Cable Roped



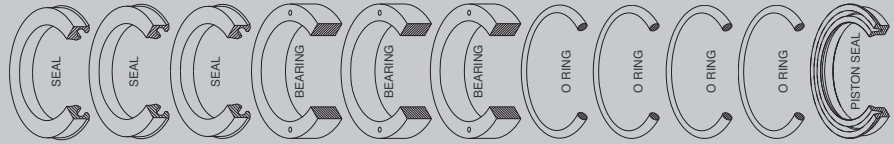
Illustrations are property of Texacone and may not be reproduced without permission.

Cable Size	Solid Packing Set Number	Replacement Seal Number (3 Required)	Replacement Piston Seal Number (1 Required)
5/8	6EA123-01	7E026	7E032
5/8 RES	6EA123-02	7E026	7E032
5/8	6EA123-03	7E026	7E032
3/4**	7E025	-	-

NOTES

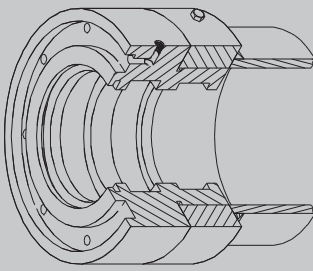
- Not as common. Only way to determine correct packing is to disassemble. Call for assistance.
- Split wear rings used instead of solid bearings shown.
- Call for Complete set availability.
- Each unit requires (4) sets except 5/8 RES which requires (2) sets.

Packing Set



SOLID PACKING SET

ESCO P9 - Holeless - 886



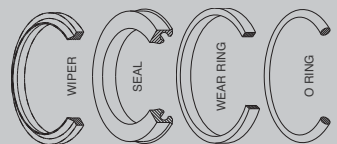
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
3-1/4 (Before July 1983)	3EA024-28	6E158SF
3-1/4 (After July 1983)	3EA024-29	6E158SF
3-1/4 (Both Seals)	3EA024-30**	6E158SF
4	3EA024-22	9E034

NOTES

- if date is not known, recommend 3EA024-37 which contains seals for both 3-1/4 versions.

Packing Set



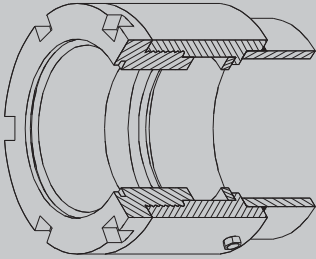
SOLID PACKING SET



PACKING

TEXACONE® CYLINDER HEAD IDENTIFICATION SYSTEM

Florlift

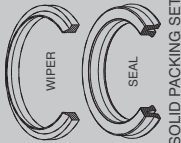


Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number
2	9EA144-01
2 1/2	9EA144-02
3	9EA144-03
4	9EA144-04

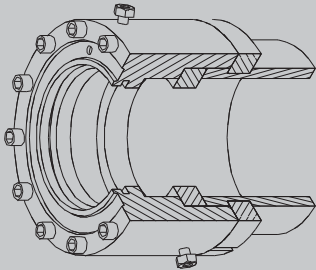
NOTES
Uses bronze gland.

Packing Set



SOLID PACKING SET

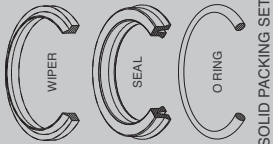
Federal



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
2-3/8	9EA140-01	7E034
2-3/4	9EA140-02	9E154
3-1/2	9EA140-03	9E048

Packing Set



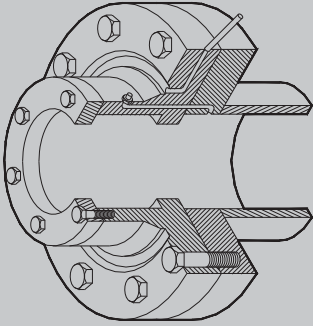
SOLID PACKING SET

Gorman packing and seals also available at AES and Quality as well, for most applications!

© 2012 THE TEXACONE COMPANY, INC.

Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

General Steel and Aluminum



Illustrations are property of Texacone and may not be reproduced without permission.

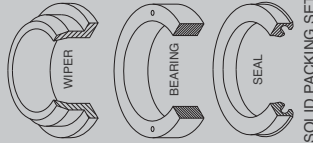
Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
3-7/16	9EA014-12	9E045
4-1/2	9EA014-11	9E019
3-15/16	9EA014-11	9E019
4	9EA014-13	9E022
4-7/16	9EA014-02	9E084
4-1/2	9EA014-10	9E012
5	9EA014-14	9E020
5-1/8	9EA014-15	9E016
5-1/2	9EA014-15	9E019
6-7/16	9EA014-04	9E272
6-1/2	9EA014-05	9E024
7-1/2	9EA014-08	9E054
8-1/2	9EA014-07	9E087
9-1/2	9EA014-08	9E089

NOTES

Additional Sizes available, please inquire.

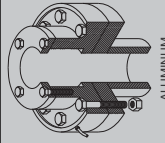
May require gasket (not included) if completely disassembled.

Packing Set



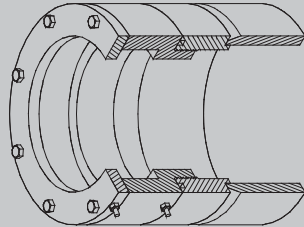
SOLID PACKING SET

Other Versions



ALUMINUM

G.C.E

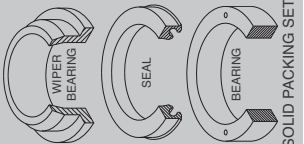


Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
2-7/8	9EA109-02*	9E035
3	9EA109-05	9E051

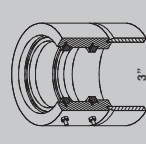
NOTES
 Heads used with multi-piece plungers may require O Ring.
 * O Ring included

Packing Set



SOLID PACKING SET

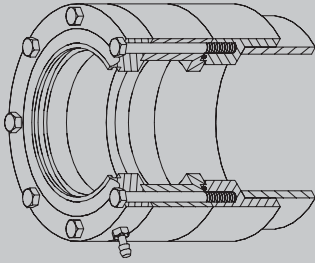
Other Versions



3"

PACKING TEXACONE® CYLINDER HEAD IDENTIFICATION SYSTEM

Global (Hydrotech Cylinders)



Illustrations are property of Texacone and may not be reproduced without permission.

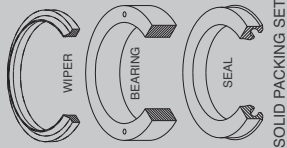
Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
2	9EA121-01	9E047
2-1/8	9EA121-02	9E016
2-3/4	9EA121-03	9E011
3	9EA121-04	9E022
3-1/2	9EA121-05	9E029
4	9EA121-06	9E034
4-3/8	9EA121-16	9E003
4-1/2	9EA121-08	9E022
5-1/2	9EA121-15	9E014
6	9EA121-09	9E019
6-1/2	9EA121-10	9E032
7	9EA121-11	9E024
8-1/2	9EA121-13*	9E118*
10-5/8	9EA121-14*	9E030*

NOTES

*These sets contain (2) seals and requires (2) seals for replacement. Assembled as wiper, seal, bearing, seal.

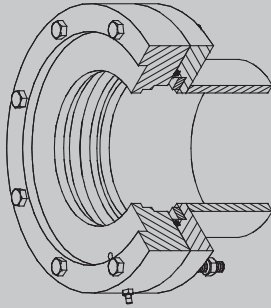
Manufactured until 2006.

Packing Set



SOLID PACKING SET

General F2



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
4-7/16	9EA151-01	9E084
4-1/2	9EA151-02	9E094
5-1/2	9EA151-03	9E019
6-17/32	9EA151-04	9E081
6-1/2	9EA151-05	9E024
6-17/32	9EA151-06	9E083
7-1/8	9EA151-07	9E054
7-17/32	9EA151-08	9E087
8-1/2	9EA151-09	9E087
8-17/32	9EA151-10	9E096

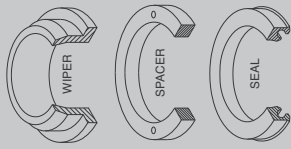
NOTES

Additional sizes available, please inquire.

O Ring sizes vary per unit - see O Ring Splicing Kit.

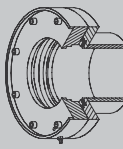
Reuse existing shoulder bearing. Replacements available upon request.

Packing Set

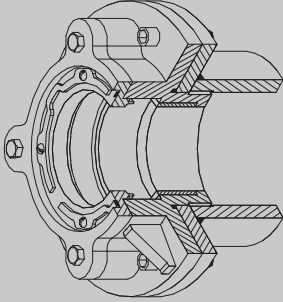


SOLID PACKING SET

Other Versions



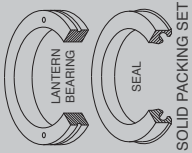
Hollister - Whitney Old



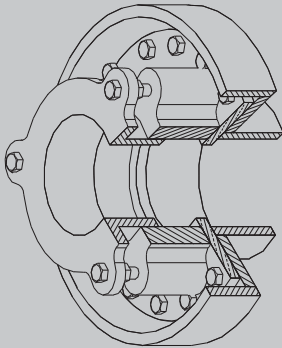
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
4-3/8	6EA119-01	6E208SF
5-3/8	6EA119-02	6E047
5-7/16	6EA119-03	6E047
6-1/2	6EA119-04	6E219SF
6-1/2	6EA119-05	6E208SF
8-1/2	6EA119-06	6E029
10-5/8	6EA119-07	6E030
	6EA119-08	6E042

Packing Set



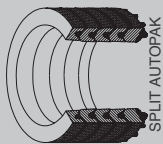
Globe Hoist



Illustrations are property of Texacone and may not be reproduced without permission.

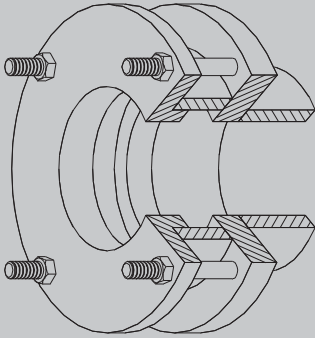
Plunger Size	Split Autopak Set Number
4-3/8	1AT117-01
5-3/8	1AT117-02
6-1/2	1AT117-03
7-1/2	1AT117-04
8-1/2	1AT117-05
10-5/8	1AT117-06

Packing Set



Gorman packing and seals also available at AES and Quality as well, for most applications!

Home

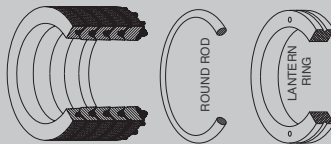


Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Split Autopak Set Number
4	1A107-01
4-1/2	1A107-02
5	1A107-03
5-1/2	1A107-04
6	1A107-05

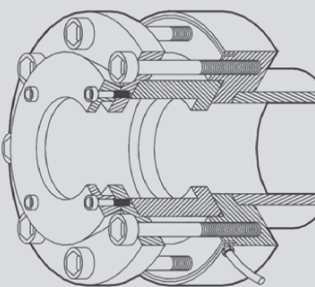
NOTES
Not supplied as Super Slick Autopak.

Packing Set



ROUND ROD
LANTERN RING
SPLIT AUTOPAK

Hollister - Whitney

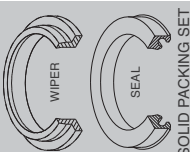


Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
4-3/8	6EA017-01	6E206SF
4-1/2	6EA017-02	6E042
5-3/8	6EA017-03	6E042
5-7/16	6EA017-04	6E215SF
6-1/2	6EA017-05	6E208SF
7-1/2	6EA017-06	6E029
8-1/2	6EA017-07	6E030
10-5/8	6EA017-08	6E042

NOTES
Manufactured in the 1960's and 1970's.

Packing Set



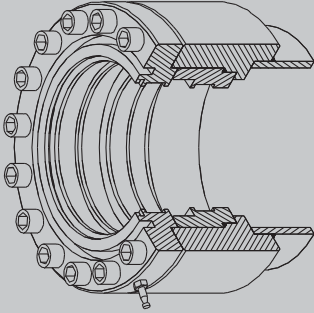
WIPER
SEAL
SOLID PACKING SET

Gorman packing and seals also available at AES and Quality as well, for most applications!

© 2012 THE TEXACONE COMPANY, INC.

Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

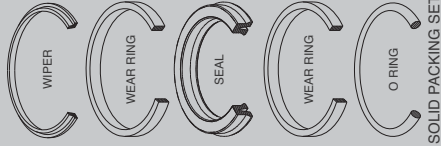
Inclinator



Illustrations are property of Texacone and may not be reproduced without permission.

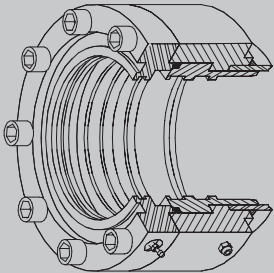
Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
2-5/16	9EA135-01	9EO88
2-13/16	9EA135-02	9EO89

Packing Set



SOLID PACKING SET

Hydromoris (Kone)



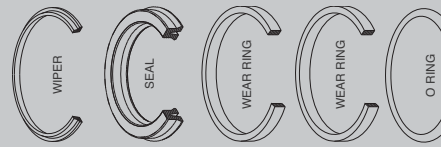
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
60mm	9EA131-01	9EO71
70mm	9EA131-02	9EO72
80mm	9EA131-03	9EO73
90mm	9EA131-04	9EO65
100mm	9EA131-05	9EO66
110mm	9EA131-06	9EO67
120mm	9EA131-07	9EO68
130mm	9EA131-08	9EO69
140mm	9EA131-09	9EO70
150mm	9EA131-10	9EO83
160mm	9EA131-11	9EO70
180mm	9EA131-12	9EO43
200mm	9EA131-13	9EO64

NOTES

Manufactured from 2000 to 2004.

Packing Set



SOLID PACKING SET

Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

© 2012 THE TEXACONE COMPANY, INC.

ITI Holeless & Telescopic

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Cross Section	Solid Packing Set Number	Replacement Seal Number (1 Required)
1-3/4	3/8	9EA146-01	9E045
1-3/4	3/8	9EA146-02	9E046
2	3/8	9EA146-03	9E047
2-1/2	3/8	9EA146-04	9E076
2-3/4	3/8	9EA146-05	9E077
3	3/8	9EA146-06	9E031
3-1/4	3/8	9EA146-07	9E111
3-1/2	1/2	9EA146-08	9E042
3-3/4	3/8	9EA146-10	9E053
3-7/8	1/2	9EA146-11	9E142
4	3/8	9EA146-12	9E110
4-3/8	1/2	9EA146-13	9E078
4-1/2	1/2	9EA146-14	9E079
4-7/16	1/2	9EA146-17	9E084
4-1/2	1/2	9EA146-14	9E079
4-5/8	1/2	9EA146-16	9E114
5	1/2	9EA146-18	9E080
5-7/16	1/2	9EA146-20	9E128
5-7/2	1/2	9EA146-21	9E081
6-1/2	1/2	9EA146-22	9E082
6-9/16	1/2	9EA146-23	9E083
7-1/2	1/2	9EA146-24	9E129
8	1/2	9EA146-25	9E103
8-1/8	1/2	9EA146-26	9E085
8-1/2	1/2	9EA146-27	9E086
9-9/16	1/2	9EA146-28	9E089
10-11/16	1/2	9EA146-29	9E090
12-11/16	1/2	6EA146-30	8E112

Packing Set

WIPER
SEAL
SOLID PACKING SET

Other Versions

Internal Head

NOTES

Complete seal repack for telescopic units require (2) or more sets plus piston seal.

Other sizes available, call with plunger size and cross section.

O Ring sizes vary per unit - see O Ring Splicing Kit page 115

First digit of serial number indicates type of unit. (2) In ground (3) holeless (4) telescopic

Uses bronze head

ITI In ground

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Cross Section	Solid Packing Set Number	Replacement Seal Number (2 Required)
3-1/2	1/2	9EA138-09	9E029
4-3/8	1/2	9EA138-10	9E030
4-3/8	1/2	9EA138-15	9E003
4-7/16	1/2	9EA138-17	9E084
4-1/2	1/2	9EA138-14	9E014
4-5/8	1/2	9EA138-16	9E114
5	1/2	9EA138-18	9E020
5-7/16	1/2	9EA138-20	9E014
6-1/2	1/2	9EA138-19	9E039
6-1/2	1/2	9EA138-22	9E024
6-9/16	1/2	9EA138-23	9E086
7-1/2	1/2	9EA138-24	9E054
8	1/2	9EA138-25	9E103
8-9/16	1/2	9EA138-26	9E088
9-9/16	1/2	9EA138-27	9E089
10-11/16	1/2	9EA138-29	8E110
12-11/16	1/2	6EA138-30	8E112

NOTES

After July 2005, some units smaller than 6-1/2" may require only (1) seal.

Always reuse lantern ring. Place between the (2) seals.

Other sizes available, call with plunger size and cross section.

O Ring sizes vary per unit - see O Ring Splicing Kit.

First digit of serial number indicates type of unit. (2) In ground (3) holeless (4) telescopic

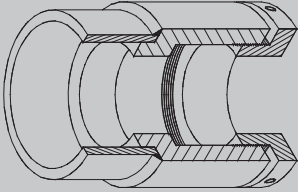
Packing Set

WIPER
SEAL
SEAL
SOLID PACKING SET

PACKING

TEXACONE® CYLINDER HEAD IDENTIFICATION SYSTEM

Lift - Avator



Illustrations are property of Texacone and may not be reproduced without permission.

Split Autopak Set Number

1A120-01
1A120-02

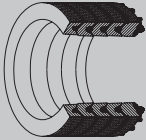
Plunger Size

2-1/2
3

NOTES

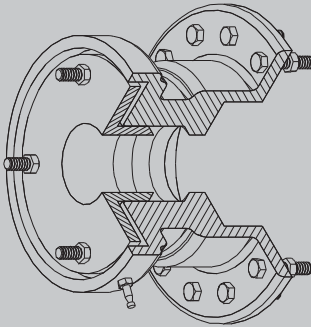
Inverted Cylinder. Unit extremely difficult to disassemble to install solid seals. Specify if solid set is preferred.

Packing Set



SPLIT AUTOPAK

Kieckhefer

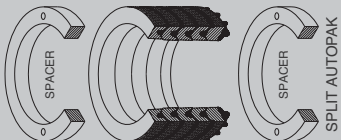


Illustrations are property of Texacone and may not be reproduced without permission.

NOTES

Call with plunger size and cross section for availability.

Packing Set



SPLIT AUTOPAK

Gorman packing and seals also available at AES and Quality as well, for most applications!

© 2012 THE TEXACONE COMPANY, INC.

Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

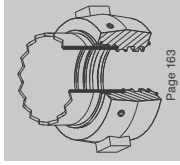
QUALITY ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
 7760 N. Merrimac Ave. • Niles, IL 60714

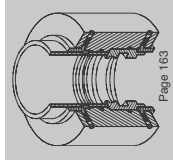
Martin, D.L. (Schindler)

NOTES

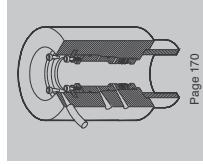
D.L. Martin manufactured units for Schindler & Westinghouse from 1980's to present. See corresponding pages in the catalog.



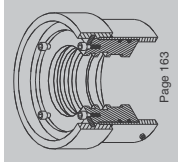
Page 163



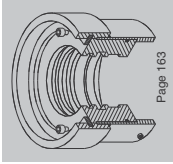
Page 163



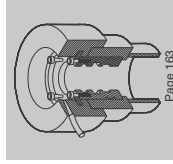
Page 170



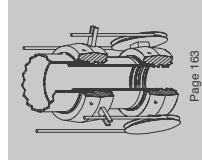
Page 163



Page 163

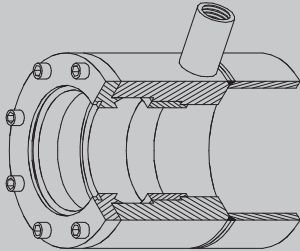


Page 163



Page 163

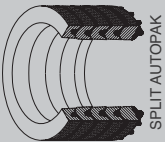
Marmac



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Split Autopak Set Number
4-3/8	1A119-01
6-3/8	1A119-02
8-1/2	1A119-03
8-1/2	1A119-04
10-1/2	1A119-05
12-1/2	1A119-06
13-3/4	1A119-07
15-3/4	1A119-08
18-3/4	1A119-09
21-3/4	1A119-10
	1A119-11

Packing Set

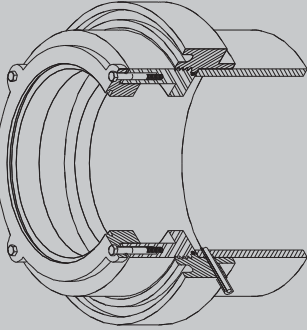


SPLIT AUTOPAK

Gorman packing and seals also available at AES and Quality as well, for most applications!

Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

Montgomery (Kone) Machined



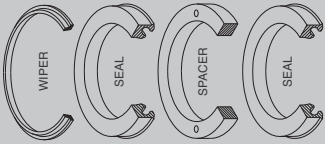
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seals Only Set Number (1 Required)	Split Autopak Set Number
3-15/16	3EA026-11	8RF026-11	1AT074-01
4	3EA026-12	8RF026-12	1AT074-02
5.52	3EA026-13	8RF026-13	1AT074-03
5.72	9EA026-14	9RF026-14	1AT074-04
6.59	3EA026-15	8RF026-15	1AT074-05
7.47	3EA026-16	8RF026-16	1AT074-06
8.57	3EA026-17	8RF026-17	1AT074-07

NOTES

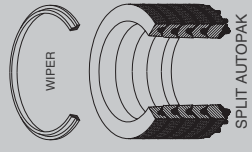
- Autopak is the recommended replacement packing. Use with existing filler ring if possible. Manufactured since 1966.
- Always reuse existing filler ring when possible instead of supplied spacer.
- Uses bronze gland.

Packing Sets



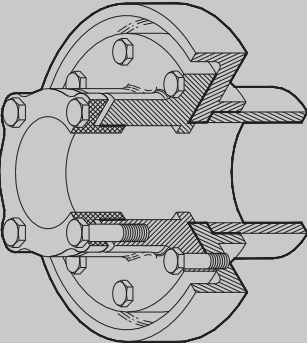
SOLID PACKING SET

OR



SPLIT AUTOPAK

Montgomery (Kone) Cast



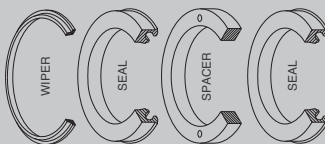
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seals Only Set Number (1 Required)	Split Autopak Set Number
3-15/16	3EA026-11	8RF026-11	1AT074-01
4-3/8	3EA026-28	8RF026-28	1AT074-33
4-1/2	3EA026-29	8RF026-29	1AT074-34
5-7/16	3EA026-27	8RF026-27	1AT074-34
5.52	3EA026-13	8RF026-13	1AT074-03
5.72	9EA026-14	9RF026-14	1AT074-04
6-1/2	3EA026-28	8RF026-28	1AT074-35
6.59	3EA026-15	8RF026-15	1AT074-05
7.47	3EA026-16	8RF026-16	1AT074-06
8.57	3EA026-17	8RF026-17	1AT074-07
10.7	3EA026-18	8RF026-18	1AT074-08
12.7	3EA026-19**	8RF026-19	1A074-09
	3EA026-20**	8RF026-20	1A074-10

NOTES

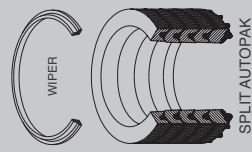
- Autopak is the recommended replacement packing. Use with existing filler ring if possible.
- **Two additional spacers are included with these sets.
- Plungers under 9.47 manufactured until 1965. Plungers 9.47 and larger manufactured until 1993.
- Always reuse existing filler ring when possible instead of supplied spacer.
- May require gasket (not included) if completely disassembled.
- Uses bronze gland.

Packing Sets



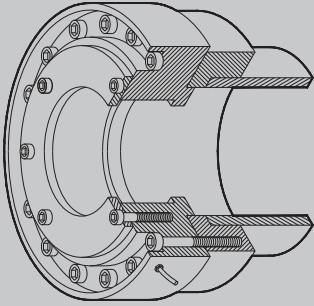
SOLID PACKING SET

OR



SPLIT AUTOPAK

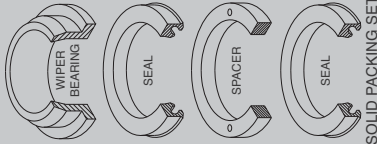
Montgomery (Kone) 1993



Illustrations are property of Texacone and may not be reproduced without permission.

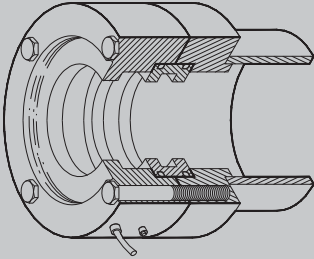
Plunger Size	Solid Packing Set Number	Replacement Seal Number (2 Required)
8.57	3EA026-25	6E084
9.14	3EA026-24	6E059
10.7	3EA026-24	6E059
12.7	3EA026-22	6E052

Packing Set



SOLID PACKING SET

Montgomery (Kone) Holeless



Illustrations are property of Texacone and may not be reproduced without permission.

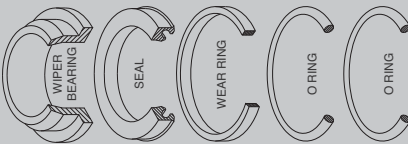
Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
2.84	6EA018-03	8E009
3-1/2	6EA018-02	8E004
3-1/2	6EA018-02	8E004

NOTES

Some older units do not have groove for wear ring.

Usually need 2 sets per car.

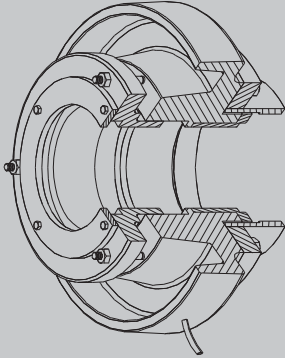
Packing Sets



SOLID PACKING SET

Gorman packing and seals also available at AES and Quality as well, for most applications!

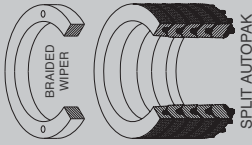
Murphy



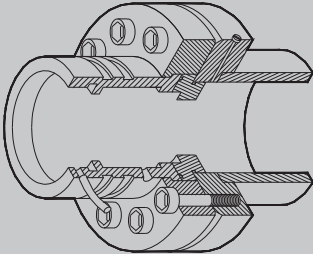
Illustrations are property of Texacone and may not be reproduced without permission.

NOTES
Call with plunger size and cross section for availability.

Packing Set



Mowrey

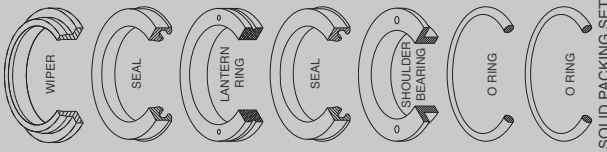


Illustrations are property of Texacone and may not be reproduced without permission.

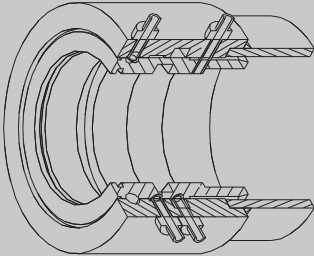
Plunger Size	Solid Packing Set Number	Seals Only Set Number (1 Required)
4-3/8(4M)	6EA063-01	8RF063-01
5-7/16(5M)	6EA063-02	8RF063-02
6-1/2(6M)	6EA063-03	8RF063-03
50mm	6EA063-04	8RF063-04
70mm	9EA063-05*	9EO09*

NOTES
*This set contains wiper, seal and bearing.
Requires (1) seal for replacement.
All dimensions in inches unless otherwise stated.
Usually does not have grooves on barrel.

Packing Set



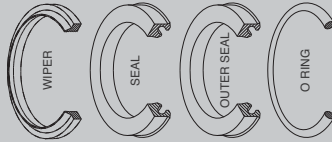
Northern MPH



Illustrations are property of Texacone and may not be reproduced without permission.

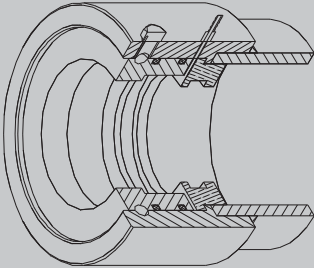
Plunger Size	Cross Section	Solid Packing Set Number
3	3/8	9EA122-01
3	3/8	9EA122-02
3-1/2	3/8	9EA122-03
4	3/8	9EA122-04
4-1/2	3/8	9EA122-05
5	3/8	9EA122-06
5-1/2	1/2	9EA122-07
6	1/2	9EA122-08
6-1/2	1/2	9EA122-08

Packing Set



SOLID PACKING SET

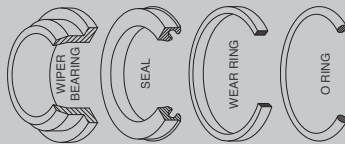
Northern QPH



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Cross Section	Solid Packing Set Number	Replacement Seal Number (1 Required)
2-1/2	3/8	9EA095-10	9E046
3	3/8	9EA095-11	9E047
3-1/2	3/8	9EA095-02	9E108
3-1/2	1/2	9EA095-05	9E029
4	3/8	9EA095-03	9E110
4	1/2	9EA095-06	9E034
4-1/2	3/8	9EA095-04	9E016
4-1/2	1/2	9EA095-07	9E035
4-9/8	3/8	9EA095-11	9E039
5	3/8	9EA095-08	9E039
5-1/2	1/2	9EA095-12	9E019
6	1/2	9EA095-13	9E032
6-4/8	1/2	9EA095-17	9E033
6-1/2	1/2	9EA095-14	9E075
6-1/2	1/2	9EA095-15	9E075
7-1/2	1/2	9EA095-16	9E054
8-1/2	1/2	9EA095-09	9E037

Packing Set



SOLID PACKING SET

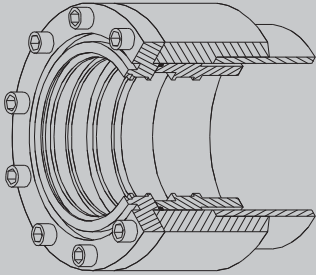
NOTES

-1 No O Ring available.



PACKING TEXACONE® CYLINDER HEAD IDENTIFICATION SYSTEM

Oil Lift Systems (OLS, GMV) Single Stage



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number*
42mm	9EA133-14
50mm	9EA133-15
60mm	9EA133-07
70mm	9EA133-01
80mm	9EA133-02
90mm	9EA133-03
100mm	9EA133-04
110mm	9EA133-05
120mm	9EA133-06
130mm	9EA133-08
150mm	9EA133-10
180mm	9EA133-11
200mm	9EA133-12**
238mm	9EA133-13**

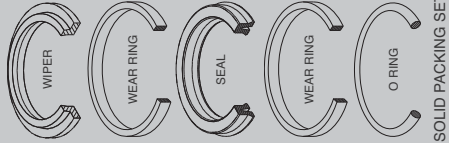
NOTES

*Wiper not available on some sets.

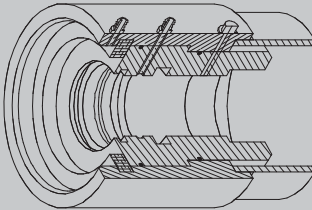
**Call for availability.

Some sets contain several O Rings for single stage or "S" telescopic.

Packing Set



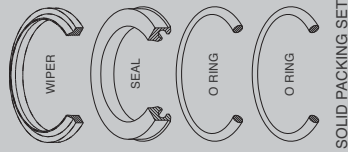
Northern HPH



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Cross Section	Solid Packing Set Number	Replacement Seal Number (1 Required)
3	3/8	6EA123-01	6E237SF
3-1/2	3/8	9EA123-02	9E108
4	3/8	9EA123-03	9E016
4-1/2	3/8	9EA123-04	9E016
5	3/8	9EA123-05	9E039
5-1/2	3/8	6EA123-06	6E188SF
6	3/8	9EA123-07	9E040
6-1/2	3/8	6EA123-08	6E273SF

Packing Set



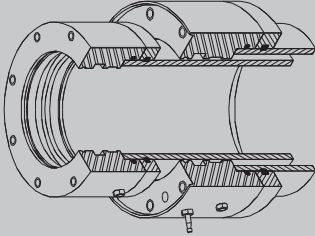
QUALITY ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
 Fax (847) 581-0095
 7760 N. Merrimac Ave. • Niles, IL 60714

Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

© 2012 THE TEXACONE COMPANY, INC.

Oil Lift Systems - "H" Top Bolt Telescopic



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number*
42 mm	-
51 mm	-
56 mm	-
63 mm	-
70 mm	-
85 mm	-
100 mm	-
120 mm	-
140 mm	-
170 mm	-
200 mm	-

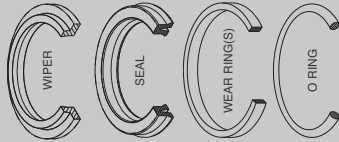
NOTES

*Call for availability of complete set.



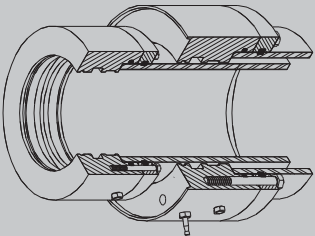
© 2012 THE TEXACONE COMPANY, INC.

Packing Set



SOLID PACKING SET

Oil Lift Systems - "H" Bottom Bolt Telescopic



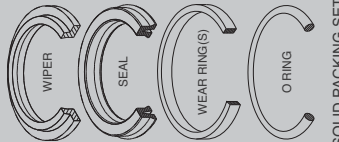
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number*
42 mm	9EA141-01
51 mm	9EA141-02
56 mm	9EA141-03
63 mm	9EA141-04
70 mm	9EA141-05
85 mm	9EA141-06
100 mm	9EA141-07
120 mm	9EA141-08
140 mm	9EA141-09
170 mm	9EA141-10
200 mm	9EA141-11

NOTES

*Call for availability of complete set.

Packing Set



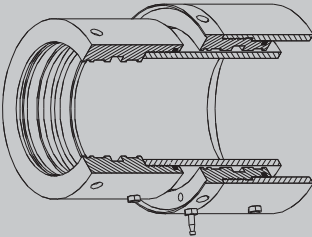
SOLID PACKING SET

Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

PACKING

TEXACONE® CYLINDER HEAD IDENTIFICATION SYSTEM

Oil Lift Systems (OLS, GMV, GMV) - "S" Telescopic



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number*
42 mm	9EA133-14
50 mm	9EA133-08
63 mm	9EA133-15
69 mm	9EA133-16
70 mm	9EA133-01
85 mm	9EA133-17
100 mm	9EA133-04
120 mm	9EA133-06
140 mm	9EA133-12
170 mm	9EA133-18
200 mm	9EA133-12**

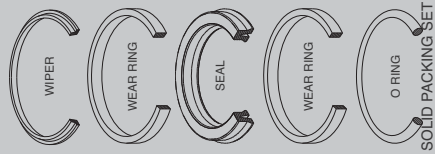
NOTES

*Wiper not available on some sets.

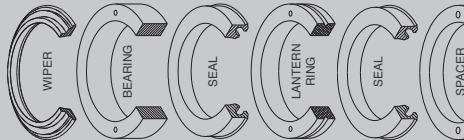
**Call for availability.

Some sets contain several O Rings for Single Stage or "S" telescopic.

Packing Set

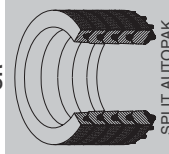


Packing Sets

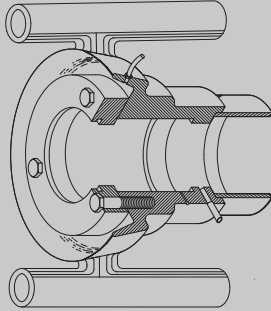


SOLID PACKING SET

OR



Otis Cast Head



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size Actual (Nom)	Solid Packing Set Number	Seals Only Set Number (1 Required)	Split Autopak Set Number
3-7/8(4)	6EA001-01	8RF001-01	1A1085-01
4-1/2(6)	6EA001-02	8RF001-02	1A1085-02
5-7/16(5-1/2)	6EA001-03	8RF001-03	1A1085-03
6-1/2(6-1/2)	6EA001-04	8RF001-04	1A1085-04
7-1/2(7-1/2)	6EA001-05	8RF001-05	1A1085-05
8-1/2(8-1/2)	6EA001-06	8RF001-06	1A085-06
9-1/2(9-1/2)	6EA001-07	8RF001-07	1A085-07
12-5/8(12-1/2)	6EA001-08	8RF001-08	1A085-08
13-3/4(14)	6EA001-10	8RF001-10	1A085-10
15-3/4(16)	6EA001-11	8RF001-11	1A085-11

NOTES

-Can use existing bearing with Autopak set. Place on top of packing set. (3) shims also included.

This unit was manufactured prior to 1974.

**Otis
AP Welded - 1993**

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seals Only Set Number (1 Required)
3-7/8	6EA114-05	8RF114-05
3-7/8	6EA114-06	8RF114-06
4	6EA114-11	8RF114-11
4-3/8	6EA114-08	8RF114-08
4-3/8	6EA114-02	8RF114-02
5-7/16	6EA114-07	8RF114-07
5-9/16	6EA114-03	8RF114-03
6-1/2	6EA114-04	8RF114-04

NOTES
This unit manufactured after 1993.

Packing Set

SOLID PACKING SET

**Otis
AP-Welded**

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seals Only Set Number (1 Required)
3-7/8(4)	6EA114-05	8RF114-05
4-1/2(2)	6EA114-06	8RF114-06
4-7/8(5)	6EA114-09	8RF114-09
5-7/16(6-1/2)	6EA114-07	8RF114-07
6-1/2(6-1/2)	6EA114-08	8RF114-08

NOTES
Manufactured from 1974 to 1993.
Gasket shown not included.

Packing Sets

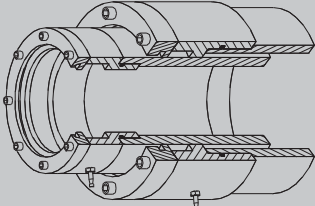
SOLID PACKING SET

Gorman packing and seals also available at AES and Quality as well, for most applications!

© 2012 THE TEXACONE COMPANY, INC.

Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

Otis Telescopic



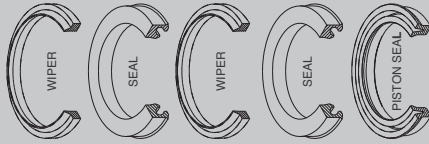
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number
3.00/4.62	9EA067-01
4.17/5.32	9EA067-02
4.37/6.32	9EA067-03
3.87/5.71	9EA067-04
3.00/4.62*	9EA067-05

NOTES

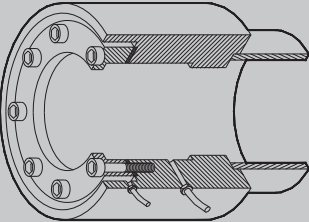
*Unit manufactured after 1977.

Packing Set



SOLID PACKING SET

Otis Holeless & Roped



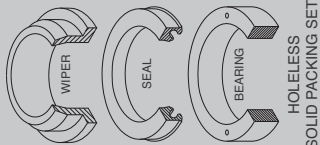
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
2-3/4	Holeless	9E104
	9EA128-01	9E001
2.84	Roped	9E001
	9EA104-02	9E001
3.93	6EA104-01	8E017
	6EA104-02	8E006
4.43	6EA104-02	8E006
	6EA104-03	8E020
5.50	6EA104-03	8E020

NOTES

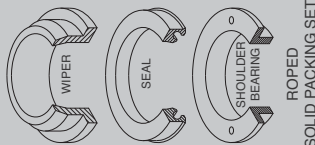
Usually need 2 sets per car for Holeless.

Packing Sets

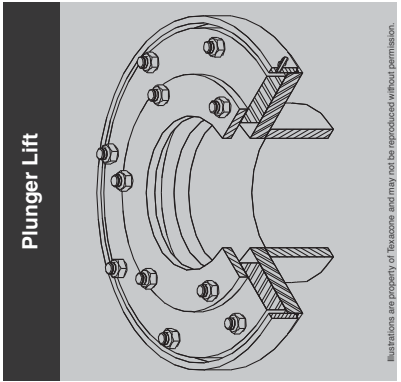


HOLELESS SOLID PACKING SET

OR



ROPED SOLID PACKING SET



Plunger Lift

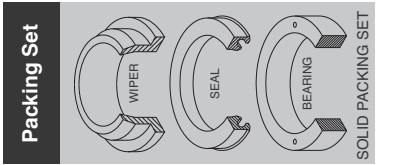
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seals Only Set Number (1 Required)
4	9EA034-01	9E078
5	9EA034-02	9E082
6	9EA034-03	9E105
7	9EA034-04	9E105

NOTES

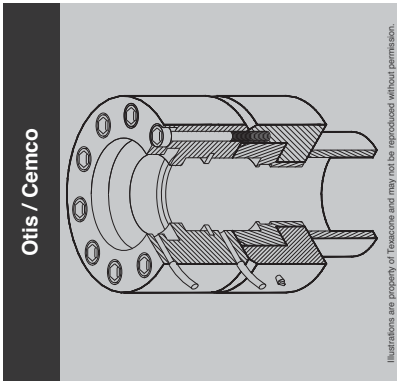
Head shown is with steel ring. The other version has a brass ring and uses a different packing set.

Call for availability.



Packing Set

SOLID PACKING SET



Otis / Cemco

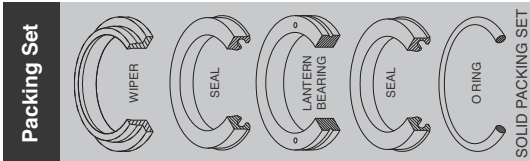
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seals Only Set Number (1 Required)
3-7/8	6EA110-05	8RF110-05
4-1/2	6EA110-06	8RF110-06
4-3/8	6EA110-06**	8RF110-06
4-3/8	6EA110-02**	8RF110-02
5-7/16	6EA110-07	8RF110-07
5-5/8	6EA110-03**	8RF110-03
6-1/2*	6EA110-10	8RF110-10
6-5/8	6EA110-09**	8RF110-09
6-5/8*	6EA110-11	8RF110-11

NOTES

*These cylinder heads look like the Cemco - Flange head.

**Wear ring and additional O Ring included in these sets.



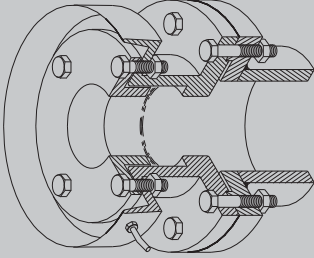
Packing Set

SOLID PACKING SET



Gorman packing and seals also available at AES and Quality as well, for most applications!

R & O Cast Head



Illustrations are property of Texacone and may not be reproduced without permission.

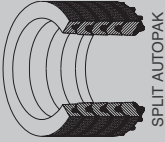
Plunger Size	Split Autopak Set Number
4-3/8	1AT090-01
4-7/8	1AT090-02
5-7/16	1AT090-03
5-1/2	1AT090-04
6-1/2	1AT090-05
8-1/2	1AT090-06
10-1/2	1AT090-07

NOTES

Manufactured prior to 1971.

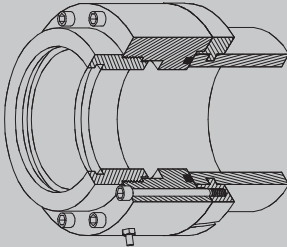
May require gasket (not included) if completely disassembled.

Packing Set



SPLIT AUTOPAK

Porta-Flex (C.E.E.)



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number*
1-3/4 / 2-3/4 / 3-3/4	6EA149-01
2-1/4 / 3 / 4-1/4	6EA149-02
3 / 4 / 5-1/2	6EA149-03
3-1/2 / 4-1/4 / 6-1/4	6EA149-04

NOTES

*Call for availability.

Packing Set

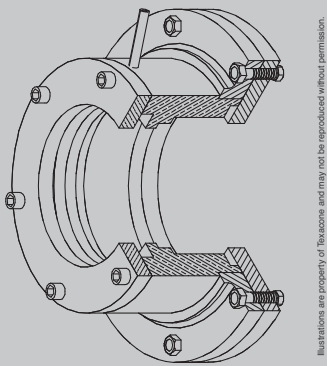


(3) SEALS
SOLID PACKING SET

Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

© 2012 THE TEXACONE COMPANY, INC.

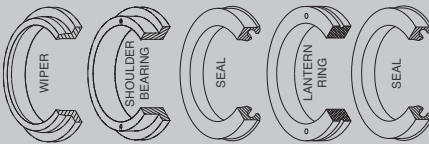
Richmond



Illustrations are property of Texacone and may not be reproduced without permission.

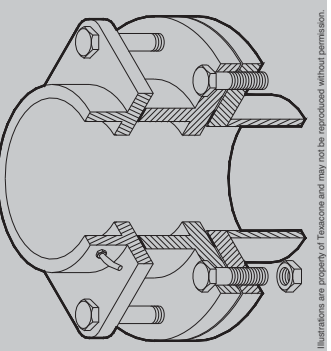
Plunger Size	Solid Packing Set Number	Replacement Seal Number (2 Required)
4-3/8	9EA142-01	9E044
5-3/8	9EA142-02	9E045
6-1/2	9EA142-03	9E083

Packing Set



SOLID PACKING SET

**R & O
Model 71 & 76**

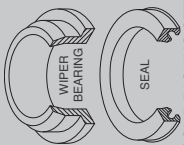


Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
4-3/8	6EA013-01	8E007
5-3/8	6EA013-02	8E008
6-1/2	6EA013-03	8E026

NOTES
 Model 71 manufactured from 1971 to 1975.
 Model 76 manufactured from 1976 to 1978.

Packing Set



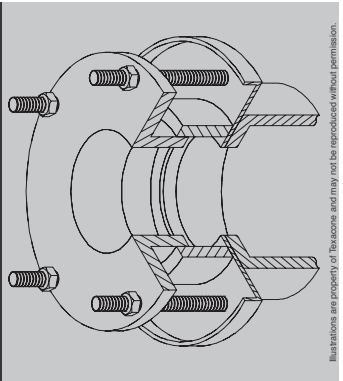
SOLID PACKING SET

Gorman packing and seals also available at AES and Quality as well, for most applications!

PACKING

TEXACONE® CYLINDER HEAD IDENTIFICATION SYSTEM

San Jose

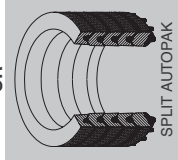
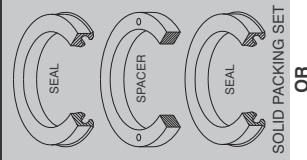


Illustrations are property of Texacone and may not be reproduced without permission.

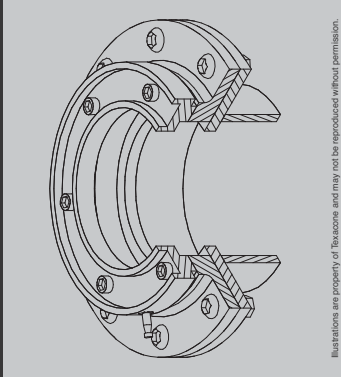
Plunger Size	Replacement Packing Set (2 Required)		Split Autopak Set	
	Serial Number	Part Number	Serial Number	Part Number
4-1/2	6EA086-01	3E059	1A093-01	1A093-01
5-1/2	6EA086-02	3E059	1A093-02	1A093-02
6-1/2	6EA086-03	3E059	1A093-03	1A093-03
7-1/2	6EA086-04	3E041	1A093-04	1A093-04
8-1/2	6EA086-05	3E098	1A093-05	1A093-05

NOTES
Packing Sets and Autopak are 3/4 cross section.

Packing Sets



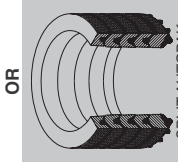
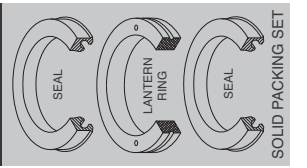
Rosenberg - Cast Head



Illustrations are property of Texacone and may not be reproduced without permission.

NOTES
Call with plunger size for availability.

Packing Sets



Schindler Telescopic (321A & 330)

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
60mm	9EA130-01*	9E059
90mm	9EA130-02	9E060
90mm	9EA130-03*	9E026
105mm	9EA130-04	9E026

Note: See chart below for Model No. requirements.

Solid Packing Set Number	Model Number	60-2Y	75-2Y	90-2Y	60-3Y	75-3Y
9EA130-01		X	X	X	X	X
9EA130-02		X	X	X	X	X
9EA130-03				X	X	X
9EA130-04				X	X	X

NOTES

Inverted Cylinder.

*Additional O Ring included for foot piece.

Packing Set

SOLID PACKING SET

Other Versions

Schindler MPH2 (Martin, D.L.)

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
3-1/2	9EA113-01	9E048
3-1/4	9EA113-02	9E049
4	9EA113-03	9E049
4-1/2	9EA113-04	9E021
5	9EA113-05	9E023
5-1/2	9EA113-06	9E015
6	9EA113-07	9E005
6-2	9EA113-08	9E031
7	9EA113-09	9E031
8	9EA113-10	9E135

Other Versions

NOTES

Manufactured since 1989 by D.L. Martin

Packing sets are 1/4 cross section.

Some units have been field retrofitted to accept 3/8 or 1/2 cross section seals. Please call for availability.

Early units had (4) bolts, (2) O rings. Later units had (2) bolts, (1) O ring.

Easily confused with Westinghouse MPH1 which was manufactured before 1989. Notice outside cylinder head wall is much shorter than MPH1.

Packing Set

SOLID PACKING SET

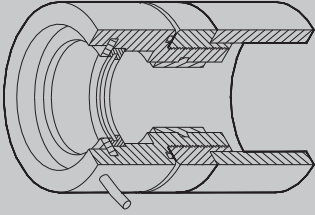
Other Versions

Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

© 2012 THE TEXACONE COMPANY, INC.

PACKING TEXACONE® CYLINDER HEAD IDENTIFICATION SYSTEM

Thyssenkrupp (Dover)



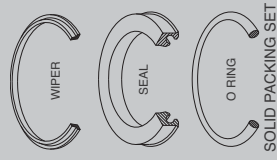
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (1 Required)
3 (2S)	9EA023-27	9EO51
4-3/8 (4S)	9EA127-01	9EO52
5-7/16 (5S)	9EA127-02	9EO03
6-1/2 (6S)	9EA127-03	9EO04
7-1/2 (7S)	9EA127-04*	9EO54

NOTES

- Manufactured since 2001.
- Split plastic wear ring available on request.
- 4S, 5S, 6S packing sets have extra O Rings.
- O Ring not available.
- Some older units may not have groove for wiper.

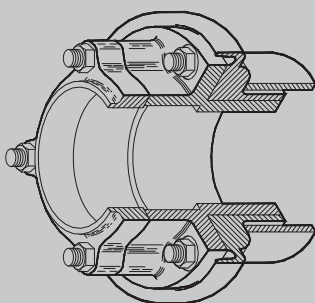
Packing Set



OPTIONAL



Southeastern



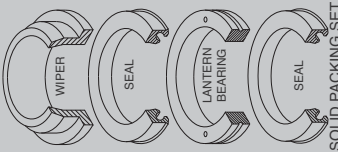
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Seals Only Set (1 Required)		Split Autopak Set Number
	Solid Packing Set Number	Autopak Set Number	
4-3/8	6EA007-01	8RF007-01	1AT086-01
5	6EA007-02	8RF007-02	1AT086-02
5-1/4	6EA007-03	8RF007-03	1AT086-03
6-1/2	6EA007-04	8RF007-04	1AT086-04
6-9/16	6EA007-05	8RF007-05	1AT086-05
7-1/2	6EA007-06	8RF007-06	1AT086-06
8-1/2	6EA007-07	8RF007-07	1AT086-07
9-1/2	6EA007-08	8RF007-08	1AT086-08
10-5/8	6EA007-09	8RF007-09	1AT086-09
13-7/8	6EA007-10	8RF007-10	1AT086-10
15-7/8	-	-	1A086-14*

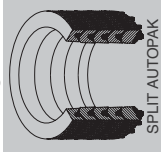
NOTES

- Available in Split Autopak only.
- Other sizes available.
- Manufactured in the 1960's.
- Number of bolts on head may vary – sometimes only (3).
- May require gasket (not included) if completely disassembled.
- May have SH, SE, or SF stamped on head.
- Older units have bronze gland and no wiper.

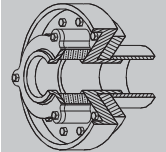
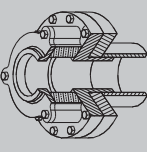
Packing Set



OR



Other Versions

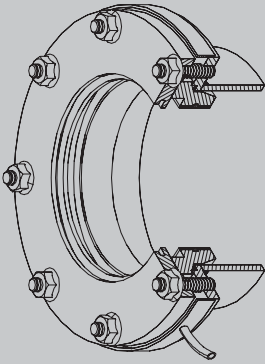


Gorman packing and seals also available at AES and Quality as well, for most applications!

© 2012 THE TEXACONE COMPANY, INC.

Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

ThyssenKrupp Rota U-Cup



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seals Only Set Number (1 Required)
4-3/8 (4S)	9EA127-01	9E003
5-7/16 (5S)	9EA127-02	9E014
7-1/2 (7S)	9EA127-03	9E054
8-1/2	9EA127-05	9E098

NOTES

Manufactured as of Jan 2005. Looks similar to Dover - Rota except uses flange type nuts and conventional U-cup seal.

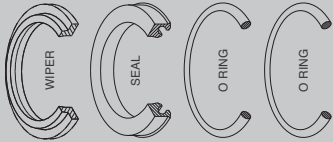
All sets have extra O Rings.

Split plastic wear ring available on request.



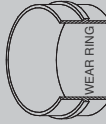
© 2012 THE TEXACONE COMPANY, INC.

Packing Set

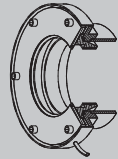


SOLID PACKING SET

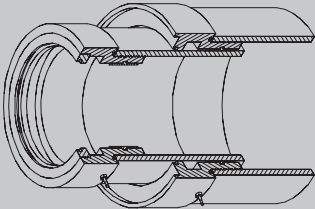
OPTIONAL



Other Version



ThyssenKrupp (Dover) Telescopic



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Sizes	Solid Packing Set Number
2-1/2 / 3-3/4	9EA023-28
3-1/2	9EA023-29
2-1/2 / 3-3/4 / 5	9EA023-33

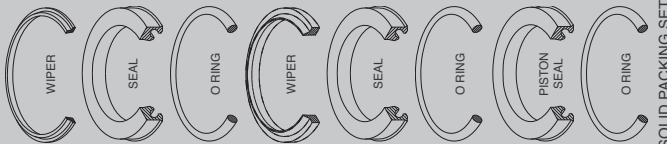
NOTES

For best results use T-K telescopic installation tool.

Piston seal cavity is not externally visible.

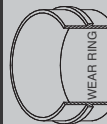
Split plastic wear ring is available on request.

Packing Set



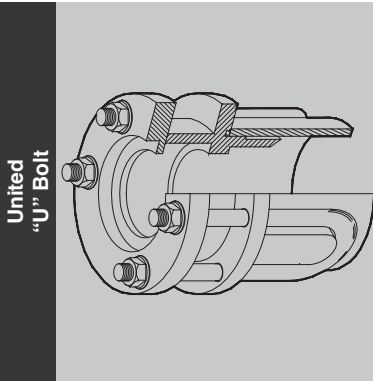
SOLID PACKING SET

OPTIONAL



Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

PACKING TEXACONE® CYLINDER HEAD IDENTIFICATION SYSTEM



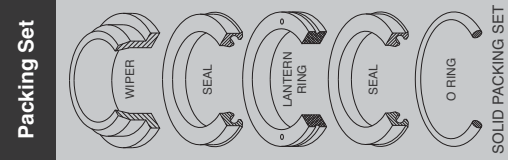
**United
"U" Bolt**

Illustrations are property of Texacone and may not be reproduced without permission.

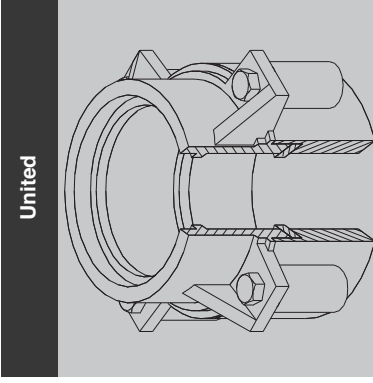
Plunger Size	Solid Packing Set Number	Replacement Seal Number (2 Required)
4	6EA033-20	6E005
4-1/2	6EA033-03	6E086SF
5	6EA033-13	6E020
5-9/16	6EA033-13	6E060SF
6	6EA033-05	6E028
6-1/2	6EA033-14	6E024
6-5/8	6EA033-15	6E186SF
7	6EA033-04	6E029
7-5/8	9EA033-17	9E039
8-1/2	6EA033-18	6E030
8-5/8	9EA033-19*	9E056

NOTES

Lantern supplied with set but reuse existing lantern bearing if possible.
 Some sets contain several O Rings for different cylinder types and sizes.
 Usually requires (1) seal for 5-9/16" and under;
 (2) seals for 6" and over. All sets shown contain (2) seals.
 *Wiper is different than shown in picture.



Packing Set



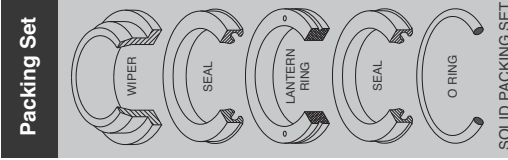
United

Illustrations are property of Texacone and may not be reproduced without permission.

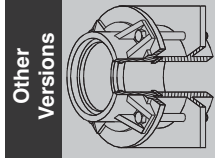
Plunger Size	Solid Packing Set Number	Replacement Seal Number (2 Required)
3-15/16	6EA033-01	6E019
4	6EA033-20	6E005
4-1/16	6EA033-02	6E006
4-1/2	6EA033-21	6E186SF
5	6EA033-03	6E020
5-1/2	6EA033-04	6E221SF
5-9/16	6EA033-13	6E050SF
6	6EA033-05	6E028
6-1/2	6EA033-14	6E024
6-9/16	6EA033-06	6E031
6-5/8	6EA033-15	6E186SF
7-1/2	6EA033-16	6E029
7-9/16	6EA033-07	6E059
7-5/8	9EA033-17	9E037
8-1/16	6EA033-08	6E034
8-9/16	6EA033-08	6E034
8-5/8	9EA033-19*	9E056

NOTES

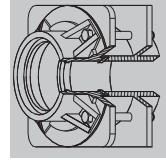
Lantern supplied with set but reuse existing lantern bearing if possible.
 Some sets contain several O Rings for different cylinder types and sizes.
 Usually requires (1) seal for 5-9/16" and under;
 (2) seals for 6" and over. All sets shown contain (2) seals.
 *Wiper is different than shown in picture.



Packing Set



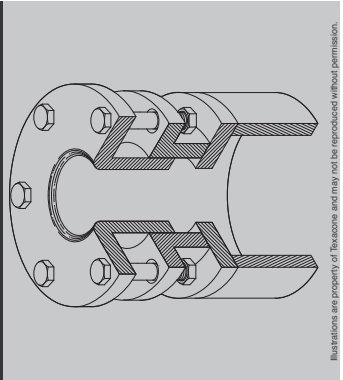
Other Versions



Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

© 2012 THE TEXACONE COMPANY, INC.

U.S. Aluminum



Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Split Autopak Set Number*	Split Packing Set Number
3-7/8	1AT118-01	6EA107-06
4-1/2	1AT118-02	6EA107-07
5-1/2	1AT118-03	6EA107-08
6	1AT118-04	6EA107-03
7	1AT118-05	6EA107-04
	1AT118-06	6EA107-09
	1AT118-07	6EA107-10

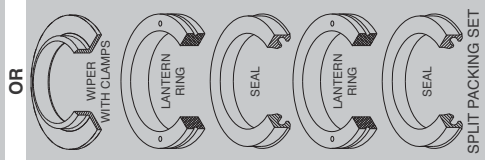
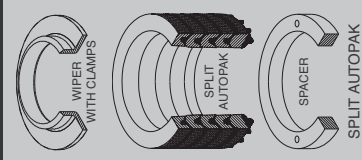
NOTES

- * Autopak is the recommended packing.
- Solid packing set available 6EA116-XX.
- Manufactured prior to 1983.
- May have more than (4) bolts.

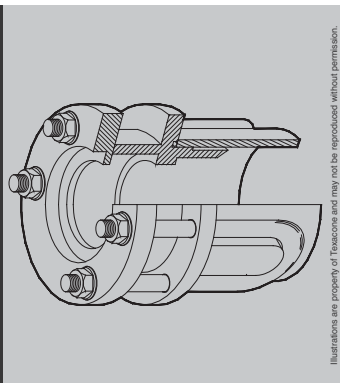


© 2012 THE TEXACONE COMPANY, INC.

Packing Sets



United Holeless



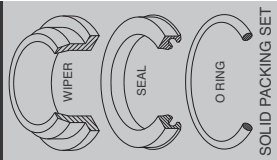
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Cross Section	Solid Packing Set Number	Replacement Seal Number (1 Required)
2-3/8	1/2	6EA033-09***	6E218SF
3-1/2	3/8	6EA033-10***	6E157SF
3-1/2**	7/16	6EA033-11	6E157SF
3-1/2**	7/16	6EA033-12	6E152SF
4	1/2	9EA033-22	9E029
4-1/2	1/2	6EA033-23	6E005
	1/2	6EA033-24	6E168SF

NOTES

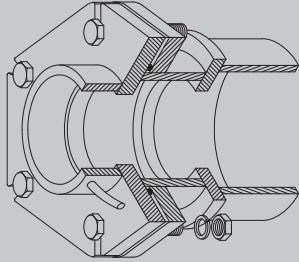
- *Manufactured before April 1988.
- **Manufactured from April 1988 to Sept 2000.
- ***Manufactured after Oct 2000.
- ***Wiper not available.
- Some sets contain several O Rings for different cylinder types and sizes.

Packing Set



Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

U.S. Econohead

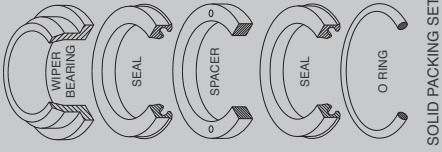


Illustrations are property of Texacone and may not be reproduced without permission.

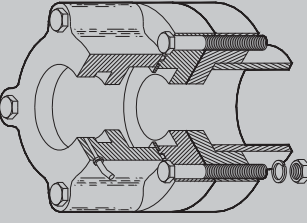
Plunger Size Actual (Nom)	Solid Packing Set Number	Replacement Seal Number (2 Required)
2.81 (2-7/8)	9EA145-01	9E107
3.14 (3-1/8)	9EA145-02	9E084
3.65 (4)	9EA145-03	9E084
4.45 (4-1/2)	9EA145-04	9E012
4.97 (5)	9EA145-05	9E080
5.49 (5-1/2)	9EA145-06	9E019
5.97 (6)	9EA145-07*	9E082
6.31 (6-1/8)	9EA145-08	9E083
6.53 (6-5/8)	9EA145-09	9E112

NOTES
 -Only seals and O Ring available.
 Units manufactured prior to 1990 use only (1) seal.
 Set numbers 6EA069, 6EA083-XX, and 6EA112-XX discontinued.

Packing Set



U.S. MT

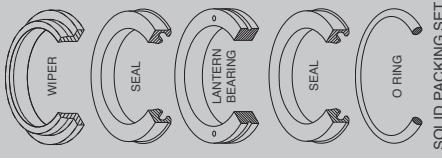


Illustrations are property of Texacone and may not be reproduced without permission.

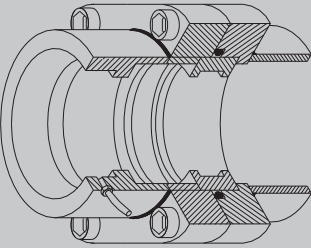
Plunger Size	Solid Packing Set Number	Seals Only Set Number (1 Required)
4	6EA012-01	8RF012-01
4-1/2	6EA012-02	8RF012-02
5	6EA012-03	8RF012-03
5-1/2	6EA012-04	8RF012-04
6	6EA012-05	8RF012-05
6-1/2	6EA012-06	8RF012-06
7	6EA012-07	8RF012-07

NOTES
 Manufactured from 1983 to 1986.

Packing Set



U.S. PS97 & Roped

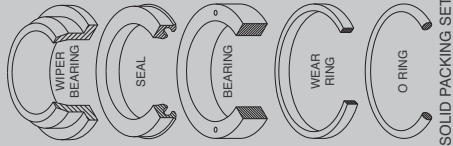


Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size Actual (Nom)	Solid Packing Set Number	Replacement Seal Number (1 Required)
2.81 (2-7/8)	6EA111-05*	8E010
3.15 (3-1/2)	6EA111-06*	8E052
3.95 (4)	6EA111-00*	8E059
4.44 (4-1/2)	6EA111-02	8E059
5.49 (5-1/2)	6EA111-03	8E029
6.56 (6-5/8)	6EA111-04	8E060
	9EA111-07*	9E096

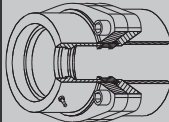
NOTES
 -Bearing not supplied. Use split wear ring only.
 Packing Sets include parts for both Bench Pack & PS97.

Packing Set

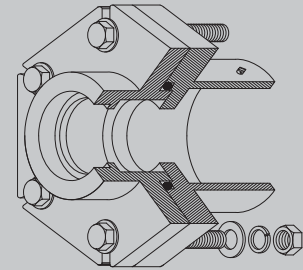


SOLID PACKING SET

Other Versions



U.S. Bench Pack - BPE

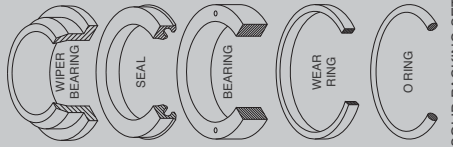


Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size Actual (Nom)	Solid Packing Set Number	Replacement Seal Number (1 Required)
2.81 (2-7/8)	6EA111-05*	8E010
3.15 (3-1/2)	6EA111-01*	8E052
3.95 (4)	6EA111-02	8E059
4.44 (4-1/2)	6EA111-03	8E029
5.49 (5-1/2)	6EA111-04	8E060

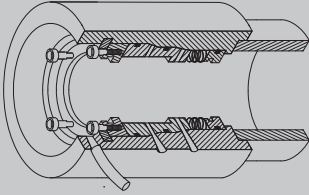
NOTES
 -Bearing not supplied. Use split wear ring only.
 Packing Sets include parts for both Bench Pack & PS97.
 Manufactured from 1994 to 1997.

Packing Set



SOLID PACKING SET

Westinghouse MPH2



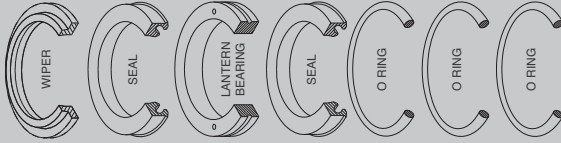
Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seats Only Set Number (1 Required)
3-1/2	6EA025-01	8RF025-01
3-1/4	6EA025-02	8RF025-02
3-1/2	6EA025-03	8RF025-03
4-1/2	6EA025-04	8RF025-04
5-1/2	6EA025-05	8RF025-05
6	6EA025-06	8RF025-06
6-1/2	6EA025-07	8RF025-07
7	6EA025-08	8RF025-08
8	6EA025-09	8RF025-09

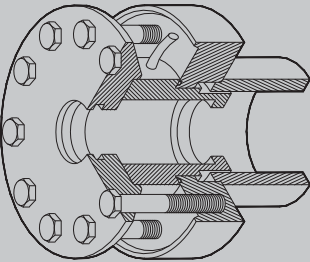
NOTES

Easily confused with Schindler MPH2 which has been manufactured since 1989. Notice outside cylinder head wall is much longer than MPH2.

Packing Set



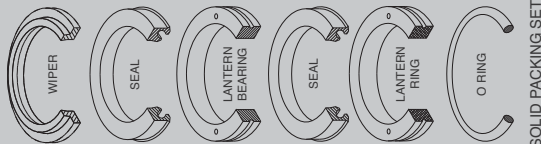
Westinghouse Bolted - E Series



Illustrations are property of Texacone and may not be reproduced without permission.

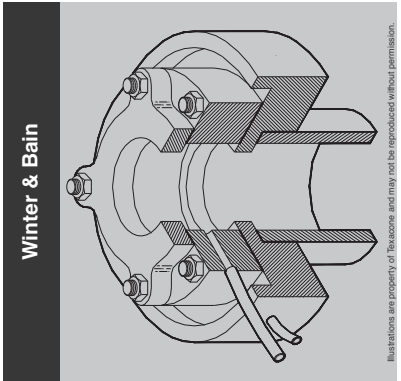
Plunger Size	Solid Packing Set Number	Seats Only Set Number (1 Required)
4	6EA117-01	8RF117-01
4-1/2	6EA117-02	8RF117-02
5-1/2	6EA117-03	8RF117-03
6-1/2	6EA117-04	8RF117-04
6-1/2	6EA117-05	8RF117-05

Packing Set



Gorman packing and seals also available at AES and Quality as well, for most applications!

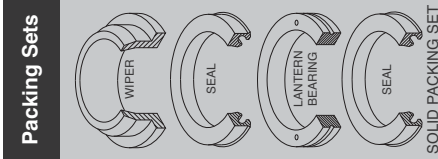
PACKING TEXACONE® CYLINDER HEAD IDENTIFICATION SYSTEM



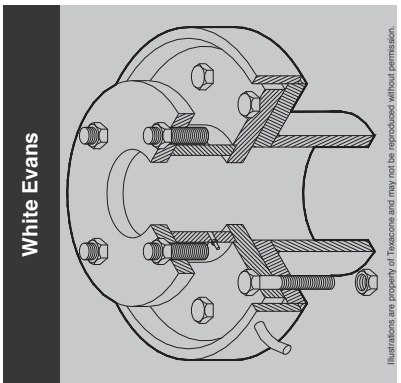
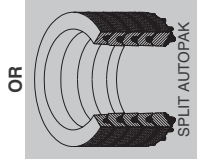
Winter & Bain

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Seals Only Set Number (1 Required)	Autopak Number	Split Number
2-1/2	6E A068-01	8RF068-01	1AT068-01	1
3-1/2	6E A068-02	8RF068-02	1AT068-02	1
3-7/8	6E A068-21	8RF068-21	1AT068-21	1
4	6E A068-15	8RF068-15	1AT068-15	1
4-3/8	6E A068-03	8RF068-03	1AT068-03	1
4-1/2	6E A068-20	8RF068-20	1AT068-20	1
5	6E A068-04	8RF068-04	1AT068-04	1
5-7/16	6E A068-06	8RF068-06	1AT068-06	1
5-1/2	6E A068-14	8RF068-14	1AT068-14	1
6	6E A068-07	8RF068-07	1AT068-07	1
6-1/2	6E A068-08	8RF068-08	1AT068-08	1
6-9/16	6E A068-09	8RF068-09	1AT068-09	1
7	6E A068-10	8RF068-10	1AT068-10	1
7-1/2	6E A068-11	8RF068-11	1AT068-11	1
8	6E A068-16	8RF068-16	1AT068-16	1
8-1/2	9E A068-12	8RF068-12	1AT068-12	1
9	6E A068-17	8RF068-17	1AT068-17	1
9-1/2	6E A068-18	8RF068-18	1AT068-18	1
10	6E A068-19	8RF068-19	1AT068-19	1
10-1/2	9E A068-13	8RF068-13	1AT068-13	1
10-5/8	6E A068-13	8RF068-13	1AT068-13	1



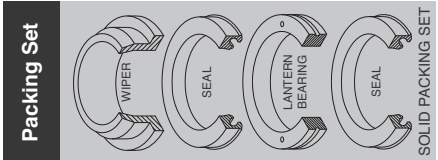
Packing Sets



White Evans

Illustrations are property of Texacone and may not be reproduced without permission.

Plunger Size	Solid Packing Set Number	Replacement Seal Number (2 Required)	Notes
4-1/2	6EA125-02	6E207	
5-3/8	6EA125-03	6E208	
5-7/16	6EA125-03	6E213SF	
5-1/2	6EA125-04	6E221SF	
6-1/2	6EA125-05	6E208SF	
7	6EA125-06	6E035	
7-1/2	6EA125-06	6E036	
8-1/2	6EA125-08	6E039	
10-5/8	6EA125-08	6E042	



Packing Set

Gorman packing and seals also available at AES and Quality as well, for most applications!

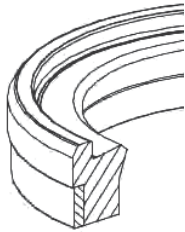
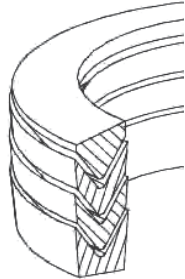
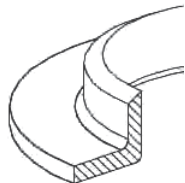
NOTES

- Use the existing lantern bearing with Autopak set. Place on top of packing set.
- May require gasket (not included) if completely disassembled.

© 2012 THE TEXACONE COMPANY, INC.

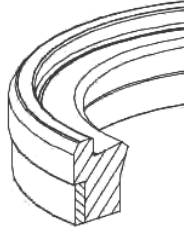
Reprinted with the permission of the Texacone Company. Further reproduction or copying is expressly prohibited.

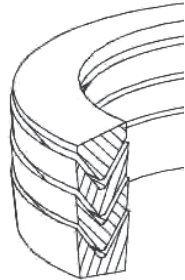
PACKING TRACTION MACHINE SEALS AND PACKING

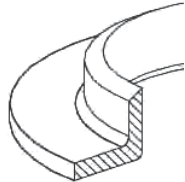
Machine Number	Packing Dimensions	Manufacturer Part Number	Model Number	Packing
U. S. Elevator				
	2.12 x 3.18		1R027	
Armor Elevator				
#1	1.50 x 2.50 x 0.82		10PA01-29*	 <p>Worm Gear Seal (1R)</p>
#2	1.75 x 2.75 x 0.82		10PA01-30* (1)	
#3 OLD	1.87 x 2.87 x 1.29		10PA01-31*	
#3 INT	1.93 x 3.06 x 1.35		10PA01-32*	
#3 FIN	1.93 x 2.87 x 1.26		10PA01-33* (2)	
#4	2.00 x 3.00		1R020	
#5	2.75 x 3.75		1R081	
<p>*Shim included with these sets, 10PA sets must be compressed. (1) May substitute worm gear seal part number 1R059. (2) May substitute worm gear seal part number 1R079.</p>				
Dover Elevator				
GD1*	2.00 x 3.00 Worm	-	1R020	 <p>Worm Shaft Packing (10PA)</p>
GD1*	2.00 x 3.25 Worm	-	1R021	
GD2*	2.00 x 3.00 Worm	-	1R020	
GD2*	2.00 x 3.25 Worm	-	1R021	
GD45	3.12 x 4.25 Inner	9752146	1R103CR SOLID	
GD45	1.74 x 2.65 Worm	9752110	1R043	
GD45	5.12 x 7.00 Spider	9767897	5E006	
GD50	3.12 x 4.25 Inner	9752146	1R103CR SOLID	
GD50	1.74 x 2.65 Worm	9752110	1R043	
GD75	3.12 x 4.25 Inner	9752146	1R103CR SOLID	
GD75	1.74 x 2.65 Worm	9752110	1R043	
GD105	7.12 x 8.62 Spider	9825526	5E004	
GD105	4.50 x 5.50 Inner	9727346	1R048 SOLID	
GD105	2.34 x 3.22 Worm	9825514	1R002	
GD200	2.81 x 3.82 Worm	9751122	1R113	
GD240	2.34 x 3.22 Worm	9825514	1R002	
GD240	5.00 x 6.25 Inner	9824479	1R101N SOLID	
GD240	8.50 x 10.25 Spider	9808760	5E005	
GD300	2.81 x 3.82 Worm	9751122	1R113	
<p>*NOTE: Requires both seals.</p>				
Fujitec				
	50mm x 72mm	TM50C		 <p>Spider Seal (5E)</p>
	60mm x 90mm	EM81	1R119	
<p>All seals supplied SPLIT unless otherwise noted. Please specify, if require other than noted, SPLIT or SOLID.</p>				

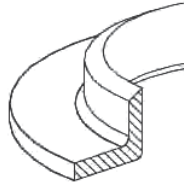
PACKING TRACTION MACHINE SEALS AND PACKING

Gorman packing and seals also available at AES and Quality as well, for most applications!

Machine Number	Packing Dimensions	Manufacturer Part Number	Model Number	Packing
Haughton Machines				
E	2.00 x 2.75 x 2.25		10PA01-20	
EK	2.75 x 3.75		1R081	
H	1.43 x 2.25 x 1.68		10PA01-21	
O	1.43 x 2.25 x 1.62		10PA01-22	
R	1.75 x 2.50 x 1.75		10PA01-23	
OH	2.50 x 3.50		1R100	
N	3.18 x 4.25 x 2.50		10PA01-24	
L	2.68 x 3.75 x 2.50		10PA01-25	
K	2.18 x 3.25 x 2.31		10PA01-26	
EKU	2.75 x 3.75		1R081	

Hollister & Whitney Elevator Co.				
34	4-7/8 x 6-7/8 Sheave		1M253	
43	5-3/8 x 7-3/8 Sheave		1M244	
43	1.68 x 2.56 Worm		1R062	
53	7.00 x 9.00 Sheave		1M252	
53	1.93 x 2.87 Worm		1R079	
63	8-1/4 x 11.0 Sheave		1M240	
63	2.18 x 3.00 Worm		1R052	
74	12.0 x 14.0 Sheave		1M251	

Mitsubishi				
	70mm x 100mm		1R120	
	80mm x 105mm		1R121	

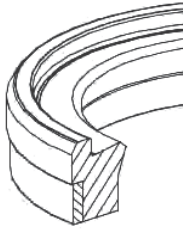
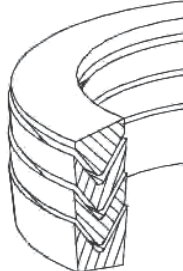
Montgomery Elevator				
207E	1.93 x 3.19	9096-017	1R086	
207E	1.12 x 1.83	9096-021	1R049N	
207E	2.62 x 3.54	9096-047	1R095N	
208E	1.93 x 3.19	9096-017	1R086	
208E	1.12 x 1.83	9096-021	1R049N	
208E	4.00 x 5.00	9096-024	1R031	
210E	2.43 x 3.54	9096-005	1R047	
210E	4.50 x 5.75	9096-046	1R094N	
214E	2.43 x 3.54	9096-005	1R047	
214E	4.37 x 5.75	9096-029	1R093N	
215E	2.43 x 3.54	9096-005	1R047	
215E	2.93 x 4.00	9096-008	1R039	
215E	4.37 x 5.75	9096-029	1R093N	

NOTE: N designates SOLID seal, otherwise supplied as SPLIT, unless specifically requested SOLID.

All seals supplied SPLIT unless otherwise noted. Please specify, if require other than noted, SPLIT or SOLID.

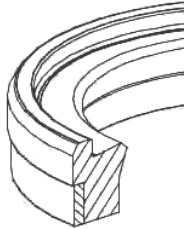
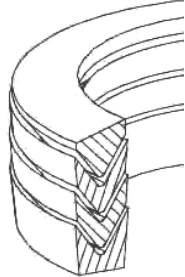
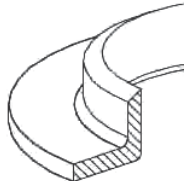
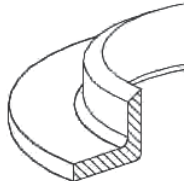
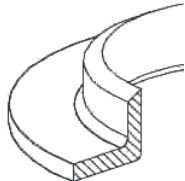
PACKING TRACTION MACHINE SEALS AND PACKING

Gorman packing and seals also available at AES and Quality as well, for most applications!

Machine Number	Packing Dimensions	Manufacturer Part Number	Model Number	Packing
Otis Elevator Co.				
17CT	1.93 x 2.87	33AA1	1R079	 <p>Worm Gear Seal (1R)</p>
22CT	2.00 x 3.00	33D29	1R020	
22CT OLD	2.00 x 3.25	33P2	1R021	
29CT	3.00 x 4.50	33D26	1R019	
	6.87 x 7.87	33D31	1R077	
	8.25 x 9.50	33D27	1R096	
	5.00 x 6.00	33D5	1R091	
	5.31 x 6.31	33D23	1R084	
	5.31 x 6.25	33D20	1R105	
Otis Worm Shaft Packing				
	1.00 x 1.75 x 1.25	182A1	10PA01-37	 <p>Worm Shaft Packing (10PA)</p>
	1.31 x 2.06 x 1.37	182A2	10PA01-38	
	1.56 x 2.56 x 1.68	182A3	10PA01-39	
	1.87 x 3.12 x 2.06	182A4	10PA01-40	
	2.12 x 3.37 x 2.62	182A5	10PA01-41	
	2.25 x 3.50 x 2.00	182A6	10PA01-42	
	2.50 x 3.75 x 1.93	182A7	10PA01-43	
	3.50 x 4.50 x 2.31	182A8	10PA01-44	
	0.62 x 1.40 x 1.12	182A9	10PA01-45	
	1.18 x 1.68 x 1.62	182A10	10PA01-46	
	1.31 x 1.87 x 1.06	182A11	10PA01-47	
	2.00 x 3.00 x 1.31	182A12	10PA01-48	
	1.81 x 2.81 x 1.50	182A13	10PA01-49	
	1.43 x 2.43 x 1.00	182A14	10PA01-50	
	1.56 x 2.56 x 1.37	182A15	10PA01-51	
	3.62 x 5.12 x 2.31	182A16	10PA01-52	
	1.87 x 3.12 x 1.68	182A17	10PA01-53	
	1.87 x 3.00 x 2.62	182A18	10PA01-54	
	2.50 x 3.75 x 1.62	182A19	10PA01-55	
Park Manufacturing				
	1.93 x 3.18		1R017	
	2.18 x 3.18		1R018	
F.S. Payne				
B	1.37 x 2.37		1R061	
300	1.87 x 2.87		1R013	
400	2.50 x 3.50		1R100	
All seals supplied SPLIT unless otherwise noted. Please specify, if require other than noted, SPLIT or SOLID.				

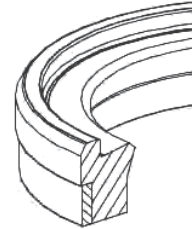
PACKING TRACTION MACHINE SEALS AND PACKING

Gorman packing and seals also available at AES and Quality as well, for most applications!

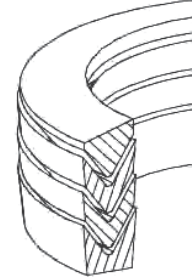
Machine Number	Packing Dimensions	Manufacturer Part Number	Model Number	Packing
Titan Machine				
#1	2-1/8 x 3 Worm		1R027	
#1	7-1/4 x 8-3/8 Spider		5E010	
#2	Worm - call for size		-----	
#2	8.80 x 9.93 Spider		5E011	
#3	12-3/4 x 14-1/4 Worm		1R111	
Watson Elevator Company				
	1.68 x 2.56		1R062	
	2.18 x 3.18		1R063	
Westbrook / Southeastern				
7	1.62 x 2.43 x 2.00		10PA01-34	
22, 26	2.00 x 2.81 x 3.00		10PA01-35	
31	2.43 x 3.25 x 4.00		10PA01-36	
Westinghouse Machine Complete Kits				
18	Machine Kit		1K006	
28	Machine Kit		1K005	
38	Machine Kit		1K004	
Kits include gaskets, breather, screws, instructions, and all (1R) (1M) seals.				
Westinghouse Machine				
18	1.75 x 3.18 Worm	X30ES1H13	1R007	
18*	2.56 x 3.75 Geared	X30ES1H12	1R050	
18	6.85 x 8.50 Sheave	6918C45H01	1M139	
27	2.12 x 3.14 Worm	R7311H23	1R115	
27*	2.75 x 3.75 Geared	X30AS1H11	1R081	
27*	2.75 x 3.50 (0-2-1) Geared	M3427H06	10PA01-56	
28	2.50 x 3.50 Worm	X30ES1H19	1R100	
28*	3.68 x 4.75 Geared	X30ES1H15	1R022	
28	8.12 x 9.25 Sheave	6917C89H01	1M130	
31	2.12 x 3.14 Worm	R7311H23	1R115	
37	2.43 x 3.43 Worm	R7311H17	1R006	
37*	3.25 x 4.25 (0-2-1) Geared	M3427H01	10PA01-57	
38	3.12 x 4.25 Worm	X30ES1H20	1R004	
38*	4.50 x 5.50 Geared	X30ES1H18	1R048	
38*	4.00 x 5.00 Geared	R7311H25	1R031	
38	9.75 x 11.30 Sheave	2890C79H01	1M057	
53	3.24 x 4.25 Worm	X30ES1H09	1R005	
57	3.24 x 4.25 Worm	X30ES1H09	1R005	
57*	4.00 x 5.00 (0-2-1) Geared	M3427H02	10PA01-58	
58 NEW	3.25 x 4.5 Worm	X30ES1H14	1R028	
58 OLD	3.24 x 4.25 Worm	X30ES1H09	1R005	
61	3.24 x 4.25 Worm	X30ES1H09	1R005	
81	4.00 x 5.00 Worm	R7311H25	1R031	

* Geared Center - also called Pedestal, A-Frame, and Outboard.

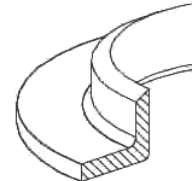
All seals supplied SPLIT unless otherwise noted. Please specify, if require other than noted, SPLIT or SOLID.



Worm Gear Seal (1R)



Worm Shaft Packing (10PA)



Spider Seal (5E)
Sheave Seal (1M)

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

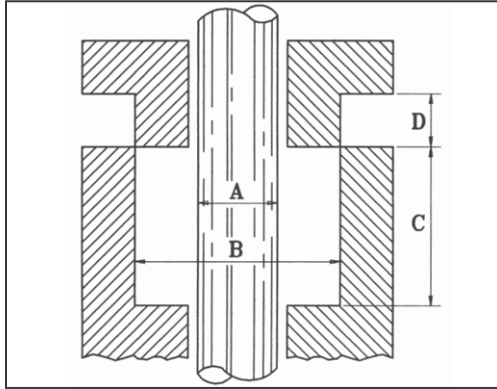
PACKING

PACKING BOX WORKSHEET / QUESTIONNAIRE

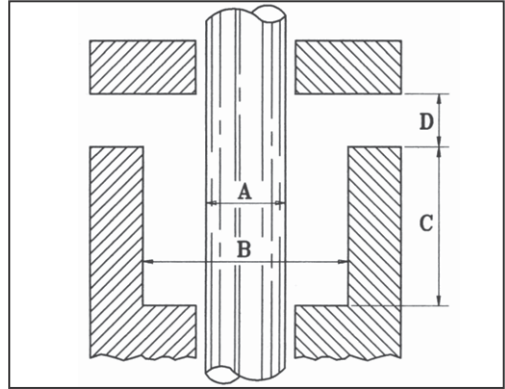
Master Copy
Please Make A Photo Copy



Standard Elevator
Packing Box



Elevator Packing Box
Flat Plate



Information Needed

Jack Identification (Mfgr's) _____

Manufacturer Of Jack: _____

(A) Plunger Diameter _____ (A) Plunger Diameter _____

(B) Box Bore _____ (B) Box Bore _____

(C) Depth Of Box: _____ (C) Depth Of Box: _____

(D) Length Of Gland Neck _____ (D) Length Of Gland Neck _____

Notes: _____

Company _____ Phone # : _____

By: _____ Date: _____

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

PACKING

WORM GEAR PACKING BOX WORKSHEET

MASTER COPY

PLEASE MAKE A PHOTO COPY

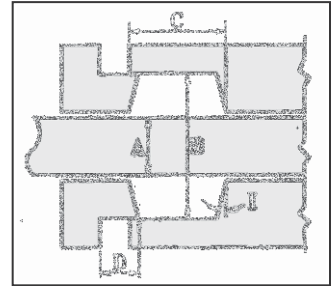
INFORMATION NEEDED

Manufacturer of Gear Box: _____

Manufacturer's Identification: _____

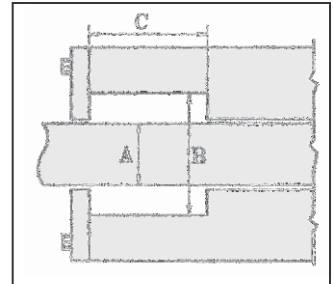
Stuffing Box:

- (A) Shaft Diameter _____
- (B) Box Bore _____
- (C) Depth of Box _____
- (D) Length of Gland Neck _____
- (I) Box End Angles _____



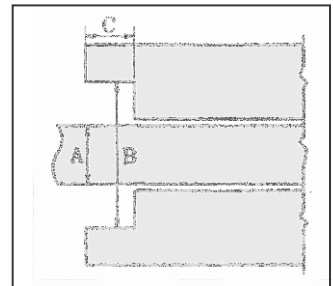
Seal Cavity With Retainer:

- (A) Shaft Diameter _____
- (B) Box Bore _____
- (C) Depth of Box _____



Seal Cavity With No Retainer:

- (A) Shaft Diameter _____
- (B) Box Bore _____
- (C) Depth of Box _____



COMPANY: _____

BY: _____

PHONE# : _____

DATE: _____

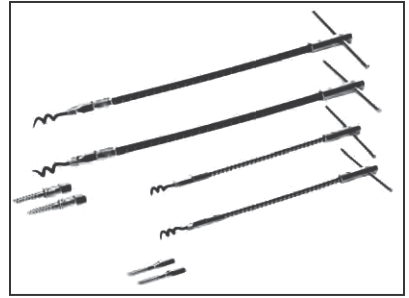
PACKING HOOKS, TAPE

FLEXIBLE PACKING HOOKS

Model FPH2

8 pcs set for hydraulic packing, bearing, and lantern removal.

- 2 #1 flexible packing hooks
- 2 #2 flexible packing hooks
- 2 #10 wood screw tips
- 2 #14 wood screw tips



PACKING TAPE

Model PT

- 6 mil black PVC to wrap cylinders
- 4" x 36 yards



**Gorman packing
and seals also
available at
AES and Quality
as well,
for most applications!**

BEAM PADS, PADLOCKS

BEAM PADS

Quality Elevator Beam Pads are manufactured from heavy duty 10 oz. Olive green fire-resistant cotton duck with a FiberLok filling. Each of these quilted pads is supplied with #3 spur grommets for attaching. All sizes are constructed with binder tape providing superior closure for the filling, adding long life to the product.

Model

BP1	Beam Pad 12" x 18"
BP3	Beam Pad 15" x 24"
BP5	Beam Pad 18" x 24"
BP6	Beam Pad 12" x 21"



PADLOCKS

Rust proofed high security padlocks.

Model LK75

- 2 keys included
- 3/4" shackle

Model LK2

- 2 keys included
- 2" shackle

LOCKOUT TAGS AND BREAKERS see page 223

PADS, ELEVATOR PROTECTIVE, PAD HOOKS

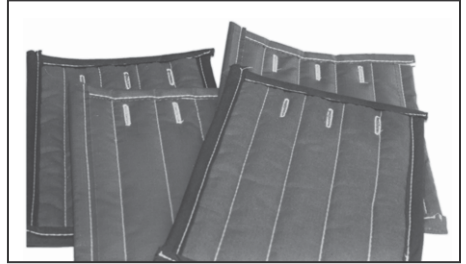
ELEVATOR CAB PADS

Quality Elevator Cab pads are manufactured from flame retardant materials with an outside cover of vinyl or canvas, with FiberLock interior cushioning, and reinforced buttonholes or grommets. The pads tested both individually and as a complete pad. They meet ASTM E84 UL, CAN 3-B44-M90, and NFPA701 standards and also conform to Rule 204.2 for passenger car enclosures. Canvas available in tan, black, brown. Vinyl available in tan, blue, gray, black.

While all elevator pads are custom, the delivery time isn't. Standard shipping time is one to two weeks after receipt of order with work sheet.

Please call or fax a copy of work sheet for price quote. When ordering, please specify the following:

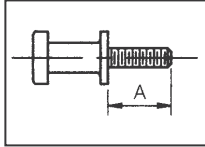
- Panel Sizes
- Material (Vinyl or Canvas)
- Color



PAD HOOKS

Available in high quality stainless steel and bronze with 10/24 threaded rod or threaded for wood (specify when ordering). Pad hook is permanently secured to threaded rod to prevent vandalism, button 5/8".

Model
SPH5*
SPH25
BPH5*
BPH25



Finish
 Stainless Steel
 Stainless Steel
 Bronze
 Bronze

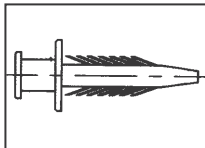
Rod Length (A)
 1/2"
 2-1/2"
 1/2"
 2-1/2"



* Wood stud available on request

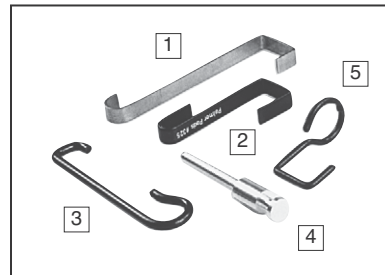
Also available in plastic to install from inside of car.

SPPH
BPPH
BLPPH



Silver Plastic
 Brown Plastic
 Black Plastic

1. Model SPH335
2. Model SPH325
3. Model SPH400 (OAL 4.25")
4. Model SPH675 (OAL 3.5") button 1-1/4"
5. Model SPH200 (OAL 2")

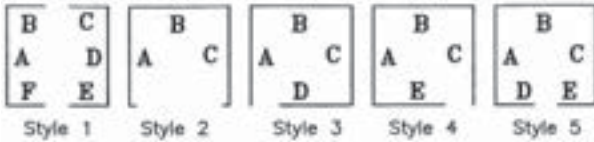


QUALITY
ELEVATOR PRODUCTS, INC.

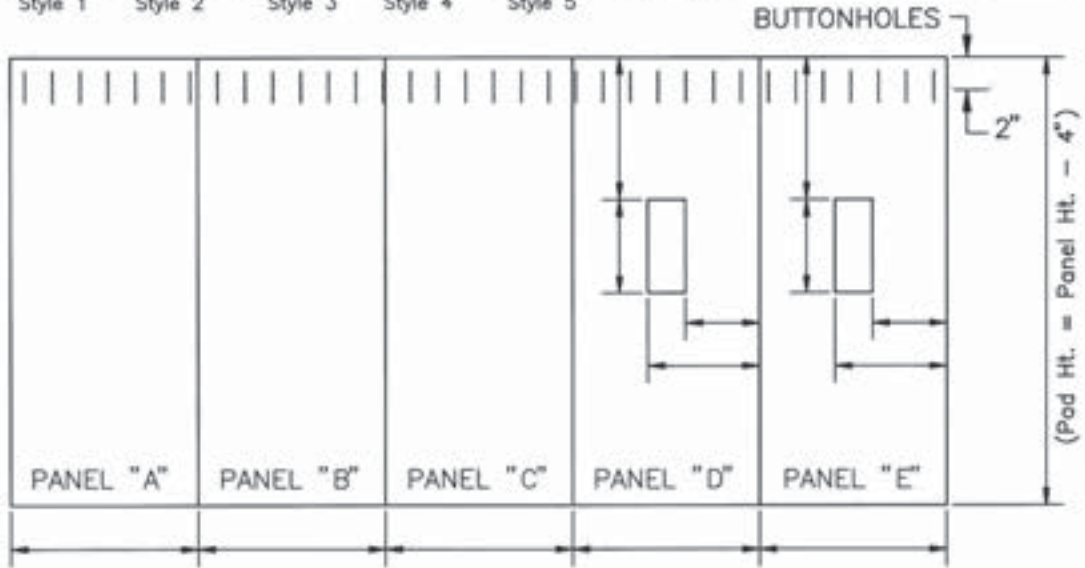
(847) 581-0085 • (800) 222-3688
 Fax (847) 581-0095
 7760 N. Merrimac Ave. • Niles, IL 60714

PADS, ELEVATOR PROTECTIVE

WORKSHEET



Customer: _____
 Job Name: _____
 P.O. # _____



Choose Pad Attachment Method

- Buttonholes
- Grommets (specify location)

Select Pad Material

- Vinyl
- Canvas

Advise Color

Number of sets _____

Type of Pad Hooks

SPH _____

BPH _____

Qty. _____

Grommet Information (if necessary)		
	QTY	Location (From Left to Right)
Panel A		
Panel B		
Panel C		
Panel D		
Panel E		

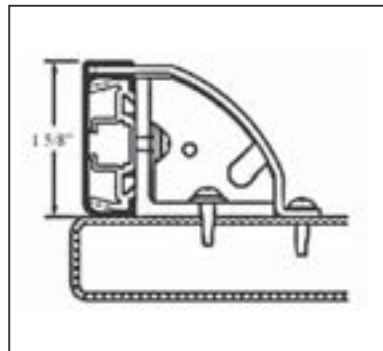
PANAFORTY PLUS

The Pana40 Plus from Quality Elevator Products protects your passengers by setting up a harmless curtain of infrared beams. Block a single beam and the door reopens. The beams are controlled by ultra-reliable electronic circuitry thus eliminating costly service calls associated with the traditional safety edge.

Model P40-PLUS

Features & Benefits

- FCC class A
- FCSA approved
- CSA approved
- Complies with ADA requirements.
- Quick installation-no adjustments.
- Easily serviced/Enhanced diagnostics.
- Complies with ASME/ANSI A17.1/A17.5.
- No moving parts-quieter doors, fewer call backs.
- Can be set to tolerate damage-keeps elevator in service.
- Full opening protection- screen fills doorway from ground level to six feet.
- Microprocessor fail-safe, holds doors safely open in the event of a failure.
- Reduces damage to elevator doors normally associated with freight movement.
- No alignment problems-Absolutely free from the problems associated with the condition of the doors, rollers, etc...



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

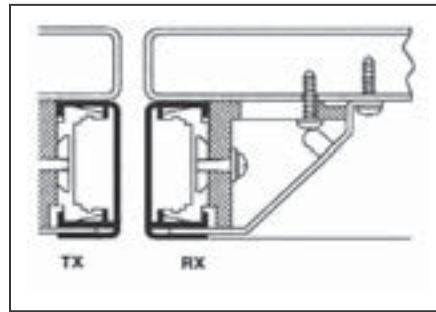
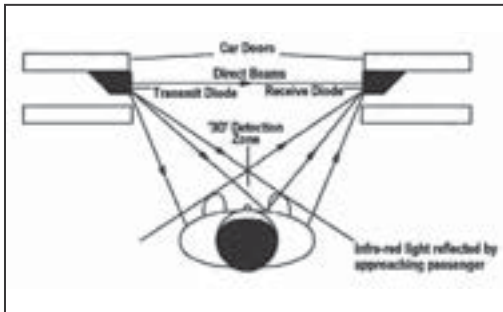
PANAFORTY PLUS

The Pana40 Plus 3D from Quality Elevator Products have two independent detection systems. The first is a curtain of direct infra-red beams, the second, an infra-red proximity detector which operates between the hoist way doors and into the landing. Any interruption of the direct beams across the car door opening or any reflection within the 3D detection zone in the landing triggers the system.

Model P40-3-D

Features & Benefits

- FCC class A
- FCSA approved
- CSA approved
- Complies with ADA requirements
- Easily serviced/Enhanced diagnostics
- Complies with ASME/ANSI A17.1/A17.5
- No moving parts-quieter doors, less call backs
- Can be set to tolerate damage-keeps elevator in service
- Full opening protection- screen fills doorway from ground level to six feet
- Microprocessor fail-safe, holds doors safely open in the event of a failure
- Reduces damage to elevator doors normally associated with freight movement
- No alignment problems-Absolutely free from the problems associated with the condition of the doors, rollers etc...



P40-3-D ONLY 1-5/8"

Model P40-PLUS • 40 beam unit

Model P40-3-D • "3-D" unit

Replacement Cables

Model P40C (black) (For Panaforty)

Model P40C-PLUS (blue) (For Panaforty Plus)

ELECTRIC EYES -- INNOVATION see page 41

**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

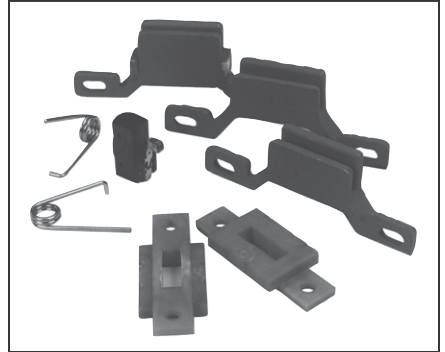
Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

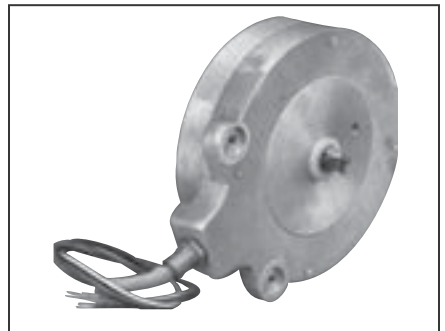
PEELLE REPLACEMENT PARTS

The Following Replacement Parts for the Peelle Company Hoistway Doors and Car Gates are in Stock at QUALITY ELEVATOR PRODUCTS!!

Model 0238B	Guide Shoes - Bronze
Model 0239	Guide Shoes
Model 0258	Guide Shoes
Model 0232	Gate Cwt. Guide Shoes
Model 03457	Center Latch Round Wire Spring
Model 06592	Roller Keeper with Washer
Model 01506	Adjustable Latch Hook
Model 235534	Hanger Bar Keeper Hook



Model 056910M	Moisture Resistant Door Motor
Model 25472	Moisture Resistant Gate Motor, w/Pinion



Model 036717	7M-1B Contact Switch Assembly
Model 093444	Micro Switch, Door and Gate Limits, 3-Point
Model 093445	Micro Switch, Door and Gate Limits, 5-Point



PHASE MONITORS

3 PHASE VOLTAGE MONITORS

Required for compliance with National Elevator Code, ANSI/ASME A17.1, Rule 210.6. 3 different models available. All models UL and CSA approved.

PLR Series Protects against:

- Phase loss (on start up)
- Low voltage
- Phase reversal

Octal, 8 Pin Socket Mount
SPDT Isolated Relay Contact

*Model SPLR-240 • 240V

*Model SPLR-480 • 480V

PLM Series Protects against:

- Phase loss
- Low voltage
- Phase reversal
- Voltage underbalance

Octal, 8 Pin Socket Mount
SPDT Isolated Relay Contact

*Model SPLM-240 • 240V

*Model SPLM-480 • 480V

RLM Series Protects against:

- Phase loss
- Low voltage
- Phase reversal
- Voltage underbalance

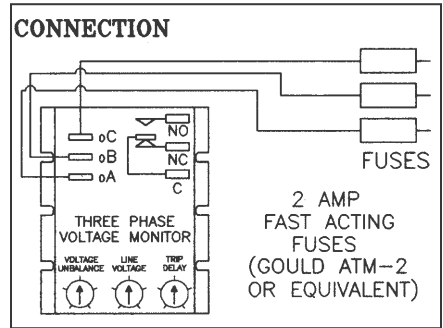
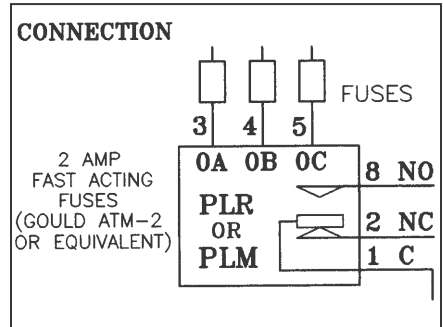
Model SRLM-240 • 240V

Model SRLM-480 • 480V

The RLM voltage monitor provides the same features as the PLM series, in addition to providing better protection against faults by allowing the accurate adjustments of voltage underbalance, line voltage and trip delay settings via on-board knobs and calibrated dials.

The RLM is fully encapsulated for uses under rugged conditions.

*Model D0320 • Socket 8-Pin Octal Style



PIPE RUPTURE VALVES, PIPE STAND, PISTON CLAMPS

PIPE RUPTURE VALVES

Flow sensitive, pressure activated valves act as a "velocity fuse" to retard the downward motion of a descending elevator to provide a gradual stop.

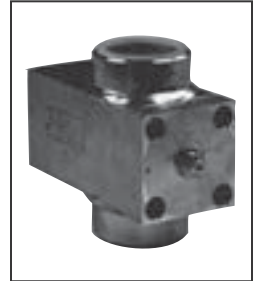
Features

- Up to 3" size for flow rates up to 380 GPM, 50 to 640 psi operating range
- Fully adjustable closing rate. Manual lowering around the valve when set
- Fully adjustable flow rate minimum pressure loss in the up direction 90°

Straight (Blain)

- ALL IN STOCK -

Model PRV-R1075	• 3/4"
Model PRV-R1015	• 1-1/2"
Model PRV-R102	• 2"
Model PRV-R102V	• 2" (victaulic)
Model PRV-R1025	• 2-1/2"
Model PRV-R1025V	• 2-1/2" (victaulic)
Model PRV-R103	• 3"
Model PRV-R103V	• 3" (victaulic)



PIPE STAND

Model APS

Our pipe stand supports 1-1/2" to 4" hydraulic pipe lines and adjusts from 16" to 27" high. It is equipped with base plate and two mounting holes.

Model APS-1

Unistrut pipe stand. Specify oil line diameter.

APS-1



APS



PISTON CLAMPS

Used to support ram during construction. Installation of two or more piece rams. Cut to encircle outer circumference of finished ram without marring or scoring the ram finish.

- Hardwood surface

Model	PC45	PC5	PC55	PC6	PC65	PC75	PC85
Size	4-1/2"	5"	5-1/2"	6"	6-1/2"	7-1/2"	8-1/2"



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

PIT LADDERS

All pit ladders built from solid stock steel. Rungs, 5/8" diameter, inserted into 3/8" x 2" sides and welded. See drawings on pages 188-189. Ladders painted with gray industrial enamel.

STANDARD ONE PIECE PIT LADDERS

- Wall brackets bolted to ladder sides
- Floor brackets welded to ladder sides

Model PL8 • 16"W x 8'L
Model PL8-8 • 12.75"W x 8'L

CUSTOM PIT LADDERS

- Wall brackets bolted to sides
- Floor brackets welded to ladder sides
- Made as one or multiple section ladder
- Sectional ladder comes with additional brackets
- Worksheet required. (Page 188)

Model PL8S • Up to 9' long
Model PL8L • Up to 11' long
Model PL8XL • Up to 13' long
Model PL8XLL • Up to 15' long
Model PL8XL-20 • Up to 20' long
Model PL8XL-30 • Up to 30' long



PL8-8



PL8C-8

STANDARD COLLAPSIBLE PIT LADDERS

- Folds in half for shipping
- Floor brackets welded to ladder inner sides
- Center brackets at point of pivot provide rigidity when installed

Model PL8C-8 • 16"W x 8'L

CUSTOM RETRACTABLE PIT LADDERS

- Extend forward (down) to allow access to pit
- Retract (up) to lock ladder in place to allow elevator to run
- Safety switch, left or right, prevents elevator operation when ladder down
- Top pin lock, left or right, secures ladder position
- Gas spring assist to retract the ladder
- Made as one or multiple section ladder
- Sectional ladder comes with additional brackets
- Worksheet required. (Page 189)

Model PL8-RET • Up to 8' long
Model PL9-RET • Up to 9' long
Model PL8-RET-10 • Up to 10' long
Model PL12-RET • Up to 12' long
Model PL15-RET • Up to 15' long
Model PL18-RET • Up to 18' long



PL8-RT

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

PIT LADDERS

CUSTOM PIT LADDER WORKSHEET

Master Copy Please Make a Photo Copy

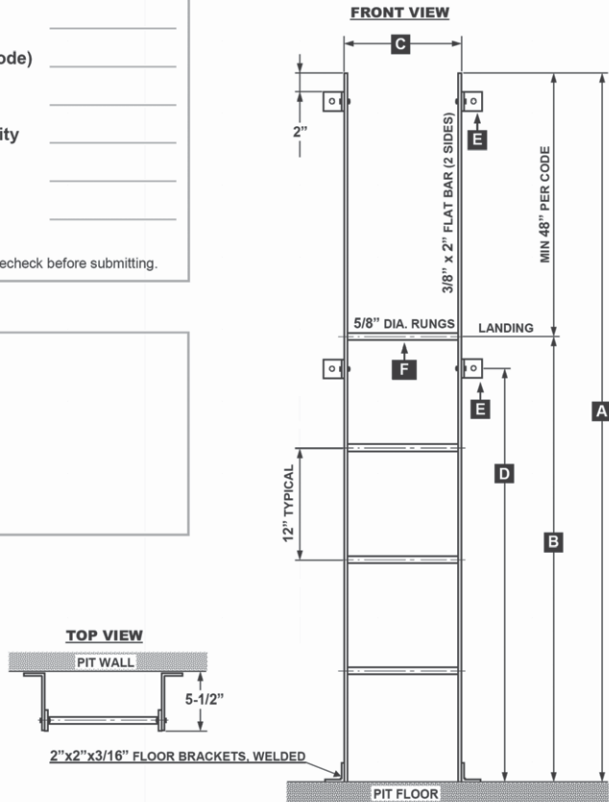
Name: _____	Reference #: _____
E-mail: _____	Phone: _____
Company: _____	Date: _____
Address: _____	

Data

A Overall ladder length	_____
B Pit depth	_____
C Ladder width (9-3/4" minimum per Code)	_____
D Extra brackets, distance (if required)	_____
E Wall brackets, bolted to sides, quantity	_____
F Quantity of rungs	_____
Quantity of ladders	_____

Note:
Ladders are custom made and non-returnable. Please recheck before submitting.

Notes



Please fill out the form and e-mail it to sales@qualityelev.com or fax it to 847-581-0095.

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

PIT LADDERS

RETRACTABLE PIT LADDER WORKSHEET

Master Copy Please Make a Photo Copy

Name: _____	Reference #: _____
E-mail: _____	Phone: _____
Company: _____	Date: _____
Address: _____	

Data

- A** Overall ladder length _____
 - B** Pit depth _____
 - C** Ladder width (9-3/4" minimum per Code) _____
 - D** Extra brackets distance (if required) _____
 - E** Bottom brackets distance, 15" typical _____
 - F** Quantity of rungs _____
 - G** Lock pin location Left/Right side _____
 - H** Safety switch location Left/Right side _____
- Quantity of ladders _____

Note: To optimize price we recommend to order pin (G) and switch (H) on opposite sides of the ladder, avoid extra brackets (D), or change distance (E) unless necessary. Ladders are custom made and non-returnable. Please recheck before submitting.

Notes

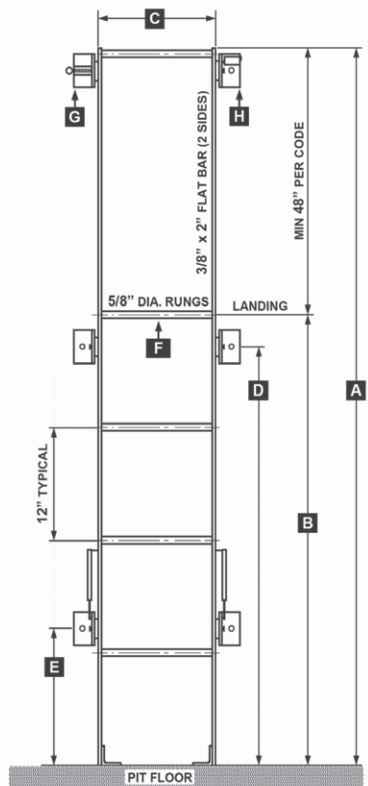
TOP VIEW - LADDER UNFOLDED



TOP VIEW - LADDER FOLDED



FRONT VIEW - LADDER UNFOLDED



PCB00027174

Please fill out the form and e-mail it to sales@qualityelev.com or fax it to 847-581-0095.



(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
 7760 N. Merrimac Ave. • Niles, IL 60714

PIPE CLAMP ASSEMBLIES, PIT FLOOD ALARM, PIT WORK LIGHT

PIPE CLAMP ASSEMBLIES

Insulated pipe clamps designed to hang off unistrut.

- Model HMCLAMP-2 • 2"
- Model CLAMP-3 • 3"



PIT FLOOD ALARM

Our quality built 110VAC pit flood alarm is equipped with a 3 wire grounded plug, automatic liquid level controls and 4" bell*. It is extremely adjustable, mounting to 8#, 12#, or 15# rails.

Model PFA1

Liquid level control switch is to be located 12" above pit floor.

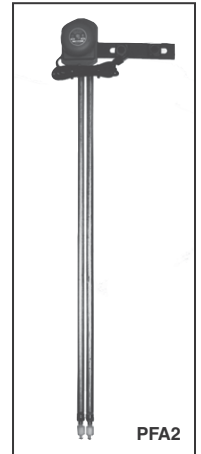
* NOTE: Bell must be located above high water level or 12" above bottom landing floor.

Model PFA2

A second level control switch can be furnished so that when wired into the elevator control circuit, an elevator car will not go down into the bottom landing should 13" of water be present in a 4'0" pit. Float switch CSA and UL approved. 48" pipe.

Model 21FA002

- Replacement Float Switch



PIT WORK LIGHT

Model PWL

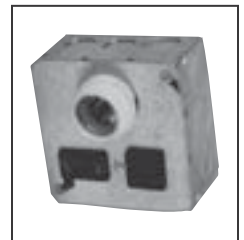
- Pit work light for pit or under car
- Light socket
- Light switch
- 4" x 4" x 2-1/2" box
- 120V outlet

Model PWLG

- With Ground Fault Circuit Interrupter
- 4-3/4" x 4-3/4" x 2-1/2" box



PWLG



PWL

- Lamp guards optional - Model LG
- Rough service lamp - Model 71LB0084

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

PIT SWITCHES & OUTLETS

PIT SWITCHES

All Models are designed to meet ANSI A17.1 Rules 106.1f and 210.2e/2g Elevator Safety Code Requirements Red run/stop control switch conforms to Rule 210.2e(4). PS2 & PS3 switches available with lockout pin, to prevent accidental movement of switch to "RUN".

Model PS2

- Steel guard prevents damage or accidental switching
- Switch rated 20A at 250VAC

Models PS2L

- Lockout pin included

Model PS3

- Run/stop in 1/2" permanent raised letters
- Cast aluminum cover
- CSA approved (CSA B44, B44.1/ASME, A17.1, A17.5)

Models PS3L

- Lockout pin included

Model PS2-DC

- Heavy Duty rocker switch
- Switch rated 1.5A at 120VDC

Model PS4

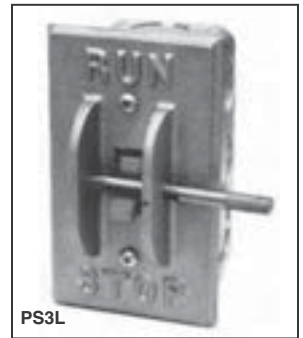
- Push To Stop / Pull To Run
- One normally closed contact
- Maintained in both positions
- Switch rated 5A at 250VAC

Model PS-WP

- NEMA 4X



PS2



PS3L



PS2-DC



PS4

PIT SWITCHES / OUTLETS

Model PS2-DO

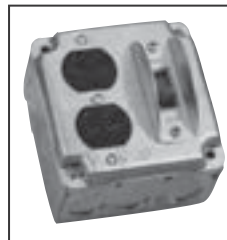
- With duplex outlet

Model PS2-GFI

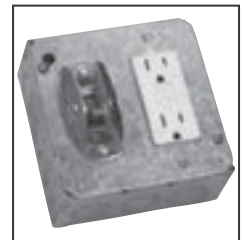
- With Ground Fault Circuit Interrupter



PS-WP



PS2-DO



PS2-GFI

POWER UNITS

SUBMERSIBLE POWER UNITS

Quality Elevator Products power units built for low noise operation and easy maintenance accessibility. Large inventory of components allows us to fabricate within 3-5 days. Units ship nationwide. Conforms to ASME A17.1

Standard Features

- Pump submerged in oil to eliminate dust and dirt problems
- Positive displacement screw pump and submersible motor
- Low noise operation with anti-vibration mounts
- Direct coupled motor and pump
- Top mounted hydraulic valve
- Oil level dipstick

- Voltage** • 200VAC, 230VAC, 460VAC, 575VAC, 3 Phase 60Hz
Motor • Imperial Motors • SB Motori • 80 Starts/Hr. • 15-70HP
Pump • Allweiler • IMO • Seim • 400PSI Max. • 270GPM Max.
Valve • Maxton • EECO • Blain • 120-440VAC • 12-120VDC
Oil line • 1.5"-3" NPT or victaulic • To right, left, front, back, up

Optional Features

- Dual pump/motor
- Dual tank unit
- Isolation coupling
- Line reducer
- Low oil level switch
- Low pressure switch
- Motor starter
- Muffler inside
- Oil level sight gauge
- Oil pressure gauge
- Oil scavenger pump
- Oil tank cooler
- Oil tank heater
- Oil thermostat
- Phase monitor
- Rupture valve
- Seismic ready
- Shut off valve

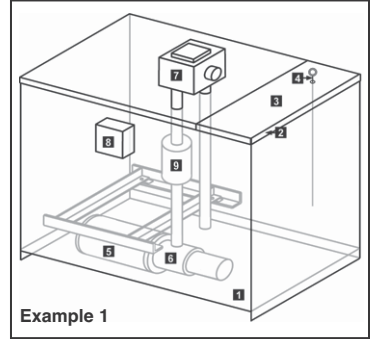
Typical Power Units data, before customization

Tank	HP	GPM	Oil Line Size / GPM	Oil Gal. Perm./Transf.	Tank Dimensions
SK-32	15-20	56-60	1.5" / 70	35 / 38	32"W x 18"D x 36"H
	15-30	77-96	2.0" / 134		
SK-36	25-40	104-106	2.5" / 206	38 / 60	36"W x 18"D x 42"H
	25-40	121-123			
SK-48	30-60	162-200	3.0" / 270	76 / 122	48"W x 23"D x 48"H
	40-60	217-213			
SK-60	≤ 70	≤ 250	3.0" / 270	159 / 215	60"W x 32"D x 50"H
SK-72	≤ 70	≤ 250		202 / 258	72"W x 36"D x 58"H

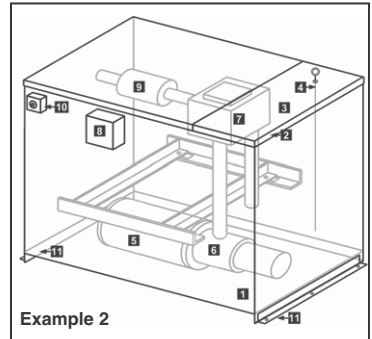
Example 1: Valve outside, NPT oil line to right, muffler inside

Example 2: Valve and muffler inside, oil line to left, seismic brackets, oil thermostat

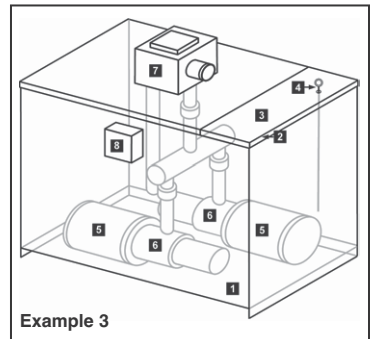
Example 3: Valve outside, victaulic oil line to right, dual pump/motor



Example 1



Example 2



Example 3

- 1 POWER UNIT TANK, 2 TANK COVER WITH 5/8" DOWNWARD LIP, 3 ACCESS COVER,
 4 OIL DIPSTICK, 5 SUBMERSIBLE MOTOR, 6 SUBMERSIBLE PUMP, 7 VALVE,
 8 ELECTRICAL BOX, 9 MUFFLER, 10 OIL THERMOSTAT, 11 SEISMIC BRACKETS

OIL TRANSFER PUMP see page 124, **COOLING UNITS** see page 234

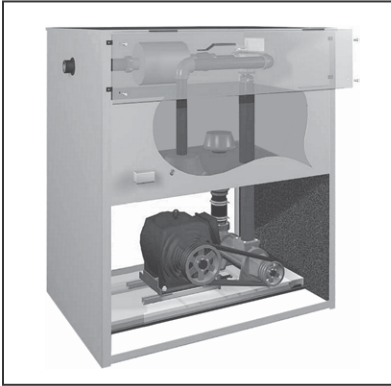
**QUALITY
 ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
 Fax (847) 581-0095
 7760 N. Merrimac Ave. • Niles, IL 60714

POWER UNITS

DRY POWER UNITS

Dry Power Units built with the motor and belt driven pump below oil tank. Valve mounted on top, inside tank. Removable covers provide access to main and shut off valves, belt tensioner, motor and pump. With dual pumps/motors up to 200HP/850GPM power unit can be customized to meet nearly any special project.



Standard Features

- Motors: 15-100HP 3 Phase
- IMO pumps: 43-425 GPM single
- Transferable oil up to 250 Gal.
- Maxton valve standard
- Valve mounted in the tank
- 12 Ga. formed tank & body
- Effective easy belt adjustment
- Noise reducing muffler
- Isolated pump/motor bedplate
- Protective packaging
- Shut off (ball) valve in the tank
- Oil level sight gauge

Optional Features

- EECO valve
- Constant down speed valves
- Custom tank sizes
- Low pressure switch
- Low oil switch
- Tank heater
- Oil cooler
- Oil level sight gauge
- Shut off(ball) valve
- Oil return pump

Typical dimensions: (48" or 60")W x (34" or 43")D x (60" to 77")H

EMERGENCY POWER UNITS

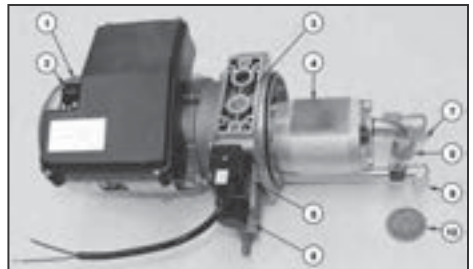
Temporary hydraulic pump for elevator emergency, adjustment and maintenance.

Model CEPU

1. AC motor, 3485RPM, 120VAC, 1 phase, 60Hz, 1Hp
2. Motor power cable connector, liquid tight
3. Oil outlet to load, 3/8"-18NPT, female, (to jack)
4. Gear pump, 363 PSI, 4.23GPM
5. Oil return valve, 7.5" cable, 120VAC
6. Oil relief valve, 72-870PSI
7. Oil return, 3/8"-18NPT, male, (to oil tank)
8. Oil inlet, 3/8"-19BSPP, female, (to oil tank)
9. Oil relief valve outlet, 3/8"-18NPT, male, (to oil tank)
10. Oil inlet filter, included, 90M, 3/8"-18NPT, female

Overall dimensions: 17" x 8" x 8", weight: 25.6 Lb.

CUSTOM OPTIONS ARE AVAILABLE



Piston Diameter	Speed FPM
2"	26.0
3"	11.6
4"	6.5
5"	4.2
6"	2.9
7"	2.1
8"	1.7
9"	1.3

**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
 Fax (847) 581-0095
 7760 N. Merrimac Ave. • Niles, IL 60714

POWER UNIT QUOTE FORM

POWER UNIT QUOTE FORM

Master Copy
Please Make A Photocopy

Company _____
Name _____
Address _____

Project _____
Date _____
Phone _____
E-mail _____

Project Data

Car Capacity _____

Car Speed FPM _____

Car Weight _____

Car Travel _____

Car Class Passenger Freight

Piston Diameter _____

Valve Location In Tank Above Tank

No Load PSI _____

Valve Hand Right Left

Full Load PSI _____

Valve Outlet Victaulic Threaded

Oil Flow GPM _____

Valve Down Regulated

Oil Line Size _____

Valve Coil Voltage _____

Power Unit Dry Submersible

Motor HP _____

Muffler Required Threaded Victaulic

Power Supply _____

Muffler In Tank Outside Tank

Project Options

Oil Cooler

Oil Level Sight Gauge

Tank Heater (Installed)

Low Oil Switch

Oil Return (Scavenger) Pump

Shut Off Valve Qty _____

Oil Pressure Gauge

Rupture Valve

Low Pressure Switch

Isolation Coupling Qty _____

Starter With Cabinet

Additional options available, please inquire.

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

PRESSURE SWITCHES, PROXIMITY SWITCHES

PRESSURE SWITCHES (HIGH AND LOW PRESSURE)

Switches are 5A rated, circuit SPDT.

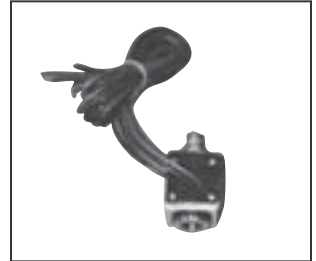
Body 2.4"W x 1.25"H x 1.25"D with 48" leads, maximum pressure 7500 psi. Steel construction. Falling pressure differential less than 10%.

Model CMWS500F

- High and Low pressure switch
- Adjusting range 45 - 900 psi

Model PS-0180

- Low pressure switch
- Adjusting range 15 - 150 psi
- 250V Max.



CMWS500F



PS-0180

"OMRON" INDUCTIVE PROXIMITY SWITCHES

Economical Limit Switch Style sensor with plastic body.

- Front sensing
- Operation indicator
- Directly switches AC loads up to 500mA, DC loads up to 200mA.

Model CTLYS15MD11

- 24-125VDC

Model CTLYS15MY11

- 100-240VAC



CTLY

PULL STRAPS

DOOR PULL STRAPS

Our 2" wide, 5000 lb. test door pull straps are made of durable nylon webbing. One end is triple reinforced for better gripping, the other doubled and sewn with 5/8" grommet.

Model DP18

- 18" long

Model DP24

- 24" long

Model DP30

- 30" long

Model DP36

- 36" long

Model DP48

- 48" long



3/8" FENDER WASHER

Model FW38

We recommend pull straps be clamped under 3/8" fender washer.



HEAVY DUTY DOOR PULL STRAPS

Our 12,000 lb. test heavy-duty door pull straps are made of durable black nylon. A mounting bracket is sewn into one end for attachment.

Model HDP18

- 18" long

Model HDP24

- 24" long

Model HDP30

- 30" long

Model HDP36

- 36" long

Model HDP48

- 48" long

Model HDP72

- 72" long



DOOR HOLE PLUG

Snap in plug for H & B doors, 3/4" knockout hole.

Model HBP



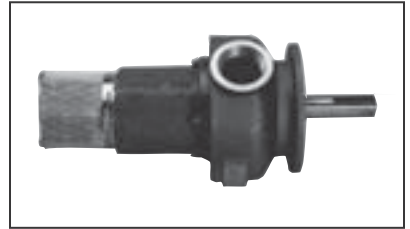
PUMPS, SUBMERSIBLE AND DRY, REPAIR KITS

IMO PUMPS - SUBMERSIBLE/DRY

Pumps are in stock and available for immediate shipment.

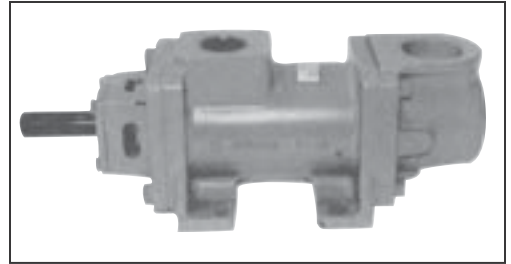
Submersible

4PICSX-276P	B4PIC-217
A4PIC-187Y	B4PIC-217P
A4PIC-187P	A4PIC-217Y
A4PIC-187M	A4PIC-236G
A4PIC-187	B4PIC-236
B4PIC-217M	B4PIC-236AS



Dry Mount

A3DB-156	A3DB-275
G3DB-187	AG3DB-312
G3DB-218	G3DB-350
G3DB-250	



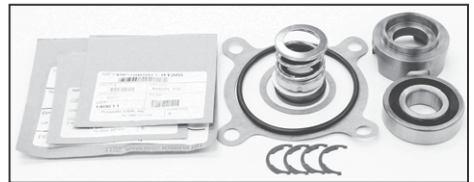
ALLWEILER SUBMERSIBLE PUMPS

80-36	210-43
80-42	210-46
80-46	280-43
140-39	280-46
140-43	280-51
140-46	440-40
210-40	440-46



IMO Minor Repair Kits in stock

Model G3DB-187K
Model G3DB-218K
Model G3DB-250K
Model G3DB-275K
Model G3DB-312K



Minor repair kits consist of Bearing, Seal, Gasket, Retaining Ring(s) and O-Rings.

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

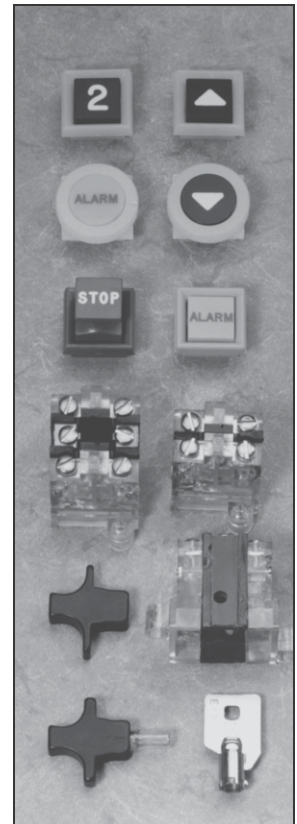
PUSHBUTTONS

PUSHBUTTONS

Replacement for Atlas, D.A. Matot, Sedgwick, and Automatic Elevator.

- 1" Dia. round or square.
 - Round pushbuttons and square floor markings have white halos.
- (Specify manufacturer, and contact arrangement)

Model	Description	Illum.
APBIWR-1	Round "1"	Yes
APBIWR-2	Round "2"	Yes
APBIWR-3	Round "3"	Yes
APBIWR-UP	Round ARROW	Yes
APBIWS-1	Square "1"	Yes
APBIWS-2	Square "2"	Yes
APBIWS-3	Square "3"	Yes
APBIWS-UP	Square ARROW	Yes
APBIBR-1	Round "1"	Yes
APBIBR-2	Round "2"	Yes
APBIBR-3	Round "3"	Yes
APBIBR-UP	Round ARROW	Yes
APBIBS-1	Square "1"	Yes
APBIBS-2	Square "2"	Yes
APBIBS-3	Square "3"	Yes
APBIBS-UP	Square ARROW	Yes
APBNBS-1	Square "1"	No
APBNBS-2	Square "2"	No
APBNBS-3	Square "3"	No
APBNBS-UP	Square ARROW	No
APBNBR-1	Round "1"	No
APBNBR-2	Round "2"	No
APBNBR-3	Round "3"	No
APBNBR-UP	Round ARROW	No
APBNWS-1	Square "1"	No
APBNWS-2	Square "2"	No
APBNWS-3	Square "3"	No
APBNWS-UP	Square ARROW	No
APBNWR-1	Round "1"	No
APBNWR-2	Round "2"	No
APBNWR-3	Round "3"	No
APBNWR-UP	Round ARROW	No
APBNWRR-ES	Round STOP	No
APBNWYR-AL	Round ALARM	No
APBNRS-ES	Square STOP	No
APBNYS-AL	Square ALARM	No
APBN1NO1NC	Contact Assembly Only, Non-Illum. 1NO / 1NC Contacts	
APBN2NO	Contact Assembly Only, Non-Illum. 2NO Contacts	
APBI1NO1NC	Contact Assembly Only, Illum. 1NO / 1NC Contacts	
APBI2NO	Contact Assembly Only, Illum. 2NO Contacts	
APBHOLDER	Pushbutton Lamp Holder	
APBE1459	Fire Service Barrel Key, E1459	
APBE1614	Access Barrel Key, E1614	
APBE1285	On/Off Barrel Key, E1285	
LS-INIT	Candelabra Screw Lamp Socket	



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

PUSHBUTTONS

HALL STATIONS & LANTERNS

In stock in Stainless Steel, #4 Finish.

We can also provide these fixtures in stainless steel, #8 finish, or Muntz Bronze, #4 or #8 finish. Custom made car operating panels are also available to complete your fixture package.

Model	Description
EPHSS120*	Terminal Hall station, 22" long
EPIHSS120*	Intermediate Hall station, 22" long
EPIHSS120	Hall lantern, 115V
PI-PIB	2 Stop position indicator with arrows and chime
PI3-PIB	3 Stop position indicator with arrows and chime
CDL-HL	Car direction lantern with chime
FSS-HSC	Fire service station
EP-HR1AS	Hall access station
IHS-HSA	Intermediate Hall station, with arrows
IHS-HSB	Intermediate Hall station, with arrows and braille
THS-HSA	Terminal Hall station, with arrow
THS-HSB	Terminal Hall station, with arrow and braille
THSA-HSA	Terminal Hall station with arrow and access key
THSA-HSB	Terminal Hall station with arrow and access key, and braille

* Surface mount, all other fixtures flush mount



EPHSS120



EPIHSS120



IHS-HSB

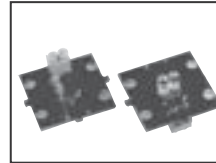


FSS-HSC

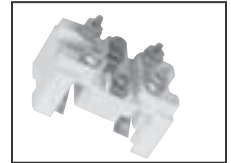
PUSHBUTTONS & KEY SWITCHES

“EPCO” REPLACEMENT FIXTURE PARTS NOW IN STOCK

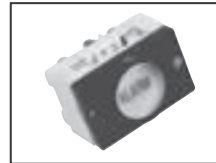
Model	Description
EPLED24	24V LED replacement
EPLED120	120V LED replacement
EP-NLUBASE	Pushbutton base
EP-CIRPB*	“Circleline” pushbutton complete
EP-CIRHALO	“Circleline” replacement Halo
EP-SPRS24	“Singapore” pushbutton, 24V
EP-SPRS120	“Singapore” pushbutton, 120V
EP-CKM3	Phase I key switch
EP-CKM4	Phase II key switch
EP-ALI	Fire hat symbol
EP-CYL1	Cylinder, “EPCO” lock #1
EP-CYL2	Cylinder, “EPCO” lock #2
EP-MFD1	Cylinder, MFD1
EP-KEY1	“EPCO” #1 key
EP-KEY2	“EPCO” #2 key
EP-KEYMFD1	“EPCO” MFD #1 key
EP-KEY**	Key switch, complete
EP-CKS22A	Key switch, “ACCESS” “EPCO” #2
EP-FEOK1I	Fire Service Key Switch (Phase I)
EP-FEOK1II	Fire Service Key Switch (Phase II)



EPLED



EP-NLUBASE



EP-CIRPB



EP-SPRS



EP-CKM



EP-FEOK1I

* Specify markings, i.e. “Arrow”, “L”, “Door Open”, “Door Close”, “Alarm”, “Call Cancel”, etc.

** Specify key switch designation, i.e. “Light”, “Fan”, “Stop/Run”, “Inspection”, “Independent Service”, etc.



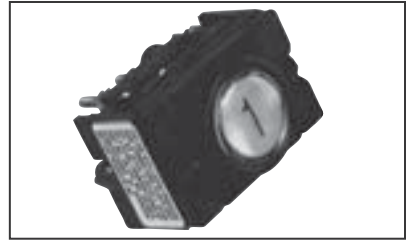
EP-FEOK1II

PUSHBUTTONS & KEY SWITCHES

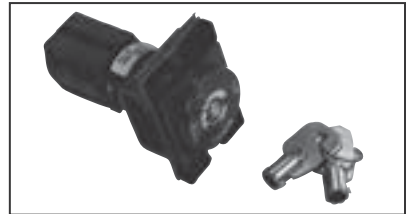
“INNOVATION” REPLACEMENT FIXTURE PARTS NOW IN STOCK

Model	Description
IN-PB1	Conventional pushbutton - complete
IN-PB7	Decorator pushbutton - complete
IN-PB13	Vandal resistant pushbutton - complete
IN-PBBASE	Pushbutton base, 2NO / 2NC
IN-EX512	Key, for “Emergency Stop”
IN-EX513	Key, for momentary 2nd and 3rd positions
IN-EX514	Key, for “On/Off” and “Access”
IN-EX515	Key, for “Fire Service”
IN-EX516	Key, for Momentary and on/off
IN-PB101	Jewel, Red fire service, projecting
IN-KS101*	Key switch, on/off
IN-KS102*	Key switch, light on/off
IN-KS103*	Key switch, fan on/off
IN-KS104*	Key switch, light/fan, 3 position
IN-KS105*	Key switch, Hoistway Access
IN-KS106*	Key switch, Emergency Stop
IN-KS107*	Key switch, Phase I (ANSI)
IN-KS108*	Key switch, Phase II (ANSI)
IN-KS109*	Key switch, Fire service, 2 position (Chicago & California)
IN-FEOK1I	Fire Service (Phase I)
IN-FEOK1II	Fire Service (Phase II)

* Add “V” for vertical mount and “H” for horizontal mount, i.e. IN-KS103V



IN-PB1



IN-KS109V



IN-FEOK1I



IN-FEOK1II

RAIL BRACKETS

RAIL BRACKETS

Adjustable 7 gauge carbon steel bracket with clips, fits 8, 12, 15 lb. rails. Fasteners to building are not included.

Model ARB825

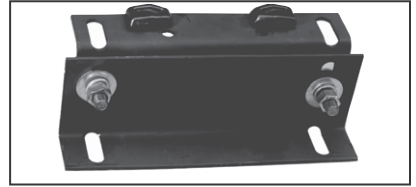
- Bracket for 12, 15 lb. rails
- 2-7/16" to 6-7/16" adjustment

Model ARB825-8

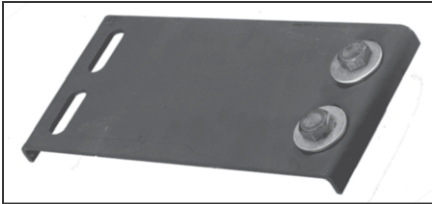
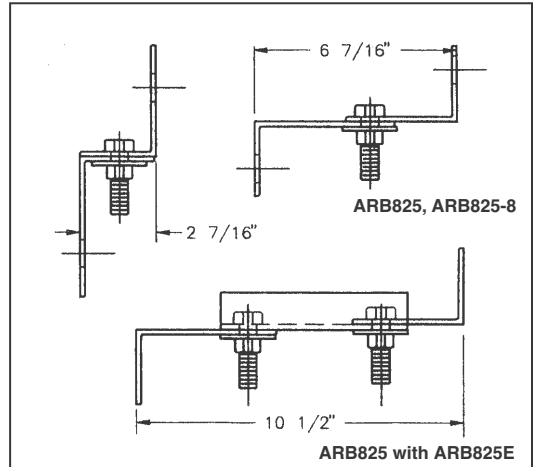
- Bracket for 8 lb. rail
- 2-7/16" to 6-7/16" adjustment

Model ARB825E

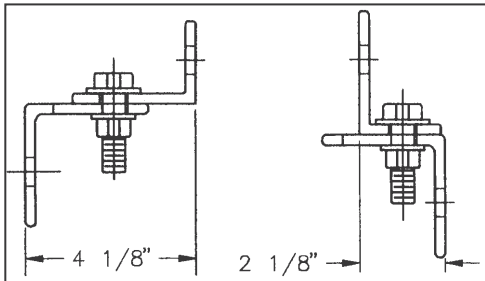
- Rail bracket extension plate with extra bolts
- Extends ARB825, ARB825-8 up to 10-1/2"



ARB825



ARB825E



ARB2

Model ARB2

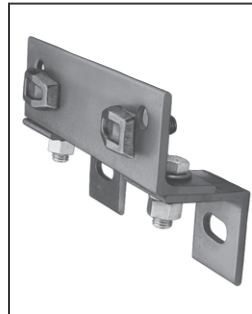
- Bracket for 15 lb. rail
- 2-1/8" to 4-1/8" adjustment

Model C-160

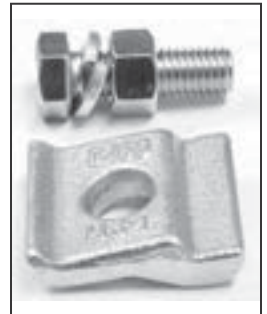
- Clip for 12, 15 lb. rails, with 5/8" bolt & nut

Model C-161

- Clip for 8 lb. rail, with 1/2" bolt & nut



ARB2



C-160, C-161

GUIDE RAIL see page 77

RAIL SHIMS see page 205

RAIL BUGS, GAUGES, HOISTING CLEVISES

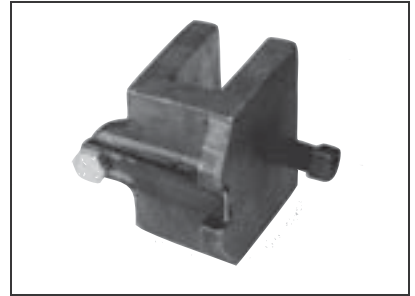
RAIL BUGS

The Rail Bug helps install guide rails easier and more accurately. It can be moved from one location to another without disturbing the weights because of the unique way the plumb line mounts to the bug.

- Fits 8, 12, 15 lb. rails
- Quickly mounts to rail with a set screw

Model RB815A

- Aluminum

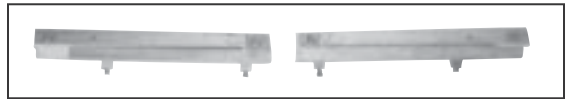
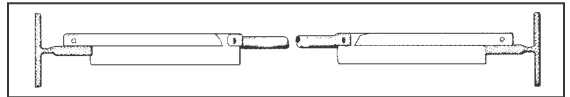


RAIL GAUGE

Model RG12

The Quality Elevator Rail Gauge assures smooth elevator operation by properly aligning rails. Use them to set guide rails facing square and for correct D.B.G.

- Quickly attaches to 1/2" or 3/4" conduit with the set screws provided in the gauge fastening bracket
- Accurately fabricated in aluminum to provide a precision tool



RAIL HOISTING CLEVISES

A one piece lever action automatically latches rails in place with no nuts or bolts to drop.

Model RHC716

- 7/16" diameter pin

Model RHC508

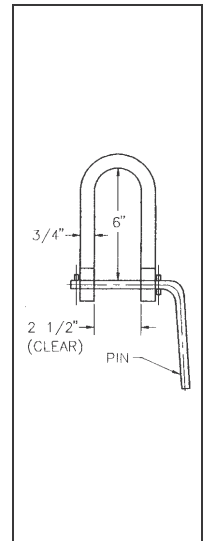
- 5/8" diameter pin

Model RHC716S

- 7/16" diameter pin



Model RHC716S



Model RHC716

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

RAIL CLAMPS

RAIL CLAMPS

Repack hydraulic elevators or recable traction elevators with our Quality Rail Clamps.* By using two complete sets to hang counterweights and car, you can recable cars at midpoint of hoistways. For use on 8, 12, and 15 lb. rails.

Model RCB

- Bottom clamp

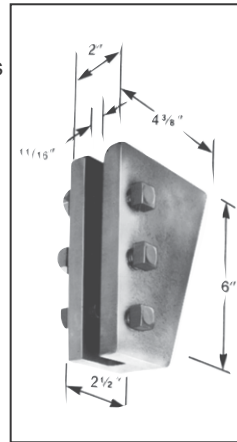
Model RCT

- Top clamp

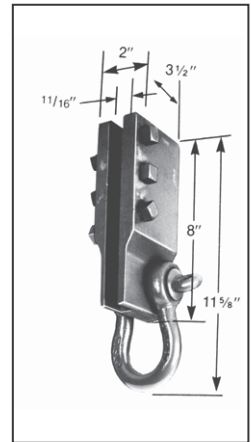
Model RCS

- Set of 2 top and bottom clamps

Rail Clamp Designation	Anchor Bolt Torque, ft.-lb.	Maximum Load, lb.**
RCB	50	20,200
	70	39,000
RCT	50	22,600
	70	36,800



RCB



RCT

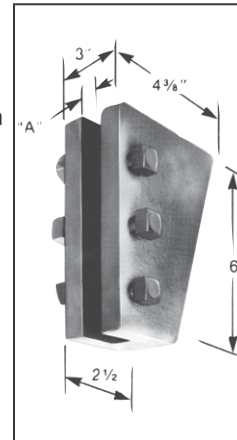
***NOTE:** Load distribution should be equal on all 4 clamps.
*Independent Testing Laboratory Rail Clamp Test Results.
 Complete copy available upon request.*

JUMBO RAIL CLAMPS

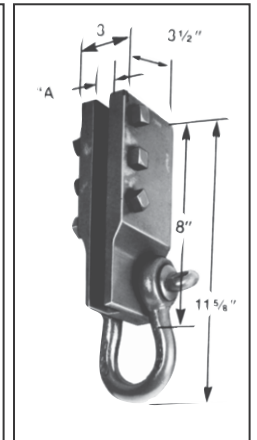
For use with larger rails.

Specify rail weight when ordering.

Model	Rail Weight	"A"	Description
18.5RCB-J	18.5 lb.	25/32"	Bottom
18.5RCT-J	18.5 lb.	25/32"	Top
18.5RCS-J	18.5 lb.	25/32"	Set
22.5RCB-J	22.5 lb.	1-5/32"	Bottom
22.5RCT-J	22.5 lb.	1-5/32"	Top
22.5RCS-J	22.5 lb.	1-5/32"	Set
30RCB-J	30.0 lb.	1-9/32"	Bottom
30RCT-J	30.0 lb.	1-9/32"	Top
30RCS-J	30.0 lb.	1-9/32"	Set



RCB-J



RCT-J

Set=2 Top and 2 Bottom Clamps

RAIL LEACHES, OILERS, SHIMS

RAIL LEACHES

This "de-oiler" is mounted just below the guide shoe's most downward point of travel. Eliminates oil pools and fire hazards. Excess oil for reuse is stored in a can (by others) mounted directly below.

Model RL8

- 8 lb. rail leach

Model RL15

- 15 lb. rail leach

Model RL30

- 30 lb. rail leach



RAIL OILERS

With wick and copper tubing, a controlled flow of oil moves slowly and easily down the rail, oiling and cleaning continuously.

Model RM815

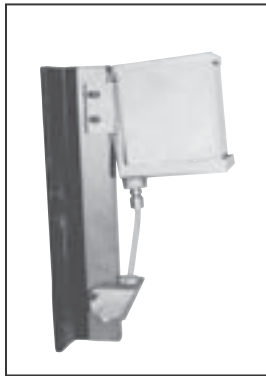
- For 8, 12, and 15 lb. guide rails

Model RM2230

- For 22.5, and 30 lb. guide rails

Model GSM815

- Mounts to Guide shoes
- Set of 2



GSM815

RAIL SHIMS

Single slot easily, added after rail is in place.

- 3" x 3" width, 13/16" x 2" slot

Model RS18

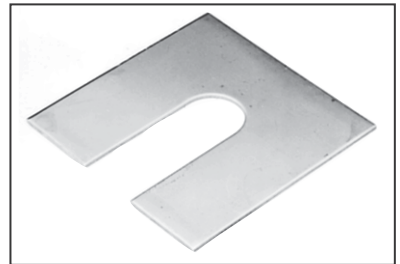
- 1/8" thick, 25 per pack

Model RS37

- 1/32" thick, 100 piece bundle

Model RS538

- 1/16" thick, 50 piece bundle

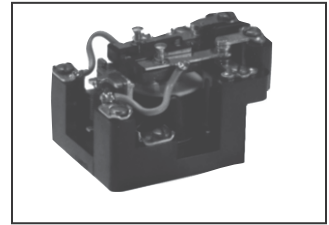


RELAYS

RELAYS

Dover relay to replace Potter & Brumfield power relay

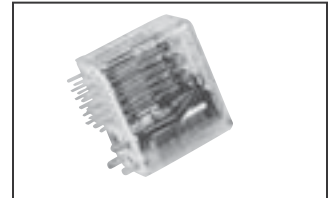
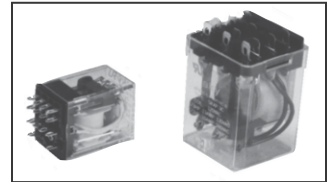
Model	Type	Coil Volts/Ohms	Contacts	Amps
R120DD	SKD2C	120VAC/250	DPDT	25A
R240DD	SKD2C	240VAC/1100	DPDT	30A
R120DS	SKD2A	120VAC/290	DPST-NO	30A
R240DS	SKD2A	240VAC/1200	DPST-NO	30A



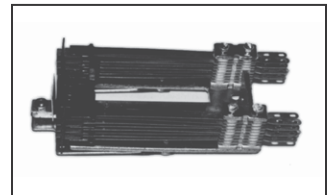
ICE CUBE RELAYS

To replace Virginia, Atlas, Wiggers, Matot, Motion Control, Vertitron

Model	Type	Coil Volts/Ohms	Contacts	Amps
RV110AD6	SKMP-4C	110VAC/3900	4PDT	6A
RV110AD6N	CAMPL4C	110VAC/3900	4PDT	6A
RV110DD5	SKMP-4C	110VDC/1100	4PDT	5A
RV110DD5N	SKMPL-4C	110VDC/1100	4PDT	5A
(With neon indicator)				
RV110AD13	SKAP-3C	110VAC/2250	3PDT	13A
RV110DD13	SKAP-3C	110VDC/10000	3PDT	13A
RV24D6N	SKMPL-4C	24VDC	4PDT	5A
RV24DD13N	SKAPL-3C	24VDC	3PDT	13A
RV48DD5N		48VDC	4PDT	5A
RV48D3PDT	KUP-14D15-48	48VDC	3PDT	3A
RV48D6PDT	R10-E1-Z6-V1.5K	48VDC	6PDT	2A



Model RV48D6PDT



Model WES2

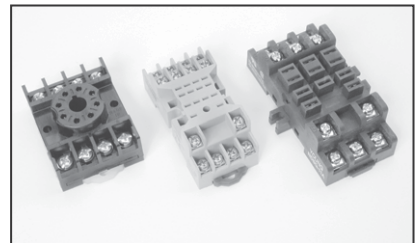
WESTINGHOUSE ES RELAY

In stock with 6NC and 2NO contacts. All other contact arrangements available. Solder Terminals. With or without coils.

Model CES125	• 125VDC coil only
Model CES625	• 62.5VDC coil only
Model WES2	• Relay only
Model WES62-125	• Relay with 125VDC coil
Model WES62-625	• Relay with 62.5VDC coil

Relay Sockets In Stock

Model DO320	• Octagon Base
Model S01RT003	• 4PDT Miniature Base
Model S01RT004	• 3PDT Panel Mount



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

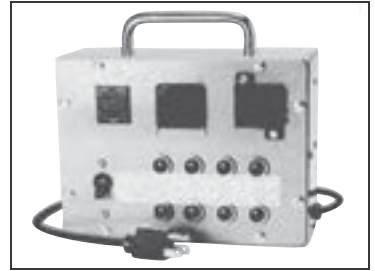
RELAY TESTERS, TESTERS, VALVE TEST KIT

RELAY TESTER

Model URT

Universal relay tester ends guess work. Rugged, simple to operate, and foolproof. It instantly identifies open or shorted coils and pinpoints defective or intermittent contacts. Three socket configurations allow testing of the most commonly used three and four pole 110-125VAC and VDC relays.

A must have time saver for service personnel. This maintenance free unit operates from a 110-125VAC plug-in line cord and is short circuit protected for safety.



URT

Model MP1 Mag-probe, standard sensitivity

Model MPS1 Mag-probe, high sensitivity

- Non-contact testing instrument
- Works on AC or DC relays and solenoids
- Response time: 10 milliseconds
- Detects residual magnetism and transit pulses

AC SENSOR

Model ACS100

- Checks for AC voltage safely, quickly and accurately
- UL listed. All surfaces are non-conductive

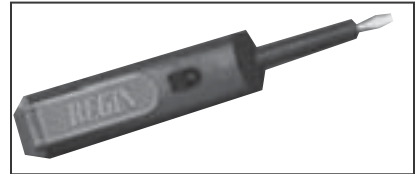


MPS1

CONTINUITY SENSOR

Model TP100

- Tests for continuity, polarity and voltage
- Screwdriver tip



TP100

VALVE TEST KIT

All the "essentials" for valve set-up and testing in one convenient, foam cushioned, carrying plastic case.

Model VTK

- Pressure gauge 1000 psi standard, or 600 psi optional
- Hose with fittings, 36"
- Fittings for 1/8" and 1/4" connections
- Allen wrenches 3/16" and 1/8" for valve adjustments
- Padded case, size 18" x 15-1/2" x 5"



VTK

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

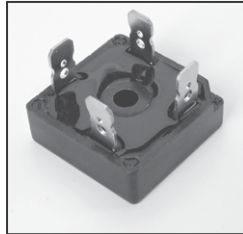
RETIRING CAMS

RETIRING CAM

Model RC110S

- 110VDC solenoid, 1.2A
- Rated horizontal forces 3 lb
- Rated horizontal movement 1-1/4"

Mounting angles and conduit connection box available.



MODEL D00360



Model RC110S

RECTIFIER

Model D00360

- Single phase bridge
- 25A, 800 PIV

RETIRING CAM

Our 110VAC single phase 60 cc motor features a 48" chain including nuts and bolts for easy mounting in your choice of locations, to any standard piece of unistrut. Designed with a protection benefit and constant torque-fractional horsepower. Torque motor 1/32 HP - 1A draw at five minutes duty, in the stalled position.

Model RC110

- Please specify left or right hand when you are in the cab looking out.

RETIRING CAM REPLACEMENT PARTS

Model 15RC001

- Retiring cam pulley and chain

Model 21RC007

- Retiring cam motor

Model 21RC008

- Retiring cam capacitor



Model RC110

ROLLERS, DOOR HANGER

ROLLERS, DOOR HANGER

Replacement polyurethane rollers in stock, high quality materials assures long life.

DOVER

	O.D.	Bore	Width	Face	Material Tire	Hub
DR-9861245	3-1/4"	.6693"	3/4"	Profiled	90-A Polyurethane	Die Cast Aluminum
DR-9864295	3-5/16"	.6693"	3/4"	Profiled	90-A Polyurethane	Aluminum
DR-9838302	2-7/8"	.6693"	3/4"	Profiled	Polyurethane	Aluminum
DR-23322G01	3-5/16"	.6693"	3/4"	Flat Track	90-A Polyurethane	Die Cast Aluminum

OTIS

	O.D.	Bore	Width	Face	Material Hub	90-A Polyurethane Tires
OR-456CC1	2-3/4"	.7874"	7/8"	Profiled	Steel	Steel w/ 2 washers for 3/4" finish width
OR-456W1	3-1/4"	.9843"	11/16"	Profiled	Steel	
OR-456CX4	3-3/8"	.7874"	13/16"	Profiled	Die Cast Aluminum	Die Cast Aluminum
OR-456DH1	3-3/8"	.6693"	13/16"	Profiled	Steel w/ ECCENTRIC Axle	Steel w/ ECCENTRIC Axle
OR-AH456EA1	3-1/4"	.7874"	11/16"	Profiled	Steel w/2 inserts for 1/2" Bore	Steel w/2 inserts for 1/2" Bore
OR-A456W1	3-1/4"	.7874"	11/16"	Profiled	Steel w/2 inserts for 1/2" Bore	Steel w/2 inserts for 1/2" Bore
OR-456CA1A	2.2"	.370"	7/8"	3/8"	Steel w/Bushing Sleeve	Steel w/Bushing Sleeve

WESTINGHOUSE

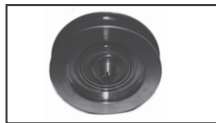
	O.D.	Bore	Width	Face	Material Tire	Hub
W576BC535G9	2-3/4"	.6693"	5/8"	Profiled	90-A Polyurethane	Steel
W323C235G02	4-1/4"	.7874"	3/4"	Profiled	90-A Polyurethane	Aluminum
W325C798G09	2-3/4"	.6693"	7/16"	Profiled	Aluminum	Aluminum
W576B535G04	2-3/4"	.5906"	5/8"	Profiled"	Nylon	Nylon
WR-R885801	3-3/8"	.787"	3/4"	Flat Track	90-A Polyurethane	Aluminum
WR-R863G04	4-3/8"	1.181"	3/4"	Flat Track	90-A Polyurethane	Aluminum

GAL- MISC ROLLERS - 90A POLYURETHANE & NEOPRENE TIRES

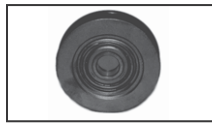
	O.D.	Bore	Width	Face	Hub Material
Hanger Roller					
GR-NH	3-3/8"	.6693"	3/4"	Profiled	Die Cast Aluminum
Pick-up Roller w/ Shaft					
GR-1NT-1-10	1-1/2"	3/8"	7/8"	13/16"	5/16" Bore Brass Sheave
Pickup Roller w/o Shaft					
GR-1NT110R	1-1/2"	3/8"	7/8"	13/16"	5/16" Bore Brass Sheave
Hanger Roller w/o Shaft					
GR-HR	2-3/8"	.6693"	5/8"	Profiled	Nylon
Bushing					
GR-INS-B	.669"	1/2"	7/16"	N/A	N/A



Model DR-23322G01



Model OR-456DH1



Model W576B535698



Model GR-NH

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

ROLLERS, GUIDE WHEEL

ROLLERS, GUIDE WHEEL

Polyurethane and Rubber Rollers which not only have excellent bearing life, but also have good adhesion to the hub to assure a quiet ride.

DOVER

90-A Polyurethane Tires

	O.D.	Bore	Width	Face	Hub Material
DR-9831873	4"	.6693"	3/4"	5/8"	Aluminum
DR-9832274	4"	.6693"	1-1/4"	1/2"	Aluminum
DR-9831824	8"	.7874"	1-1/4"	9/16"	Die Cast Aluminum
CWT ROLLER GUIDE					
DR-9872309	3"	.7874"	13/16"	13/16"	Die Cast Aluminum

ELSCO

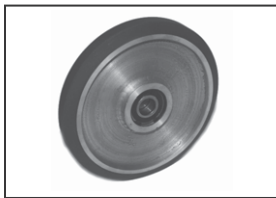
70-A Polyurethane Tires with Aluminum Hubs

	O.D.	Bore	Width	Face
ER-18405	3-1/4"	.4724"	15/16"	1/2"
ER-02209	3-1/4"	.5906"	15/16"	7/16"
ER-18347	6"	.7874"	1-1/4"	1/2"
ER-18359	6"	.7874"	1-1/4"	1-1/4"

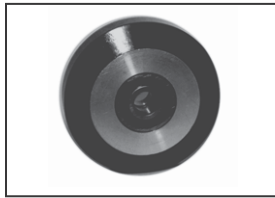
HAUGHTON

70-A Polyurethane Tires with Aluminum Hubs

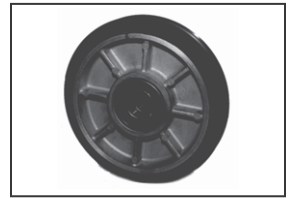
	O.D.	Bore	Width	Face
H34015071	3-1/2"	.6693"	1-5/16"	3/4"
H351159002	8"	.630"	1-3/8"	1/2"
H34019674	3-1/2"	.7874"	1-5/16"	1"
H351159004	5"	.630"	1-1/8"	7/16"
H3340220	8"	.787"	1-1/4"	1/2"
H34015867	3-1/2"	.511"	1-1/16"	1/2"



Model DR-9831824



Model ER-18405



Model ER-18359

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

MONTGOMERY ROLLERS

Rollers, Door Hangers

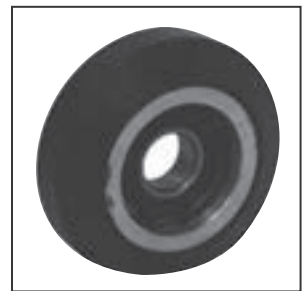
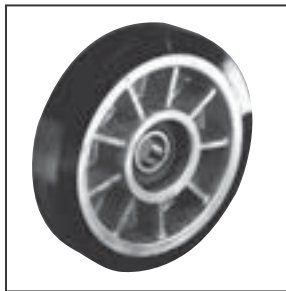
	O.D.	BORE	WIDTH	FACE	TIRE MATERIAL	HUB
MR-MAP341	2-7/8" w/stud	(7/16-20)	3/4"	Profiled	90-A Polyurethane	Aluminum
MR-MAP344	3-5/8" w/stud	(7/16-20)	3/4"	Profiled	90-A Polyurethane	Aluminum

Rollers, Escalator

	O.D.	BORE	WIDTH	FACE	TIRE MATERIAL	HUB
MR-P12963	3-15/16"	0.7874"	7/8"	7/8"	90-A Polyurethane	Aluminum
MR-P5985	3-15/16"	0.7874"	1-5/32"	1"	90-A Polyurethane	Aluminum
MR-P23230	3"	0.78974"	7/8"	7/8"	90-A Polyurethane	Aluminum

Rollers, Guide Wheels

	O.D.	BORE	WIDTH	FACE	TIRE MATERIAL	HUB
MR-P2964	3"	0.7874"	13/16"	1/2"	90-A Polyurethane	Aluminum
MR-P2654	4-3/8"	0.7874"	1"	1/2"	90-A Polyurethane	Aluminum
MR-P2789	6-1/2"	0.9843"	1-1/4"	5/8"	80-A Polyurethane	Aluminum
MR-P3174	6-1/2"	0.9843"	1-1/4"	Convex	80-A Polyurethane	Aluminum



ROLLERS

We Now Manufacture Rollers: Guide Rollers, Door Hanger Rollers and Escalator Rollers, In Stock for Immediate Shipment!!! All Rollers Meet or Exceed O.E.M. Specifications with Aluminum or Steel Hubs. Soft Poly or Hard Poly to Your Requirements. Custom Work Welcome. Additional Rollers appear on pages 56, and 209 thru 213.

Stock Guide Wheel Rollers 70-A Polyurethane, Door Hanger, Escalator 90-A Polyurethane.



PART NO.	O.D.	BORE	WIDTH	FACE	TYPE
ARMOR					
AR-1194201	3-1/2"	.6693"	1-1/16"	5/8"	Guide Wheel
AR-1194101	3-1/2"	.6693"	1-1/16"	5/8"	Guide Wheel w/Eccentric Shaft
AR-7446370	4"	.6693"	1-1/16"	5/8"	Guide Wheel
AR-7446371	4"	.6693"	1-1/16"	5/8"	Guide Wheel w/Eccentric Shaft
AR-1194001	7"	.6693"	1-1/8"	5/8"	Guide Wheel
AR-1193901	7"	.6693"	1-1/8"	5/8"	Guide Wheel w/Eccentric Shaft
AR-1192901	3-1/4"	.6693"	3/4"	9/32"	Door Hanger Roller
ELPRO					
EP-33SRGF	3-1/4"	5/8"	1-1/4"	1/2"	Roller Guide - Face
EP-33SRGS	3-1/4"	5/8"	1-1/4"	7/8"	Roller Guide - Side
EP-803RGF	3-1/8"	5/8"	1-1/4"	1/2"	Roller Guide - Face
EP-803RGS	3-1/8"	5/8"	1-1/4"	7/8"	Roller Guide - Side
EP-365RG	5-3/4"	5/8"	1-1/2"	1/2"	Roller Guide
SERGE					
SR-61401122	3-1/4"	.5906"	15/16"	5/8"	Guide Roller
SR-61401000	3-1/2"	.6693"	15/16"	1/2"	Guide Roller
SR-61401128	6"	.7874"	1-1/4"	1-1/4"	Guide Roller

ROLLERS, GUIDE WHEEL

OTIS

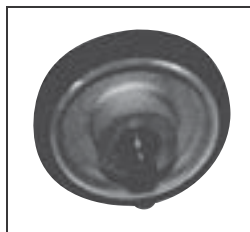
	O.D.	Bore	Width	Face
OR456CN4-R	3-3/4"	N/A	1"	1/4"
OR456CN4-U	3-3/4"	N/A	1"	1/4"
OR456CM4-R	4-7/8"	N/A	1"	1/4"
OR456CM4-U	4-7/8"	N/A	1"	1/4"
OR456CL4-R	7-7/8"	N/A	1-1/2"	1/4"
OR456CL4-U	7-7/8"	N/A	1-1/2"	1/4"
OR456CV4-R	10-1/8"	N/A	1-1/2"	1/4"
OR456CV4-U	10-1/8"	N/A	1-1/2"	1/4"
OR456AK2-U	3-3/4"	N/A	1"	3/8"
OR456AJ2-R	7-7/8"	N/A	1-1/2"	3/8"
OR456AJ2-U	7-7/8"	N/A	1-1/2"	3/8"
OR456CA2B-U	2.2"	.370"	7/8"	Convex
OR456CA1A-U	2.2"	.370"	7/8"	3/8"

WESTINGHOUSE

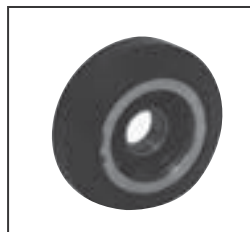
	O.D.	Bore	Width	Face
W195C975K1	10-1/4"	.6693"	1-1/4"	3/4"
W144A277G1	3"	.6693"	1"	1/2"
W323C160G1	6"	.6693"	1-1/4"	3/4"
WM5594G2	4-1/2"	.6693"	1.25"	3/4"
WM5594G1	3-1/2"	.6693"	1.25"	3/4"



Model OR-456CL4



Model OR-456CM



Model W144A277G1

All wheels with aluminum hubs, 70-A Polyurethane. 95-A Polyurethane also available!!

ROPE TENSION GAUGE

ROPE TENSION GAUGE

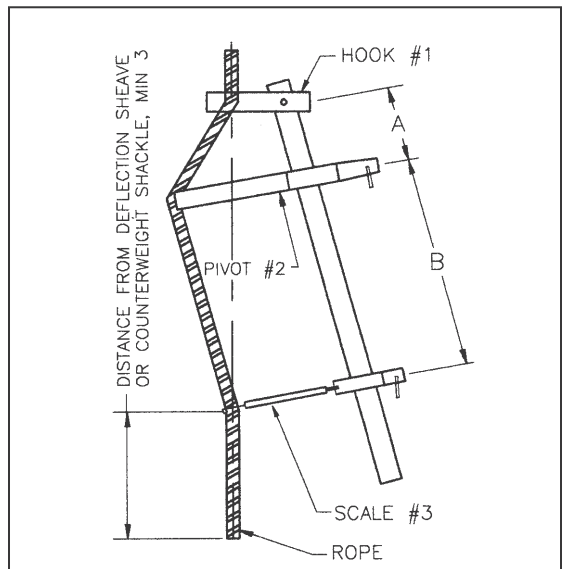
Easy to use tool to test tension of your ropes so that you save wear and tear on your sheaves.

Model RTG

• Application (Refer to picture)

1. After hoist ropes have been installed, take fully assembled RTG and loop hook #1 around one of the hoist ropes. Do this approximately 3 feet or more above counterweight shackles.
2. Place pivot #2 against rope.
3. Adjust scale #3 with stretch and attach hook to hoist rope.
4. Take readings. Preferred range for proper tensioning is between 26 and 30 lb. Tighten ropes to achieve this reading.
5. Repeat procedures 1- 4 two more times, once below deflection sheave and once above car top fittings.

NOTE: A & B dimensions will vary according to cable diameter and load on cables. At no time should the variance between ropes exceed ± 4 lb.



GOVERNORS, TENSION SHEAVE ASSEMBLY, GOVERNOR ROPE CLAMP

GOVERNORS

Model CEMCM2685

Commercial governor for "A" or "B" safeties.

- 3/8" traction steel cable
- Can be used on car speeds of up to 350 FPM
- Specify trip speed when ordering (up to 452 FPM)

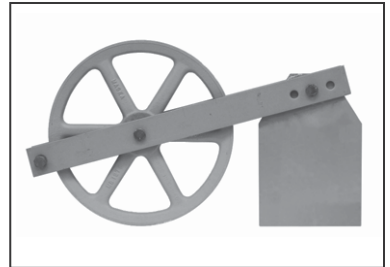


TENSION SHEAVE ASSEMBLY

Tension weight, sheave and bracket assembly.

Model CEMTSH

- 12-1/2" diameter sheave
- Weight 30 lb.



CEMTSH

GOVERNOR ROPE CLAMP

Model GRC-2006

Designed to be used during the 5-year test of the Governor Pull-Out and the Pull-Through. (See A17.2-2004 part 2, Item 2.13.2 (b) (5)). The two plates attach back to back using two vice grips to the Governor Rope.

The plates are made of 6061 T-6 Aluminum, Clear Anodized.
Shackle is included.

Vice Grips can also be provided.



GRC-2006

SAFETY MIRRORS

SAFETY MIRRORS

- Meet state law requirements
- High polished stainless metal mirror finish
- Unbreakable design
- Easy to maintain
- Tamper proof installation
- Mounting hardware included

Model MEL99

- 10" triangular
- Secured from outside of cab
- Bracket with set screw included

Model MEL800

- 8" round
- Quick and easy surface mounting
- Metal rod included

Model MEL180

- 18" round with "Z" mounting bracket



SCAVENGER PUMPS

CYLINDER HEAD SCAVENGER PUMP

Constructed of ribbed, reinforced polyethylene with 16 gauge welded steel cover and submersible pump. 2 gallon capacity. Pumps 10-12 ft. (Plastic tubing not included)

Tank: 15"W x 10"D x 6"H

Model SC/B

Reinforced external mounting brackets to mount off cylinder head bolts.

Model SC/B-2

- Without mounting brackets

Model SC/B-FR

Flood Control Switch.

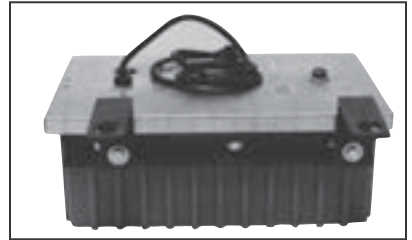
- Shuts off pump if pit begins to fill with water

Model SC/B-2FR

- With external flood switch
- Without mounting brackets

Model SC/BFR

- With external flood switch
- With mounting brackets



SC/B



SC/B-FR

HEAVY-DUTY SCAVENGER PUMP

Ribbed, reinforced polyethylene container will not corrode. The clear 1/4" lexan top allows for full visibility of the inner workings of the unit. Tank: 15"W x 10"D x 8"H

Model OSC/B

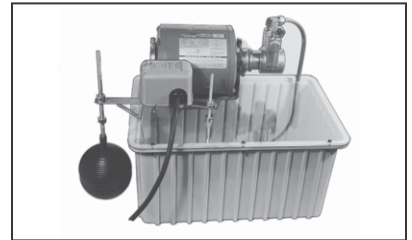
- UL approved motor and cord
- 100 ft. head
- 100 ft. plastic tubing with fittings
- Includes flood control reset
- 100 mesh filter (149 micron)
- 1/4 HP motor, 45 gallons per hour pump

Model OSC/B-1/3

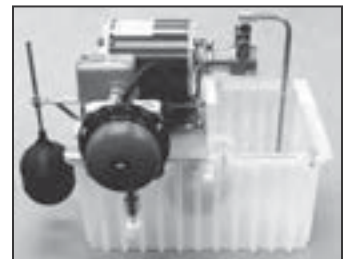
- Same as OSC/B, but with 1/3 HP motor and 1.7 GPM pump

Model OSC/B-PA

- Same as OSC/B, with pit flood warning alarm



OSC/B



OSC/B-PA

REPLACEMENT PARTS

P02SP008	1/2" plastic tubing in 100 ft. lengths
21SP004	Motor, 1/4 HP phase, 115VAC
P02SP010R	Copper tubing, 50' roll
P02SP227	Copper tubing connector

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

SCREWDRIVERS

SPANNER DRIVERS

Handle with bits.

Model SD6

- #6 Spanner Driver

Model SD8

- #8 Spanner Driver

Model SD10

- #10 Spanner Driver

REPLACEMENT BITS

Model SHB6

- #6 spanner replacement bit

Model SHB8

- #8 spanner replacement bit

Model SHB10

- #10 spanner replacement bit

Model SHD

- Spanner driver with storage handle (no bits)

Model SD-SET3

- Spanner Driver Set with #6, #8, and #10 interchangeable bits

Model TD10

- Torx Driver with pin for 6-32 screw

Model TD15

- Torx Driver with pin for 8-32 screw

Model TD25

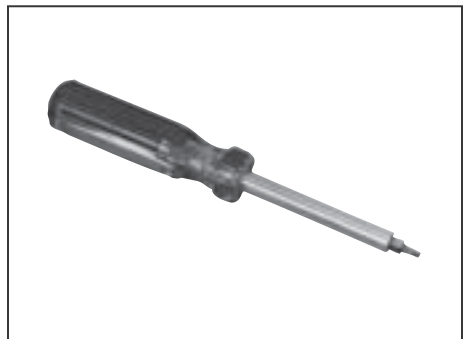
- Torx Driver with pin for 10-32 screw



Model SD8



Model SD-SET3



Model TD25

SCREWDRIVERS, SECURITY SYSTEM

SCREWDRIVER KIT

Model SBK-100

29 Piece Kit containing:

- Driver with storage handle and 1/4" bit
- 4 Phillips bits: 0, 1, 2, 3
- 5 slotted bits: 0-1, 3-4, 5-6, 8-10, 12
- 5 Allen bits: 5/64", 3/32", 7/64", 1/8", 9/64"
- 4 square recess bits: 0, 1, 2, 3
- 6 TORX bits: T10, T15, T20, T25, T30, T40
- 2 Pozidriv bits: 1, 2
- 1/4" socket adapter
- 1/4" bit holder



Model SBK-100

FOUR-IN-ONE SCREWDRIVER

Model FS

Flip Lock

4-in-1 Screwdriver

(Phillips and slotted)

A durable, heavyweight screwdriver made to fit most slotted and Phillips screws. Comes complete with two double-ended bits 3/16" slotted and #1 Phillips, plus 5/16" slotted and #2 Phillips

- Alloy steel bits lock into barrel



Model FS

SECURITY SYSTEM (Keyless Entry)

Model PT-800

- Quick and easy installation and operation
- Tamper and vandal resistant keypad
- 4 digit floor codes and master code for 10,000 possible combinations
- All functions are accessible via the keypad
- Fire service override provided, when required
- Requires 110VAC power feed
- Can be used with micro processor or relay logic control.
- At the time of ordering specify fire service (yes or no), fire service voltage, and number of floors.



Model PT-800

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

SEDGWICK REPLACEMENT PARTS

SEDGWICK REPLACEMENT PARTS

We now stock a number of items for Sedgwick dumbwaiters and residential elevators. If the item you need is not shown, please call and we will try to locate it.

Sedgwick schematic drawings also available for purchase!
(Please provide Sedgwick Job Number)

KEBCO BRAKES

K-2138

K-2139

K-2140

DESCRIPTION

KEBCO (03.31), 95VDC, 4-1/2"OD, 5.9 ft.-lb.

KEBCO (04.31), 95VDC, 4-1/2"OD, 11.8 ft.-lb.

KEBCO (05.31), 95VDC, 4-1/2"OD, 20.7 ft.-lb.



K-2138

CONTACT KITS

K-2303KIT

L-23164-A

SL-KIT

DESCRIPTION

Kit for Slack Cable Switch, Traction, Roller Type

Kit for L-23164 Switch, Includes 2 Rollers, springs, etc.

Kit for M-2378 Door Lock, Includes Contacts, springs.



K2303Kit

BRAKE SOLENOID

2117-F-19

2117-F-20

2117-F-21

DESCRIPTION

Coil, 110VAC, DECCO #9-100M-056, for K-2135

Coil, 220VAC, DECCO #9-100M-083, for K-2135

Coil, 110VAC, Pull w/ Plunger, for Gate closer (Rare)



SLKIT

GUIDE SHOES

8302-F-84

8302-F-85

8302-F-67

8302-F-74

8302-F-86

8302-F-69

8302-F-71

DESCRIPTION

1/8" Rail, Back Mount, Nylon

1/8" Rail, Side Mount, Nylon

1/4" Rail, Back Mount, Nylon

1/4" Rail, Side Mount, Nylon

8# Rail, Nylon w/Flat Stop

3/16" Rail, Back Mount, Nylon

3/16" Rail, Side Mount, Nylon



2117F20

SDM-3507

Baldor Brake Motor

3/4 HP, 1 phase, 1725 RPM, 56C frame, 110/220V



8302-F-84

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

SEIZING WIRE, PIANO WIRE, SHIM STOCK, SIGNS

PIANO WIRE

Model Piano Wire

- .039" Diameter, 247', 1 lb. Roll

SEIZING WIRE

Model SW

- 22GA, 1 Pound Roll
- 400 Foot Roll

SHIM STOCK

Model HS1 (Round)

- 15/16" Diameter, .059" Thick

CENTER SLOT STOCK

Model RSS18

- 1-3/4" x 1-1/4" x .125"

Model RSS538

- 1-3/4" x 1-1/4" x .063"

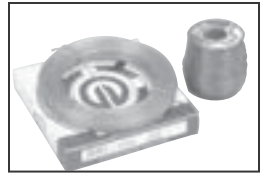
OFF-CENTER SLOT STOCK

Model RSS18A

- 1-3/4" x 1-1/4" x .125"

Model RSS538A

- 1-3/4" x 1-1/4" x .063"



Model F-1133

SIGNS, SPECIAL

Model F-1133

"Star of Life"

- Blue on white plastic
- Adhesive backing
- 4" x 4"

Model DEC-F-100

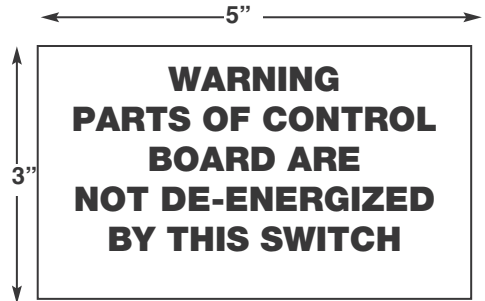
- Decal, 5"W x 3"H
- Red on white full adhesive backing

Model F-100

- Plastic, 5 mil.
- 5"W x 3"H
- Red on white, full adhesive backing

SELF-STICKING LOCK-OUT LABELS

- Self-Sticking Labels
- 2-1/4"W x 4-1/2"H
- Red Letters with white background



Model F-100, Model DEC-F-100



Model LOL-44884



Model LOL-44886

SIGNS

IF ELEVATOR BECOMES INOPERABLE

REMAIN IN CAR UNTIL ASSISTANCE ARRIVES.
DO NOT ATTEMPT
TO FORCE DOORS OR HATCH OPEN

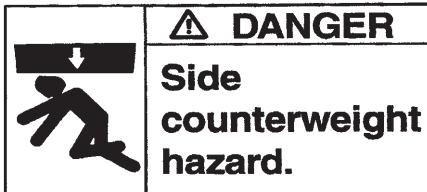
PLEASE REMAIN CALM

Model F-2000
Plastic, Full Back Adhesive
4" x 6"

AUTHORIZED PERSONNEL ONLY

STORAGE OR INSTALLATION
OF EQUIPMENT
NOT PERTAINING TO THE ELEVATOR
IS PROHIBITED

Model F-2001
Plastic, Full Back Adhesive
4" x 6"



Model S-2000
Plastic, Full Back Adhesive
3" x 6"

WARNING
KEEP HANDS AND FINGERS
OUT OF SPACE BETWEEN
ELEVATOR DOORS

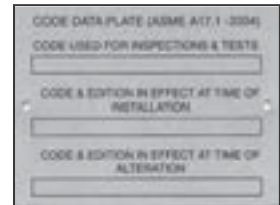
Model F-1114
Plastic, Full Back Adhesive
9" x 16"
Spanish Version F-1114-S

KEEP SWITCH CLOSED
EXCEPT DURING
MAINTENANCE REPAIRS
AND INSPECTION

Model DEC-MAINT
Decal, Full Back Adhesive
5" x 3"
Yellow Background, Red Letters

INSTALLED IN
COMPLIANCE WITH
ASME/A17.1 -2010

Model DEC-ASME
Decal, Full Back Adhesive
5" x 3"
Yellow Background, Red Letters



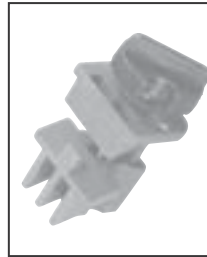
Model TAG-A17.1
Aluminum Tag
4" x 3"
Silver Background

LOCKOUT TAGS, BREAKERS, SIGNS, SPECIAL (ESCALATOR)

LOCKOUT TAGS

Model LOT-113

- High visibility lettering on heavy-duty plastic
- Excess OSHA 50 lb. pullout requirement
- 3-1/8"W x 5-1/8"H
with 3/8" Dia. grommet



Model LOB-783



Model LOT-113

LOCKOUT BREAKERS

Model LOB-783

- Works with most major multi-pole breakers with Tee-bar type switches
- Easy Installation. No cable ties required
- Fits G-E, I-T-E, Sylvania, Challenge, Bryant, Westinghouse

PADLOCKS see page 179

ESCALATOR SIGNS AND DECAL

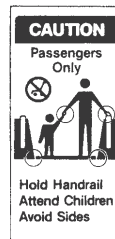
Signs are 55 mil. thick and flexible enough to allow curving to attach to escalator sides where necessary



DECF699U86
4" x 9"



F-699-BF
4" x 8-3/4"



F-699-CN
4" x 7-3/4"



F699-13
4" x 7"



F-699-CN-SM
3" x 6"



F-699-LA
4" x 8-3/4"



F699-11
4-1/4" x 9"



F699-12
4" x 7"

SILLS

SILLS - CAR

Made from extruded aluminum alloy 6063-T52 or nickel-silver alloy C79800. Available single or two speed, in 8 ft. or 16 ft. lengths. For less waste, special lengths cut to order for nominal charge.

Single speed sills

Model CS1S/8

- Aluminum finish
- 8' length, 1.08 lb./ft.

Model CS1S/16

- Aluminum finish
- 16' length, 1.08 lb./ft.

Model CS1S/8NS

- Nickel-Silver finish
- 8' length, 4.16 lb./ft.

Model CS1S/8B

- Bronze anodized finish
- 8' length, 1.08 lb./ft.

Model CS1S/8BL

- Black anodized finish
- 8' length, 1.08 lb./ft.

Model CS1S/C

- Aluminum finish
- 7' length
- For closed coupled door operators

Two speed sills

Model CS2S/8

- Aluminum finish
- 8' length, 1.44 lb./ft.

Model CS2S/16

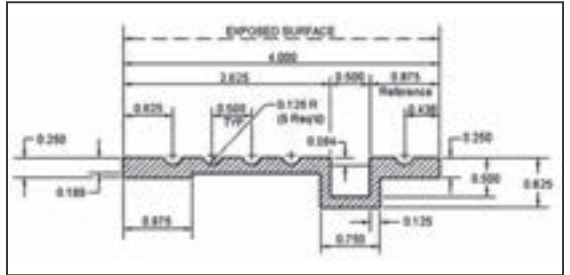
- Aluminum finish
- 16' length, 1.44 lb./ft.

Model CS2S/8NS

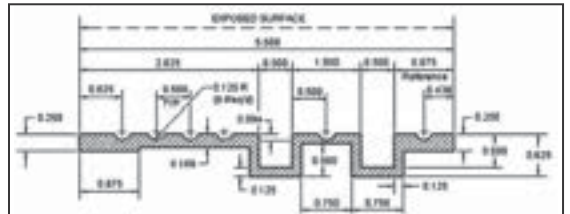
- Nickel-Silver finish
- 8' length, 6.35 lb./ft.

Model CS2S/8B

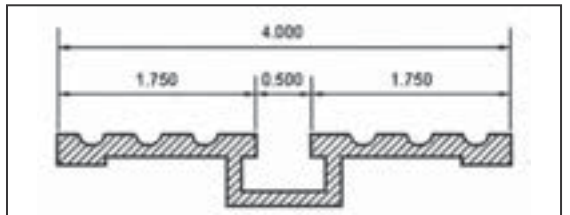
- Bronze anodized finish
- 8' length, 1.44 lb./ft.



Model CS1S



Model CS2S



Model CS1S/C

SILLS

SILLS - HATCH

Made from extruded aluminum alloy 6063-T52 or nickel-silver alloy C79800. Available single or two speed, in 8 ft. or 16 ft. lengths. For less waste, special lengths cut to order for nominal charge.



Single speed sills

Model HS1S/8

- Aluminum finish
- 8' length, 1.547 lb./ft.

Model HS1S/16

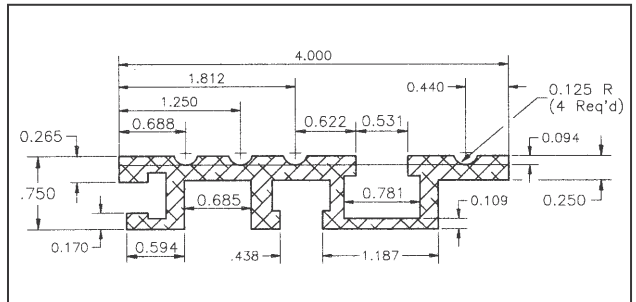
- Aluminum finish
- 16' length, 1.547 lb./ft.

Model HS1S/8NS

- Nickel-Silver finish
- 8' length, 5.05 lb./ft.

Model HS1S/8B

- Bronze anodized finish
- 8' length, 1.547 lb./ft.



Model HS1S

Two speed sills

Model HS2S/8

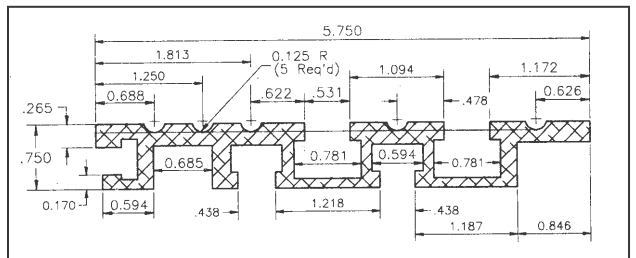
- Aluminum finish
- 8' length, 2.189 lb./ft.

Model HS2S/16

- Aluminum finish
- 16' length, 2.189 lb./ft.

Model HS2S/8B

- Bronze anodized finish
- 8' length, 2.189 lb./ft.



Model HS2S

SILL SUPPORT ANGLES see page 227

SILLS / DOOR SADDLE INSERTS

RESIDENTIAL CAR SILLS

Extruded aluminum sills available in 8', 12', and 20' lengths

Model RS1S/8

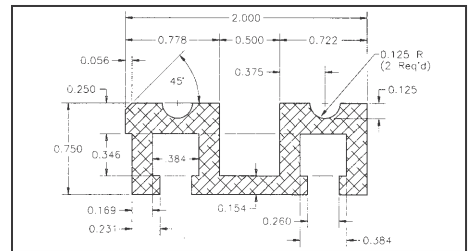
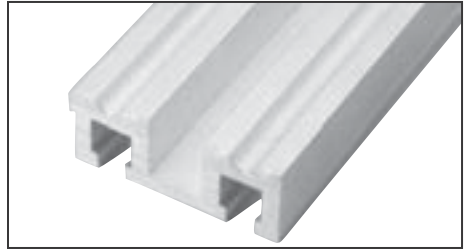
- 8' length

Model RS1S/12

- 12' length

Model RS1S/20

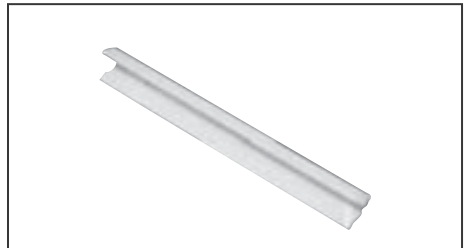
- 20' length



DOOR SADDLE INSERTS

Model EPC500

- Pressure fits - 1/2" or 9/16" tracks
- 9' lengths available
- Relines worn tracks
- Protects new tracks during construction, install upside down
- Reduces friction for easier, smoother, quieter door operation



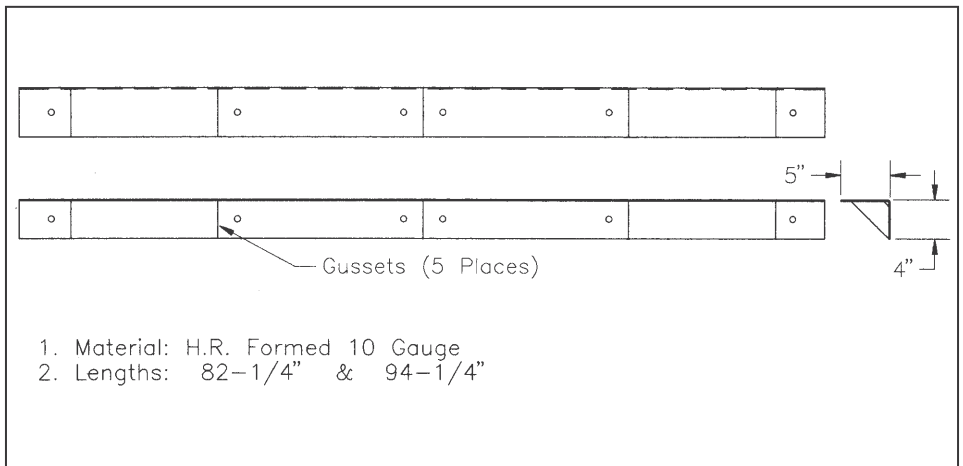
SILLS

SILL SUPPORT ANGLES

Hatch Sill Support Angles. Formed 10 Ga. 5" wide x 4" high with five support gussets.

Model SSA1 • 82-1/4" long

Model SSA2 • 94-1/2" long



SMOKE DETECTOR, SMOKE DETECTOR TESTER, MODEL SJG12 "SOFT JAWS"

SMOKE DETECTOR

Model SD1

4-Wire photoelectric smoke detectors use a State-of-the-art optical sensing chamber. Simplified installation by use of a mounting bracket and plug-in screen terminal block that can be prewired allowing for easy installation and removal for cleaning.

- System voltage 12VDC or 24VDC
- Contact rating, 1A @ 30VDC
- Auxiliary form C relay can control elevator recall, door closure, etc.
- LED indicator
- 5.5" diameter, 1.7" high



Model SD1-110

- 110VAC model

SMOKE DETECTOR TESTER

Model SDT

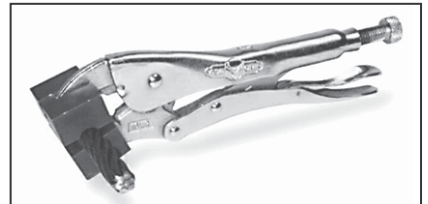
Simulates full range of actual fire conditions. Complies with legal requirements efficiently and economically. A convenient, true functional test device. Tests smoke detectors easily from a distance of 3-8 feet. Works on both ionization and photoelectric detectors. Does not contain freon.



SOFT JAWS

MODEL SJG12 "SOFT JAWS"

- Safety tool to prevent accidental damage to wire ropes. Never damage a governor rope again!!
- One size for 3/8" thru 3/4" rope.
- Made from 6061-T6 Aluminum, hard anodized black
- Use when performing governor test or shortening hoist ropes. Can also be used for seizing governor rope ends to prevent loss of rope lay.
- Use with "vice grip" brand locking pliers, models 10CR and 10WR.



(Vice Grips Optional, Model 6C661)

SOCKET FAST, SOLDER POTS

SOCKETFAST

Esco Socketfast resin compound for wire rope assemblies -- the fast, economical, cold socketing systems. Provides greater protection from high temperature pullouts. Utilizing standard elevator fittings, this convenient resin socketing system will withstand fire 50% longer than babbitt. Socketfast equals or exceeds other performance characteristics of babbitt at 1/5 the cost.

- Substantially increases fatigue life of wire rope
- Easy to use in cramped quarters
- Quick set-up time
- Follow preparation guidelines of ANSI Code A17.1, Rule 212.9e



Model SF500

- 500 grams (for 5 sockets)

Model SF1000

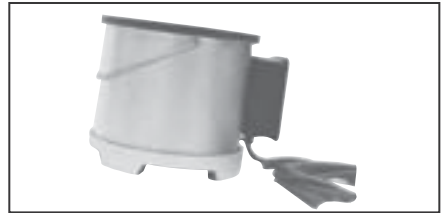
- 1000 grams (for 10 sockets)

ROUND CAST IRON SOLDER POTS

Cast iron crucible
110VAC or 220VAC multiple circuit heating element
6' power cord, bail handle
2"H density refractory insulation

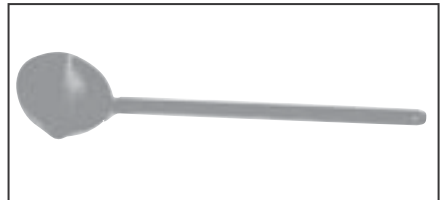
Model VSR15

- 15 lb. capacity
- 4-1/4" I.D. x 3-1/2" Depth
- 850W at 120VAC



Model VSR30

- 30 lb. capacity
- 6-1/2" I.D. x 6-1/2" Depth
- 1100W at 120VAC



Model VSRL

- Steel Ladle -- lighter to handle
- Heats more rapidly and uniformly than cast iron
- Non-spill conical shape for easy pouring
- 3-3/4" diameter bowl, 12" long handle
- 4.75 fl. oz. capacity

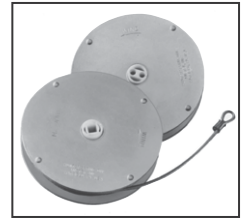
QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

SPIRATORS

DOOR SPIRATORS

Eliminate elevator door reel replacement problems with our spring-powered spirator. Pre-winding the reel upon installation allows universal replacement. Spring is made of high-carbon steel, the cable of 7 x 7 nylon coated galvanized steel with a crimped loop as opposed to eyelet. Each case is steel and the arbors Delrin. Replaces Dover, Houghton, Montgomery, G.A.L., Otis, U.S. Westinghouse and Armor Spirators.



ML 4402



MLB

Model	Arbor (Mounting)	Distribution Thru Hub	Cable Length (in.)	Load Curve Total Turns
ML-4402	5/16" Clear Square Hole	1	120	13
ML-4402W	2 Hole (Westinghouse)	1	120	13
ML-1880	.325 Square Hole		144	

Model ML-1880

Specifically for heavy-duty requirements. Grey 6" diameter steel reel with retracting cable pull 2.6 +2 lb. one turn from solid, 144" cable, 1/16" diameter coated with nylon to .093 diameter.

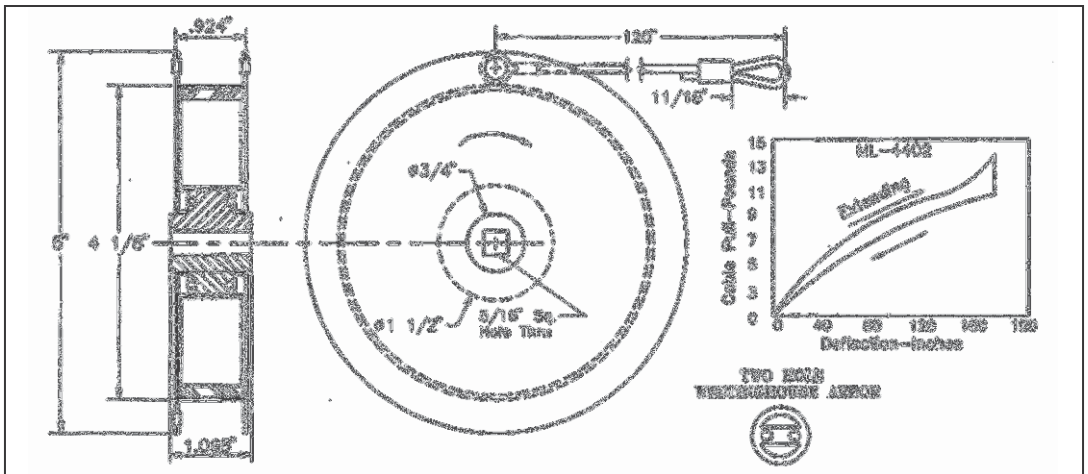
Mounting Bracket

Model MLB

Square stud mounting bracket for use with ML-4402. Specifications subject to change without notice.

Model MLBW

Bracket for ML-4402W



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

SPLINES, T-RAIL, DC TACH GENERATOR

ALUMINUM SPLINES

For mounting reversible and/or replaceable wall panels on car interior walls. Splines include a black plastic laminate insert strip.

Model ASC • Chrome Finish

Model ASB • Bronze Finish

T-RAIL

Model CEMGR16

"T" Shaped Guide Rails, primarily used for stabilizer rail or counterweight guide.

- 1/8" galvanized steel
- Overall length 16' - 4-7/8"

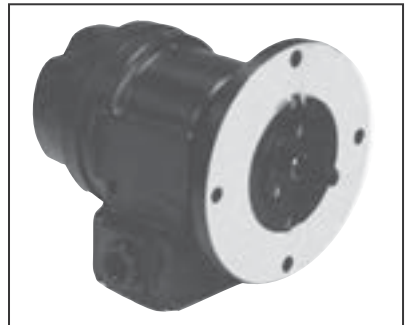
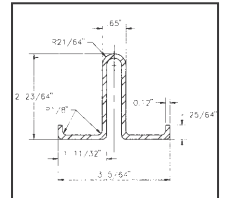
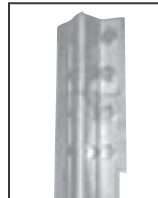
DC TACH GENERATORS

Model DCT

Radio Energie's tach generator Model REO444US satisfies the requirements of a control system demanding accurate and continuous speed measurement due to its output stability and very high quality linearity. The total enclosed construction is particularly suitable for drive control systems operating in severe environmental conditions.

Features:

- Voltage range - up to 200VDC at 1000 RPM
- Machine available with two separate output circuits (with two communicators)
- Speed - maximum speed up to 12,000 RPM with an output voltage which does not exceed 600VDC
- Flange or foot mounted



Model DCT-1	RDC14	6VDC
Model DCT-2	RE0444RIUS	50VDC
Model DCT-3	RE0444RIUS	100VDC
Model DCT-4	RE0444RICA	60VDC
Model DCT-724	RE0444RIUS	60VDC
Model DCT-FT	RE0444RIUS	50VDC

Flange Mount	
Base Mount	1/2" Shaft
Flange Mount	5/16" Shaft
Base Mount	
Flange Mount	1/2" Shaft
Base Mount	5/16" Shaft

TACHOMETERS

TACHOMETERS

Model DHT

- Hand tachometer in shock resistant case
- Tolerance $\pm 0.5\%$ of extreme scale value
- RPM 16 - 20,000, FPM 5 - 6,000

Model DHT-2

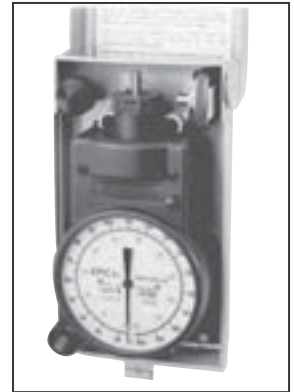
- RPM 40 - 50,000
- FPM 12 - 15,000

Model DHT-M

- Metric equivalent
- RPM 16 - 20,000, MPM 6 - 2,000

Model DHTW

- Replacement measuring wheel for tachometer



DHT-2, DHT



DHTW

TACHOMETERS

TACHOMETERS

Model DT-105

LCD 5 digit display

Model DT-107

LED 5 digit display

Battery operated, hand held, computer circuitry controlled, contact type tachometers offering the following distinct advantages:

- Housing made of strong die-cast aluminum
- Display range - 0.1 to 25,000 RPM with floating decimal
- Accuracy ± 1 RPM: 1000 to 25,000
- Display - 5 digit 0.4" (10mm) high LED
- Update time - typically 1 second
- Batteries, included - 4 AA 1.5V
- Low voltage indicator - "B" display
- Memory system readings are stored in memory and retained for 4 minutes
- Detection - Optical Coupler 60 pulses/rev.
- System control - single chip C-MOS microprocessor
- Over range indicator - 3 decimals appear between numbers
- Operating temperature - 32°F to 113° F (0-45°C)
- Measuring units - Revolutions: RPH, RPS, RPM feet; FPH, FPS, FPM Miles; Mph, yards, YPH, YPS, YPM inches; IPH, IPM, IPS Meters; MPH, MPM, CMPS
- Weight - 1 pound
- Dimensions - 8.3"L x 2.4"W x 2"H
- Warranty - 1 year
- Accessories included - 2 cone adapters, 1 funnel adapter, 3-1/2" extension shaft, carrying case, operating instructions, 1 master wheel (6" cir)

Model FPM-6

- Replacement wheel 6" circumference

Model FPM-12

- Replacement wheel 12" circumference

Model DT-100

- LCD 6 Digit Display
- Contact / noncontact, digital, optical, tachometer offers safe, non-contact operation to 30" and 30° from target
- Range 2.5 to 100,000 RPM with totalizer / counter
- 3 button , 30 function instrument
- Accuracy $70 \pm .01\%$, resolution to .0001 RPM
- Minimum, maximum, and last measurement memory
- Totalizer/counter
- Timer (stopwatch)
- Economic design allows viewing target and display simultaneously
- On test indicator
- User test mode
- 9V battery included
- Low battery indicator
- Made in U.S.A.
- Weight - 6 oz., can fit in a shirt pocket
- Warranty - 1 year
- Accessories included - 5 foot roll of reflective tape, contact tip assembly, linear speed wheel, instruction manual, plastic, latching carrying case



DT-107



DT-100

TANK COOLERS

OIL-TO-AIR HEAT EXCHANGER

With pump-motor and electric fan.

- Stabilizes the oil temperature
- Operates in the bypass flow. Independent of the power unit
- Controlled by adjustable thermostat (in power unit)
- Located next to power unit
- Adjustable thermostat and wall mounting brackets included
- 2-10' long hoses included

Water-cooled units also available. Constant water source required. Please call for details.

Model BUCR2S-1 (S1L)

- 115 / 230V, 1 phase
- 1/3 HP Motor
- 17,075 BTU / HR cooling capacity*
- Weight Approximately 80 lbs.

Model BUCR2S (S1L)

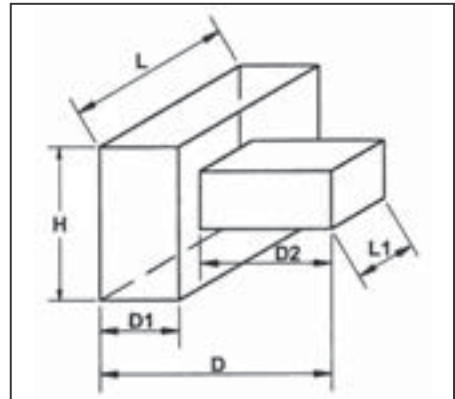
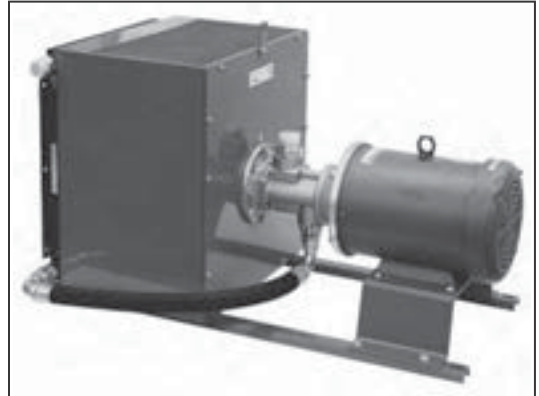
- 230 / 460V, 3 phase
- 1/3 HP Motor
- 17,075 BTU / HR cooling capacity*
- Weight Approximately 80 lbs.

Model BUCR3SN (S2L)

- 208-230 / 460V, 3 phase
- 2 HP Motor
- 29,000 BTU / HR cooling capacity*
- Weight Approximately 137 lbs.

Model BUCR4SN (S3L)

- 208-230 / 460V, 3 phase
- 2 HP Motor
- 46,100 BTU / HR cooling capacity*
- Weight Approximately 160 lbs.



Model	D	D1	D2	H	L	L1
BUCR2S-1	24"	11"	13"	15"	16"	8"
BUCR2S	24"	11"	13"	15"	16"	8"
BUCR3SN	36"	17"	19"	18"	19"	11"
BUCR4SN	39"	19"	20"	21"	22"	11"

OPTIONS AVAILABLE: Model BUCSTARTER

- Controller (Starter, circuit breaker, fuses and terminal blocks)

HYDRAULIC OIL CHILLER see page 30

* Cooling capacity is a function of the temperature difference between the oil and air temperatures.

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

TANK HEATERS, TAPE MEASURE

TANK HEATERS**

The integral thermostat is set for 100°F, has 275W, 120V, 60Hz.

Model TH120

Permanently mounted so turbulence will not move heater in tank. Custom made for your specific applications.

Advise: "A" Dimension required not to exceed 48" maximum.

**NOTE: See worksheet for installation specs and size requirements.

Model TH120F

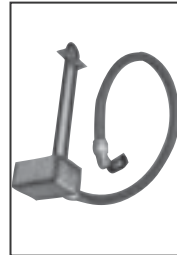
- Same heating element with flex cord
- 1 standard length, 40"

Option: Model THO

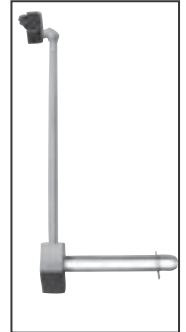
- 20A, red on/off switch with cover



THO



TH120F

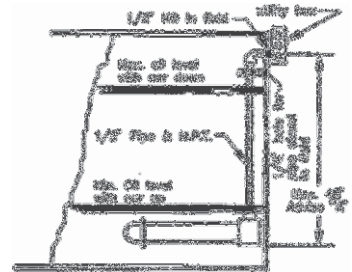


TH120

TANK HEATER WORKSHEET

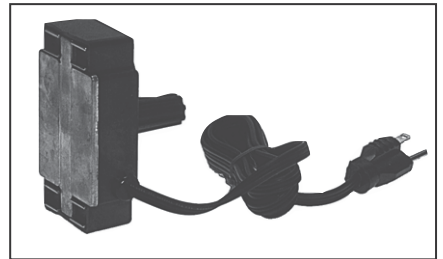
Recommended Installation

1. Locate heater if possible at bottom of tank or with minimum of 4" of oil cover.
2. Make all knock outs and holes above high oil mark in tank.
3. Mount standard switch and cover in utility box if required for summer - winter operation (not furnished, optional).



Model TH120M

- Ideal for residential and small commercial units
- Mounts outside tank
- Attach to side of tank and plug in
- 6 foot long power cord included
- Power supply 115VAC, 200W output



Models TH120P, TH120FP

- Quick, Plug-in, installation. Hard wiring not required
- 15' long plug-in cord
- 115VAC, 275W, 2.3A
- 100°F thermostat



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

TELEPHONE CABINETS

TELEPHONE CABINETS PHONE CABINETS

Three Fineline styles available. All have stainless steel #4 finish covers, durable black enamel finish boxes, mounting brackets, and commercial magnetic catches which assure secure door closing. ADA compliant handle included. All doors will adapt to right or left handle installation. On handle, "PHONE", raised, black letters.

Model	Cover Type	Door Size (W x H)	Cover Size (W x H x D)	Box Size (W x H x D)
TB950*	Formed	5-7/8" x 9-5/8"	9-1/2" x 14" x 3/8"	7-1/2" x 12" x 3-1/2"
TB875**	1/8" Flat	6" x 9-3/4"	8-3/4" x 14"	7-1/2" x 11-1/2" x 3-1/2"
TB875/3**	1/8" Flat	6" x 9-3/4"	8-3/4" x 14"	7-1/2" x 11-1/2" x 3"
TB975	1/8" Flat	6" x 9-3/4"	9-3/4" x 14"	7-1/2" x 11-1/2" x 3-1/2"
TB975/3	1/8" Flat	6" x 9-3/4"	9-3/4" x 14"	7-1/2" x 11-1/2" x 3"

* Available with key lock, **Model TB950L**

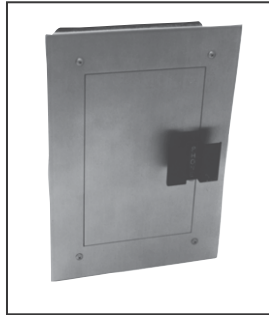
** Available in a #4 bronze finish, add "B", i.e. TB875B

Designed for residential elevators and restricted use areas. Swing doors with holding hinge. Available in both stainless and bronze (B) units.

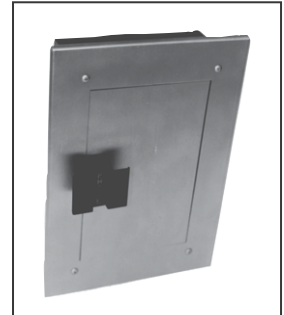
Model	Cover Type	Cover Size (W x H)	Box Size (W x H x D)
TB415	Stainless .105 Flat	4-1/2" x 15"	3-1/2" x 13-1/2" x 3-1/2"
TB415B	Bronze .125 Flat	4-1/2" x 15"	3-1/2" x 13-1/2" x 3-1/2"



TB 415



TB 875 / 975



TB 950

EMERGENCY PHONES

Begin on page 45

**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

TELEPHONE CABINET ACCESSORIES, TEST WEIGHTS

PHONE CABINET REPLACEMENT PARTS

Model M01SP004

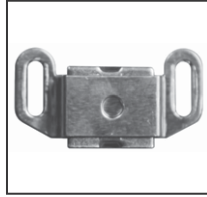
- Magnetic Catch

Model 15PB002

- Plastic Phone Box Handle
- Screws, back plate
- "PHONE" raised, black letters

Model H02PB001

- Plastic Phone Box Handle
- "PHONE" raised, black letters



M01SP004



H02PB001



15PB002

ADA PHONE HANDLE ADAPTER PLATE

Model PHAS

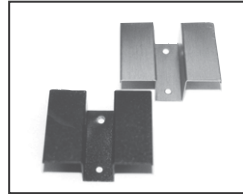
- Stainless

Model PHAB

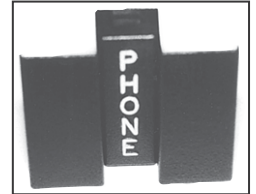
- Black

Model PHAR

- Bronze



PHAB / PHAS



PHONE ACCESSORIES

P06PE010

- 25' Telephone Cord

P06PE011

- T-adapter

P06PE012

- In-line phone adapter

SBJ325-PHON

- Adhesive braille plate - Phone Symbol

SBJ325-WORD

- Adhesive braille plate - Word "PHONE"

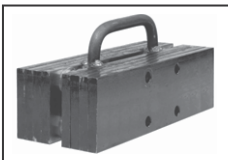


500 POUND TEST WEIGHT CART

Model 500TC

500 pound test weight cart designed specifically for the elevator industry. It is a single piece solid construction with permanently attached handle. Two 8" diameter metal wheels with bearings and solid rubber tires make cart easy to move, maneuver, and protect floors from scratches. Cart painted with grey primer and has number 500 on top.

Approximate dimensions: 26"W x 15"D x 44"H.



50 POUND TEST WEIGHT

Model 50TW

50 pound elevator test weights are made from steel with permanently attached handle, stackable, and painted with charcoal color primer.

Weight dimensions: 12"W x 5"D x 3.5"H.

Outside dimensions: 12"W x 5"D x 5.75"H.

TIMERS, TOMAHAWK

“OMRON” TIMER

- Adjustable up to 60 seconds
- 120VAC coil, contact rating 5A

Model OMRHY4260

- Double Pole, Double Throw

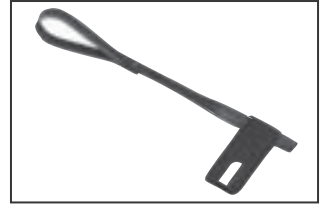
Model OMRHY4460

- Four Pole, Double Throw



Model OMRHY4260

TOMAHAWK



Model GDJ

For GAL K.M.O. operator
Model GDJ

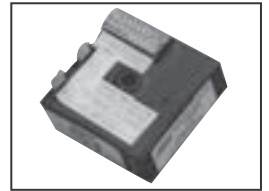
UNIVERSAL TIMER

THCU1023 is universal voltage solid state timer in a compact 2" x 2" configuration.

Timing Mode: application of input voltage to the timer starts the time delay. At the end of the delay period, the load is energized. To reset, remove the input voltage to the timer.

Model THCU1023E

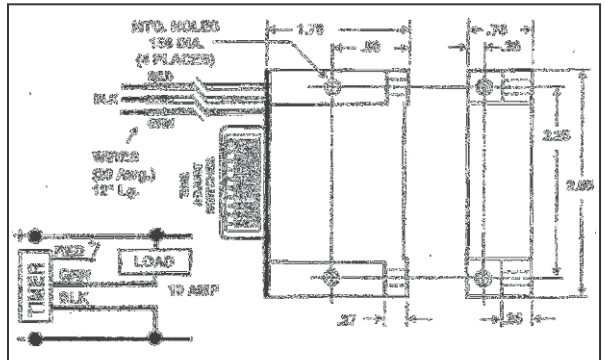
- Binary dip-switch is easy to program
- Digital Timing Accuracy
- Repeatability of $\pm 0.1\%$
- Eliminates contactor "Hum"
- Compact, easy to hook up, in-line installation
- UL/CSA



Model THCU1023E

Model 438USAPIN 3 (Switch Adjustable Power Interval Time Capsule)

This switch Adjustable Interval Time Capsule is an all solid state timer providing interval timing control of a load device operating from DC voltage and switching up to ten amperes of DC load current. The interval timing period is adjustable from 1 to 1024 seconds in increments of 1 second. When DC voltage is applied, the 438USA-PIN turns on permitting full load current to flow. At the end of the preset timing period the 438USA-PIN turns off and permits only leakage current to flow through the load to repeat a cycle, the operating voltage must be removed for a least 100 milliseconds.



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

TIMERS

438USA TIMER

Model 438USA

Digital timing circuitry features 24 to 240VAC or VDC, with 1A output.

- UL Recognized
- CSA Certified

Specifications

Operating Voltage - 24 to 240VAC or VDC, 50/60Hz

Timing Mode - Delay on make

Timing Range - 1 to 1024 seconds

Timing Adjustment- 10 position Dip switch located between power terminals. Opening of any switch position adds its associated time value to the total timing period set. Unit has one (1) second internal minimum time delay.

Timing Tolerance $\pm 15\%$ at stabilized operating voltage and temperature

Timing Repeatability $\pm 1\%$ at stabilized operating voltage and temperature

Output Rating - 10mA to 1A inductive, Inrush currents to 25A for 8 milliseconds

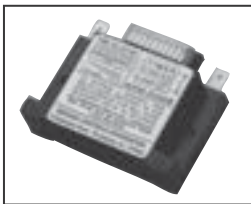
Output Voltage Drop "On" State - 4V maximum, 3V nominal

Output Leakage Current "Off" State - 0.6 mA @ 24V, 1.8 mA @ 48V, 5.4 mA @ 120V, 11.4 mA @ 240V

Recycling Time - 50 milliseconds after a timing cycle, 200 milliseconds during a timing cycle

Transient Protection - 8 Joules

Operating Temperature - -20°C to $+85^{\circ}\text{C}$



438USA-INT TIMER

Model 438USA-INT

Solid state Universal Switch Adjustable Interval Time Capsule TM provides interval timing control for any one apere load.

Specifications

Operating Voltage - 24 to 240VAC, 50/60 Hz. No need to observe polarity.

Timing Mode - Interval

Timing Range - 1 to 1024 seconds

Timing Resolution - Adjustable in 1 second increments

Timing DIP Switches - Ten DIP switches arranged in a binary fashion to add to the total delay time the value of each switch.

Switches add 1, 2, 4, 8, 16, 32, 64, 128, 256, and 512 seconds. With all switches closed the delay time is 1 second: with all switches open the delay time is 1024 seconds.

Timing Setting Accuracy - $\pm 10\%$ of DIP switch setting

Time Variation - $\pm 10\%$ over temperature and voltage range

Timing Repeatability - $\pm 1\%$

Output Rating - 10mA to 1A inductive. Inrush currents to 25A for 8ms.

Output Voltage Drop in "On" State - 4V maximum

Output Leakage Current in "Off" State . 1 mA @ 240V

Recycling Time - 100 milliseconds after a timing cycle, 200 milliseconds during timing

Operating Temperature -20°C to $+85^{\circ}\text{C}$

Transient Protection - A 22 Joule MOV across operating terminals

Wiring Terminations - Four (4) #20 AWG wire, Two(2) for operating voltage and two (2) for load circuit.

TOP OF CAR HANDRAILS, TRANSFORMERS

TOP OF CAR HANDRAILS

- Features:
- Quick & easy installation
 - Made from 1-1/4" x 1-3/4" square galvanized tubing
 - Designed to comply with ASME 17.1a-2004
 - Can ship via UPS
 - Toe guard, center rail included (not shown)

- Information needed to order:
- Openings:
 - In-line opening _____
 - Opposite opening _____
 - Handrail depth _____
 - Handrail width _____



ALL TRANSFORMERS LISTED BELOW ARE IN STOCK. ADDITIONAL TRANSFORMERS READILY AVAILABLE

Model

T1-00750013	(ARMOR V611011)	100VA	1 Phase
T1-02000002	(DOVER 9737480)	200VA	1 Phase
T1-06850001	(DOVER 9882250)	685VA	1 Phase
T1-01000023	(G.E.9T58B44)	100VA	1 Phase
T1-02200001	(G.E.9T58B3278)	220VA	1 Phase
T1-02500018	(G.E.9T58B4005)	250VA	1 Phase
T1-05000013	(G.E.9T56Y2810)	500VA	1 Phase
T1-02500013	(MONTGOMERY 28600)	250VA	1 Phase
T1-05000011	(MONTGOMERY 28601)	500VA	1 Phase
T1-10000002	(MONTGOMERY 28602)	1000VA	1 Phase
T1-00370002	(OTIS A225DR1)	37VA	1 Phase
T1-00500022	(OTIS B235AS1)	50VA	1 Phase
T1-01800001	(OTIS 225CG3)	180VA	1 Phase
T3-02500002	(OTIS 235G1)	250VA	3 Phase
T3-02500004	(OTIS 235G6)	250VA	3 Phase
T3-05000005	(OTIS 235H3)	500VA	3 Phase
T3-10000002	(OTIS 235A1)	1000VA	3 Phase
T3-50000003	(OTIS 235E6)	5000VA	3 Phase
T5-REA-0001	(OTISA7011A2)	REACTOR	
T5-IND-0001	(OTIS 224AB1)	AIR CHOKE	
T1-03000004	(WESTINGHOUSE 325C827H02)	300VA	1 Phase
T1-05500001	(WESTINGHOUSE 320C940H02)	500VA	1 Phase
T1-05500004	(WESTINGHOUSE 320C940H01)	500VA	1 Phase
T1-015000034	240 Primary, 120 Secondary		1 Phase



QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

VALVES

MAXTON VALVES

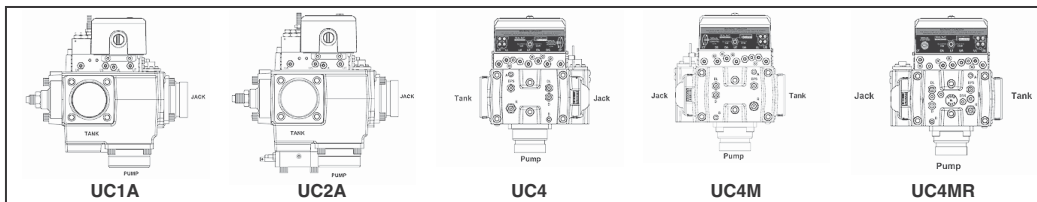
Lightweight, heat-treated, high strength aluminum body. Fully adjustable pressure relief valve. Sliding seal pistons.

Standard Features (All Models)

- Unit body construction
- Steel sleeve inserts in valve body
- Feedback control for stall free operation
- Individualized adjustments
- Integrated relief valve
- High efficiency 115VAC / 24VDC solenoids with encapsulated coils CSA / UL Listed
- Pressure Ports Pump/System/Switch (A/B/S): 1/8" NPT
- Operating Temperature: 80°-150°F (26°-65°C)
- Oil: Hyd. ISO VG32, UC2A B44 150 SUS @ 100°F (38°C)

Optional Features (All Models)

- Explosion proof coil cover
- Solenoid coils: 12VDC, 115VDC, 185VAC, 230VAC, 12VDC/120VAC dual voltage coil
- Low pressure switch



Specifications

UC1A B44, UC2A B44

Flow Min./Max.: 130-150/360 GPM*
 Pressure Min./Max.: 50/600 psi*
 Line Connections: 2-1/2" NPT**
 Line directions (facing valve controls):
 Tank – Front, Jack – Right
 Dimensions:
 13"W, 12-3/8"H, 11-1/4"D
 Weight: UC1A 47 lb., UC2A 50 lb.

UC2A B44 only

- Regulated Down Speed Control

UC4 B44, UC4M B44

Flow Guide Size: -STD, -E1, -E2, -S2
 Flow Min./Max.: 10-70/165-185 GPM*
 Pressure Min./Max.: 50/800 psi*
 Line Connections: 2" NPT**
 Line directions (facing valve controls):
UC4 B44: Tank – Left, Jack – Right
UC4M B44: Tank – Right, Jack – Left
 Dimensions:
 8-7/16"W, 10-1/2"H, 9-3/16"D
 Weight: 27 lb.

Optional

- Tank Discharge Filter

UC4MR

Flow Guide Size: STD, -E1, -E2
 Flow Min./Max.: 30-165/30-185 GPM*
 Pressure Min./Max.: 175/800 psi*
 Line Connections: 2" NPT**
 Line directions (facing valve controls):
 Tank – Right, Jack – Left
 Dimensions:
 8-7/16"W, 10-1/2"H, 9-3/16"D
 Weight: 27 lb.

- Regulated down speed control
- Push button manual lowering
- Low pressure cutoff manual lowering

Optional

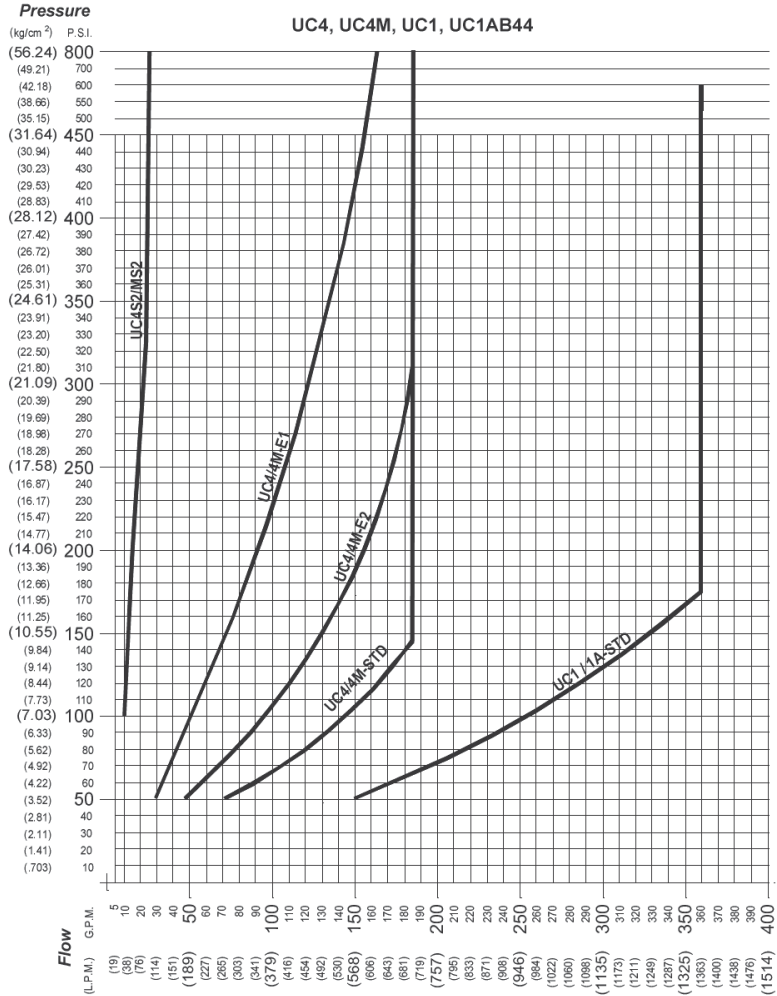
- Tank Discharge Filter

* Consult with OEM Application Flow Charts
 ** Other grooved or threaded connections available

Other valves available. Please inquire.

REPLACEMENT COILS see page 245

VALVES, APPLICATION FLOW CHART



HOW TO SELECT A VALVE:

1. APPLY MINIMUM P.S.I. AND G.P.M. (OR kg/cm² AND L.P.M.) TO CHART.
2. DETERMINE POINT OF INTERSECTION.

NOTE:

THIS CHART ASSUMES THE UP AND DOWN CONTRACT SPEEDS ARE THE **SAME**.
(CONTRACT SPEED = FULL DOWN SPEED WITH RATED LOAD)

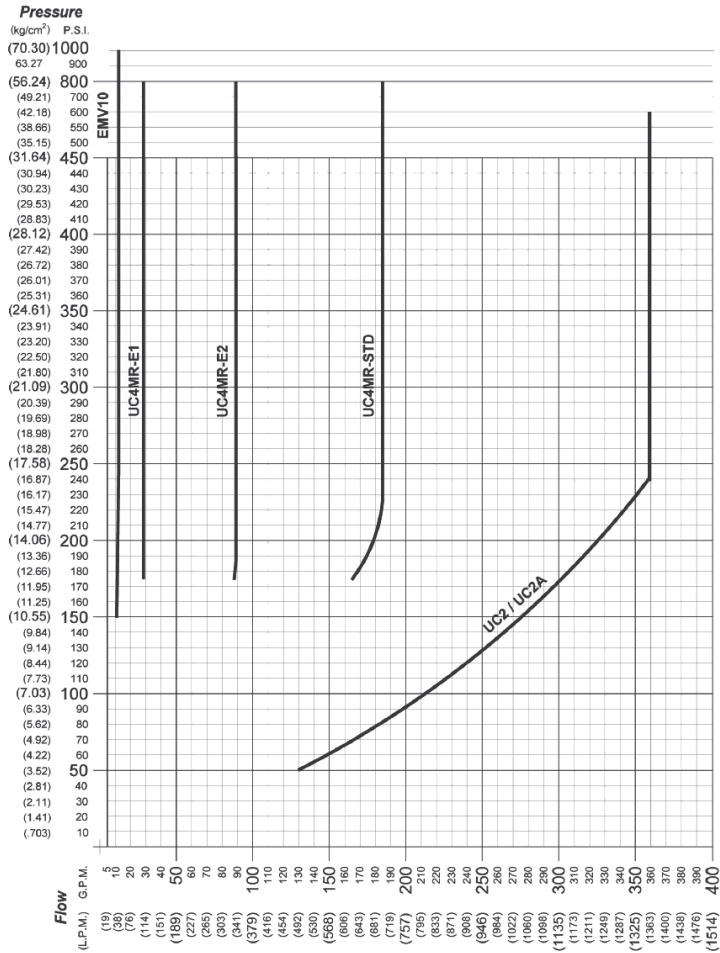
MAXIMUM OPERATING PRESSURES

UC1 / 1A SERIES VALVES: 600 P.S.I.

UC4 / 4M SERIES VALVES: 800 P.S.I.

VALVES, APPLICATION FLOW CHART

Down Speed Regulated Valves



HOW TO SELECT A VALVE:

1. APPLY MINIMUM P.S.I. AND G.P.M. (OR kg/cm² AND L.P.M.) TO CHART.
2. DETERMINE POINT OF INTERSECTION.

NOTE:

THIS CHART ASSUMES THE UP AND DOWN CONTRACT SPEEDS ARE THE **SAME**.
(CONTRACT SPEED = FULL DOWN SPEED WITH RATED LOAD)

MAXIMUM OPERATING PRESSURES

UC2/UC2A SERIES VALVES: 600 P.S.I. UC4MR SERIES VALVES: 800 P.S.I.
EMV10 SERIES VALVE: 1000 P.S.I.

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

VALVES

EECO VALVES

Lightweight, heat-treated, high strength Aluminum body.

Fully adjustable pressure relief valve. Moving parts restricted to sliding seal pistons.

C.S.A. and UL listed. Temperature 80°F minimum, 150°F maximum.

Both valves perform all necessary functions for the elevator operation in both directions of travel; including smooth up start, up transition, up leveling and up stop. Check valve locks the elevator on a column of oil while the car is stopped.

Model UV5A

- All control adjustments are made from front side of valve
- Operational Data
- Minimum PSI - 90
- Maximum PSI - 800
- Maximum GPM - 200

Model UV7B

Operational Data

- Minimum PSI - 50
- Maximum PSI - 500
- Maximum GPM - 455



Valves should be sized to bypass the entire capacity of the pump at minimum pressure.

PIPE RUPTURE VALVES see page 186

REPLACEMENT COILS see page 245

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

SHUT OFF VALVES, VALVE COILS

SHUT OFF VALVES

Full port, non-shock ball valves, with 2-piece body and blowout-proof stem for water oil or gas.

- Non-locking handle
- FNPT threaded stainless steel body
- 1000 PSI

Model SOV-2A • 2"

- Locking handle
- Victaulic carbon steel body
- 1000 PSI

Model SOV-2V • 2"

Model SOV-25V • 2-1/2"

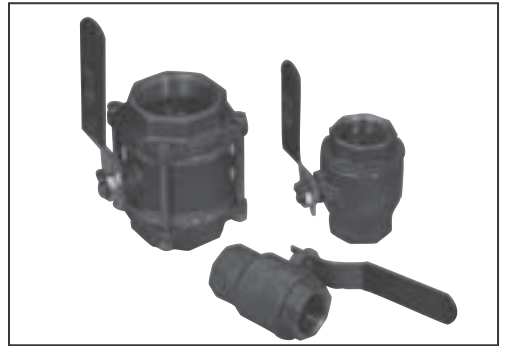
Model SOV-3V • 3"

- Non-locking handle
- FNPT threaded brass body
- 600 PSI

Model SOV-1.5 • 1-1/2"

Model SOV-25 • 2-1/2"

Model SOV-3 • 3"



MAXTON

T.H.E.

EECO

VALVE COILS

Replacement hydraulic valve coils, **IN STOCK.**

- Model CE10** • EECO, 110VAC
- Model CE08** • EECO, 208VAC
- Model CE20** • EECO, 220VAC, 110VDC
- Model CE40** • EECO, 440VAC, 220VDC
- Model CE12** • EECO, 110VAC, for UV7B
- Model S653** • EECO, 220VAC, for UV7B
- Model CM30** • Maxton, 230VAC (GREEN)
- Model CM10** • Maxton, 110VDC (BLACK)
- Model CM15** • Maxton, 115VAC, 24VDC (RED)
- Model CT10** • T.H.E., 110VAC
- Model CT08** • T.H.E., 208/230VAC
- Model C-CV500** • CEMCO, 110VAC, for CV500 Valve
- Model DI2-120** • DOVER, 120VAC, for I2 Valve



DI2-120

VALVE "O" RING REPLACEMENT KITS

"O" RING REPLACEMENT KITS FOR MAXTON UNIT VALVES

Model 3A4 Seal Kit

For use with Maxton valve models; UC-3A, UC-3AM, UC-4, and UC-4M control valves.

Description	Part No.	Quantity
Seal Ring	204500	1
Seal Ring	210200	6
Seal Ring	210300	1
Seal Ring	210500	25
Seal Ring	210700	15
Seal Ring	210800	18
Seal Ring	211000	2
Seal Ring	232100	3
Seal Ring	233600	2
Seal Ring	236000	8
Seal Ring	237200	1
Seal Ring	238500	1
Seal Ring	230600	2
U-Cup (old style)	212300	2
Seal Washer	238700	1
Teflon Seal	227000	7
Seal Ring	211300	2



Model 1A2 Seal Kit

For use with Maxton valve models: UC-1, UC-1A, UC-2, UC-2A control valves.

Description	Part No.	Quantity
Seal Ring	210500	25
Seal Ring	210000	2
Seal Ring	210600	3
Teflon Seal	227000	9
Seal Ring	211100	1
Seal Ring	210700	5
Seal Cup	212300	4
Seal Ring	210400	3
Seal Ring	210300	4
Seal Ring	210200	2
Seal Disc	205700	3
Seal Cup	210900	1
Seal Ring	211200	2
Seal Ring	210800	18
Seal Ring	211000	5
Seal Ring	236000	6
Seal Ring	217400	1
Seal Ring	233600	2
Seal Ring	219200	1

Model 3 Seal Kit

For use with Maxton UC-3 control valve.

NOTE: The replacement parts and kits for this valve have been previously discontinued by Maxton.

Description	Part No.	Quantity
Seal Ring	204500	2
Seal Ring	210200	4
Seal Ring	210500	25
Seal Ring	210700	15
Seal Ring	210800	18
Seal Ring	211000	10
Seal Ring	211300	10
Seal Ring	230600	2
Seal Ring	232100	3
U-Cup (old style)	212300	2
Teflon Seal	227000	7

VALVE O-RING REPLACEMENT KITS, WASTE CANS

EECO VALVE "O" RING REPLACEMENT KITS

Model SKSA

• For use with EECO UV-5A valves

Description	Part No.	Quantity
Insert	5065-4	4
Seal Disc	5025V	1
Seal Ring	5009P	2
Seal Ring	A504	1
Seal Ring	5021P	3
Seal Ring	5238V	1
Seal Ring	5013P	3
Seal Ring	5111	2
Seal Ring	5060	4
Seal Ring	5034	1
Seal Ring	5030	1

Model SK7B

• For use with EECO UV-7B valves

Description	Part No.	Quantity
Seal Ring	5020	2
Seal Ring	5011	7
Seal Ring	5094	8
Seal Ring	5227V	1
Seal Ring	5027	1
Seal Ring	5063	5
Seal Ring	5226V	1
Seal Ring	5092	6
Seal Ring	1630	6
Seal Ring	5237	1

Model CV500-KIT

O-Ring replacement kit for CEMCO CV500 VALVE

Model SKDI2

For DOVER I2 VALVE

SAFETY AND INDUSTRIAL OILY WASTE CANS

- UL listed non-combustible safety waste cans comply with OSHA requirements.
- Made of heavy gauge coated steel, the body extends down to the floor, eliminating the need for legs which can bend and work loose at the rivets.
- Recessed ventilated bottom eliminates the possibility of spontaneous combustion.
- Heavy circular beading at the top and bottom provides additional strength and rigidity.
- Fully welded construction.
- Ideal for soiled work garments, oily rags, combustible waste material and residues, shavings, stampings, paint cloths, or recyclables.
- Three sizes to choose from in pedal operated models.
- Available in standard safety yellow.
- Optional red



Model No.	Ship Wt.	Dia.	Ht.	Capacity
OWC-06	11 lb.	12-1/2"	19-3/8"	6 gal. (22.71 liters)
OWC-10	13 lb.	13-3/4"	20-3/4"	10 gal. (37.85 liters)
OWC-15	18 lb.	16"	23-1/2"	15 gal. (56.77 liters)

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

WEDGE SOCKETS

WEDGE SOCKETS

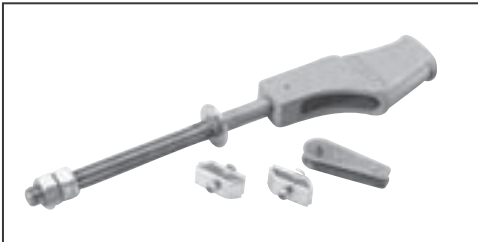
- Replace old babbitt sockets and have ease of installation - save time, avoid fires, be safer and avoid bad babbitt pours.
- Save labor costs on babbitt and resin socketing
- It's less costly to throw away your old babbitt sockets when you're re roping or when you have to take the "stretch" out of your cable it can be done in a fraction of the time.
- Easy installation and adjustment
- Wedge sockets have been approved in all fifty states as well as the cities of Los Angeles, Chicago, and New York.

WS3812	3/8" or 10mm rope	12" x 1/2" dia. rod
WS3818	3/8" or 10mm rope	18" x 1/2" dia. rod
WS3824	3/8" or 10mm rope	24" x 1/2" dia. rod

WS1212	1/2" rope	12" x 3/4" dia. rod
WS1218	1/2" rope	18" x 3/4" dia. rod
WS1224	1/2" rope	24" x 3/4" dia. rod
WS1230	1/2" rope	30" x 3/4" dia. rod
WS1236	1/2" rope	36" x 3/4" dia. rod

WS5812	5/8" rope	12" x 3/4" dia. rod
WS5818	5/8" rope	18" x 3/4" dia. rod
WS5824	5/8" rope	24" x 3/4" dia. rod
WS5830	5/8" rope	30" x 3/4" dia. rod
WS5836	5/8" rope	36" x 3/4" dia. rod
WS5842	5/8" rope	42" x 3/4" dia. rod

- Test for extra high tensile strength @ 31,600# on 6 x 19 rope.



For heavy freight elevators, high-speed gearless as well as for use with compensatory ropes. The Emco 400 has been tested with 3/4" x 6 x 19 extra-strength traction steel rope with breaking strength of 45,200 lb. meeting and exceeding ANSI A17.1 Rule 212 and Canadian B44 codes.

WS3418	3/4" or 11/16" rope	18" x 7/8" dia. rod
WS3424	3/4" or 11/16" rope	24" x 7/8" dia. rod
WS3430	3/4" or 11/16" rope	30" x 7/8" dia. rod
WS3436	3/4" or 11/16" rope	36" x 7/8" dia. rod

Includes socket, rod assembled with roll pin, two nuts, washer, cotter pin, and two wire clips. Other sizes available upon request, Special Ordered.

GOVERNOR ROPE WEDGE SOCKETS

For 3/8", 1/2" and 5/8" rope.

WS38GOV	3/8" cable
WS12GOV	1/2" cable
WS58GOV	5/8" cable



SPRINGS

Model SS900

- For 1/2" rope
- 5" long, 1-13/16" O.D., 1-1/8" I.D.

Model SS1000

- For 5/8" rope
- 4-3/4" long, 2-1/16" O.D., 1-1/8" I.D.

Model X90S3H77KIT

- Spring/bushing kit for 3/4" wedge sockets

Model SS900A

- Bushing assembly, for 1/2" x 5/8" springs
- Includes 3 bushings, 3 washers

Model EM801

- Spring/bushing kit for 3/8" wedge sockets



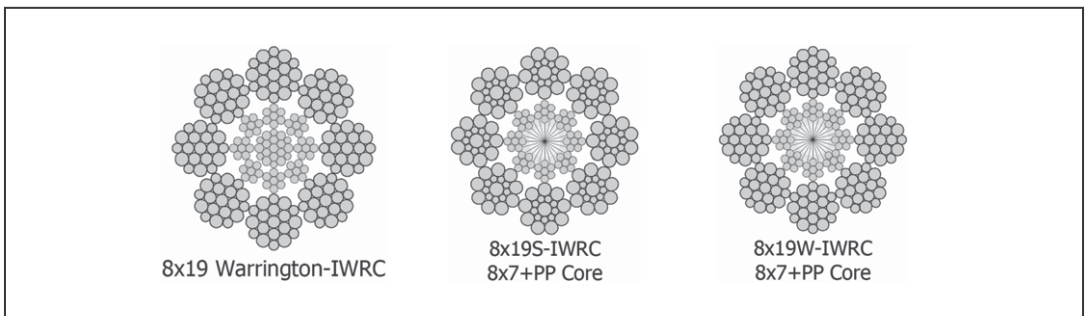
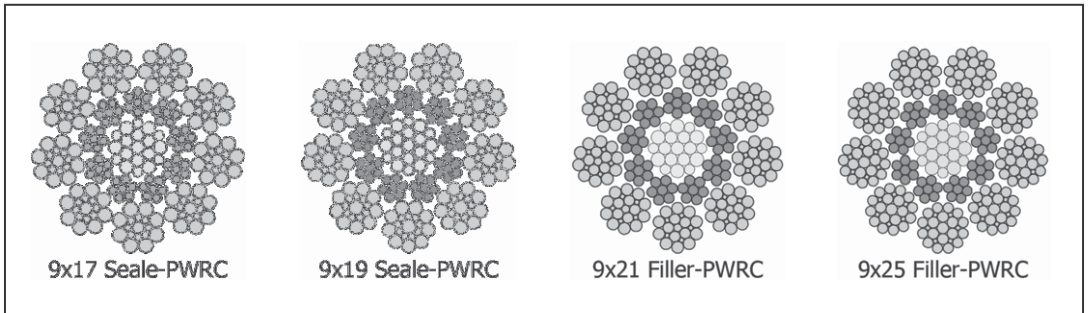
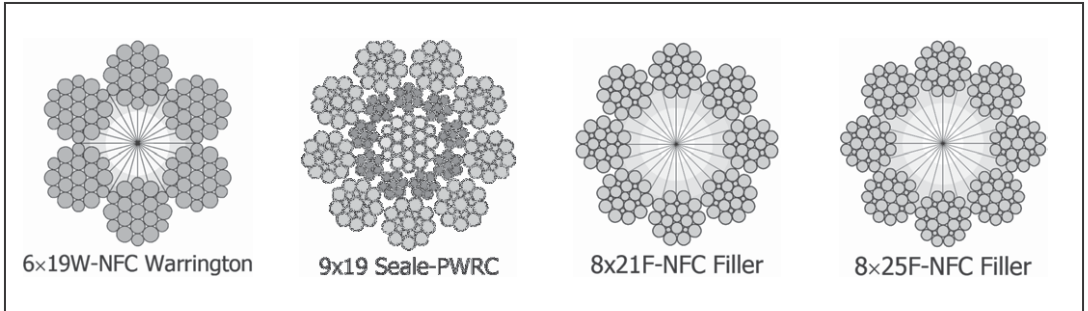
QUALITY ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
 7760 N. Merrimac Ave. • Niles, IL 60714

WIRE ROPE

WIRE ROPE

Manufactured by Wire Rope Works Messilot LTD. Messilot has been in business since 1961 and accredited for ISA9002 since 1994. The wire rope is manufactured to the following standards, BS302.BS, ISA3408, DIN3051, RR-W-410 and MIL-W-83420.



WIRE ROPE

Traction Steel Elevator Ropes

Diameter	Construction	Nom. Strength (lb.)	Approx. Wt. (lb./ft.)
3/8"	8 x 19 Seale Fiber Core	8,200	0.20
7/16"		11,000	0.28
1/2"		14,500	0.36
9/16"		18,500	0.46
5/8"		23,000	0.57
11/16"		27,000	0.69
1/2"	8 x 21 Filler Fiber Core	14,500	0.36
5/8"		23,000	0.57
3/4"		32,000	0.82

Master Form (Lang's Lay)

Diameter	Construction	Nom. Strength (lb.)	Approx. Wt. (lb./ft.)
1/2"	8 x 19 Seale Fiber Core	16,000	0.39
5/8"		25,400	0.62

Iron Ropes

Diameter	Construction	Nom. Strength (lb.)	Approx. Wt. (lb./ft.)
3/8"	8 x 19 Seale Fiber Core	4,200	0.20
3/8"		5,000	0.23
1/2"	6 x 25 Filler Fiber Core	8,400	0.40
5/8"		12,800	0.63
1/2"	8 x 25 Filler Fiber Core	7,200	0.36
5/8"		11,200	0.57
11/16"		13,600	0.69

Extra High Strength Elevator Ropes

Diameter	Construction	Nom. Strength (lb.)	Approx. Wt. (lb./ft.)
1/2"	8 x 21 Seale Fiber Core	17,500	0.36
5/8"		27,200	0.57
11/16"		32,800	0.69
1/2"	8 x 19 Comb. Core (IWRC & PP)	22,800	0.41
5/8"		34,200	0.64
3/8"	8 x 19 8-Strand Steel Core	11,500	0.25
1/2"	9 x 21 9-Strand Steel Core	24,400	0.48
5/8"	9 x 25 9-Strand Steel Core	38,200	0.72

Metric Ropes

Diameter	Construction	Nom. Strength (lb.)	Approx. Wt. (lb./ft.)
8mm	8 x 19 Warrington - IWRC	10,050	0.20
10mm		15,600	0.27
10mm	8 x 19 Seale Fiber Core	9,900	0.27
13mm		16,700	0.39

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

WIRE ROPE CLIPS, REEVING SPLICES, SEIZING BANDS AND SEIZING WIRE

WIRE ROPE CLIPS

Rope Clips are individually bagged with proper application instructions and warning information.

FIST GRIPS

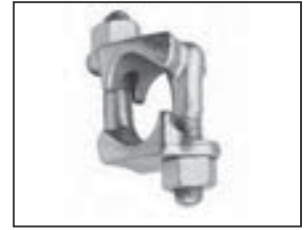
- Galvanized to resist corrosion and rusting action
- Assembled with standard heavy hex nuts

Model FG-3/8 3/8"

Model FG-1/2 1/2"

Model FG-5/8 5/8"

Model FG-3/4 3/4"



FG



CWRC

ROPE CLIPS (Crosby Clips)

- Made from 316 stainless steel
- Electro-polished

Model CWRC-3/8 3/8"

Model CWRC 1/2 1/2"

Model CWRC-5/8 5/8"

Model CWRC-3/4 3/4"

REEVING SPLICES

Use for marrying ropes during elevator re-ropeing operations.

Model RSP38 3/8"

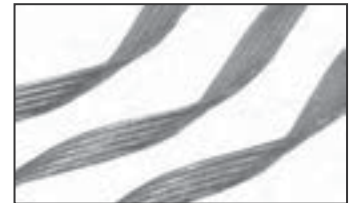
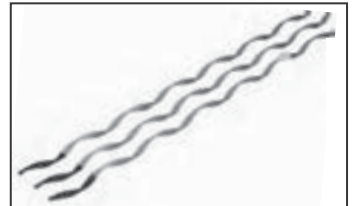
Model RSP12 1/2"

Model RSP916 9/16"

Model RSP58 5/8"

Model RSP1116 11/16"

Model RSP34 3/4"



SEIZING BANDS

Prevent rope from fraying when being cut.

Model SB12 1/2" rope

Model SB38 3/8" rope

Model SB58 5/8" rope

SEIZING WIRE

Model SW

- 22GA, 1 Pound Roll
- 400 Foot Roll



WIRE ROPE WEAR GAUGE, WIRE WRAP TOOLS

WIRE ROPE “NO-GO” GAUGE

Wire Rope Wear Gauge, Model WRG-2000



Manufactured to ASME A17.1-1996 1001.2(C)(29)(C) specifications of 2011. T3 aluminum, anodized, with numerals acid etched on.

The easy, no-hassle, foolproof way to check elevator wire rope for maximum reduced diameter. No guess work, no mistakes! Gauge stays parallel to rope, so you are always checking from the top of one strand to the top of the opposite strand for maximum reduced diameter. If rope fits into slot, it should be replaced.

A tool that every inspector and mechanic should have. No need for expensive calipers, our gauge will not break, and does not require recalibration. Accurate, durable, lightweight, and easy to use!

Model WRG-2000

- 3/8", 1/2", 9/16", and 5/8" wire rope diameter
- Anodized red finish

Model WRGM

- 8mm, 10mm, 11mm, and 13mm wire rope diameter
- Anodized blue finish

WIRE WRAP TOOLS



- For 22GA solid wire

Model WW22 Wrap Tool

Model WU22 Un-Wrap Tool

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

7760 N. Merrimac Ave. • Niles, IL 60714

WIREWAY

WIREWAYS (TROUGH)

Convenient slots for mounting switches, etc.

Construction provided with

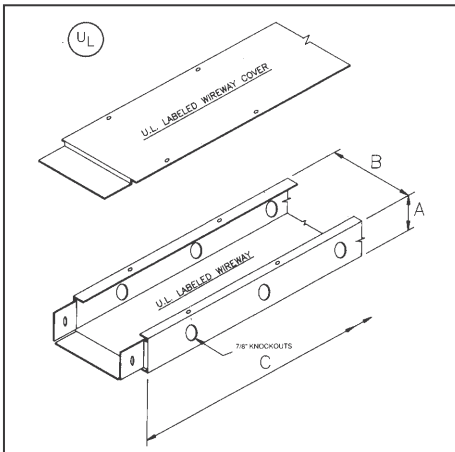
- (2) 5 ft. covers
- #10 Truss head screws
- 7/8" knockouts, for 1/2" connectors
- Integral coupling on one end
- 5/16 x 1/2" connector slots
- 1/4 - 20 1/2" hex head, zinc plated screws and nut for connection of fittings

Materials

- Hot dipped A60, mill-galvanized sheet metal to UL 870 specs.

Tolerances

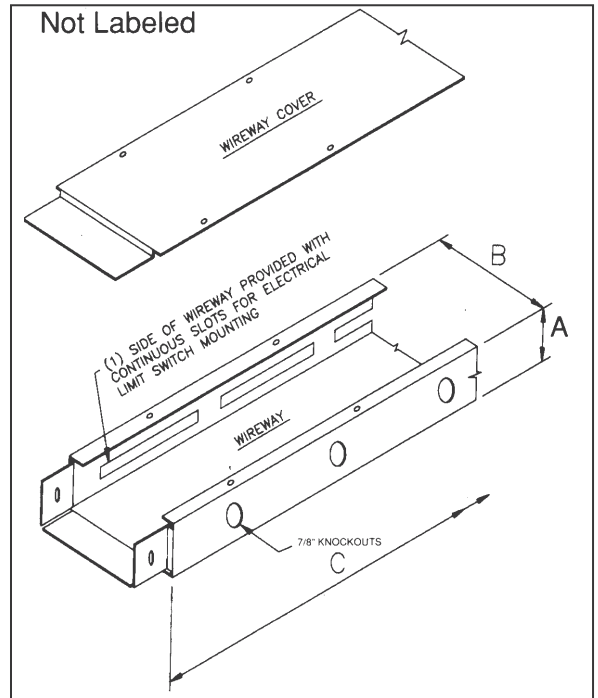
- Inside dimensions $-0 + 1/16"$
- Joints, corners, adjoining edges $\pm 1/64"$
- Screws & hole placement $\pm 1/64"$



Model CWL

Product Description (Prefix Model CWL or CW)

Model	Description	Dimensions (Inches)		
		A	B	C
CWL425.10	UL Labeled	2-1/2	4	120
CWL625.10	UL Labeled	2-1/2	6	120
CWL425.5	UL Labeled	2-1/2	4	60
CWL625.5	UL Labeled	2-1/2	6	60
CW425.10	Not Labeled	2-1/2	4	120
CW625.10	Not Labeled	2-1/2	6	120
CW425.5	Not Labeled	2-1/2	4	60
CW625.5	Not Labeled	2-1/2	6	60



Model CW

Tee's, Elbows, Connectors also available

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

WIRE ROPE CLAMPS, WRENCHES (PISTON), X-PANDO

WIRE ROPE CLAMPS

2 Groove Clamp

Allows for the shortening of hoist cables without having to hang the car or counterweights. Makes hoisting a canopy a breeze during new construction. Sizes are available for 5/8" and 1/2" cable.

Model WRCL5

- 1/2" cable

Model WRCL6

- 5/8" cable

6 Groove Cable Hoist

Specially designed clamp for tying off or hoisting up to six (6) cables. A "have to have it" tool for 2:1 cable jobs. Sizes are available to clamp 5/8" or 1/2" cable. (Please Specify)

Model WRCB5

- 1/2" cable

Model WRCB6

- 5/8" cable

Model WRC

Clevis for use with wire rope clamps.

- 12 ton capacity

Model WRCS

- 6-1/2 ton capacity



PISTON WRENCHES

Unique assembly tool for locking multiple section hydraulic plungers together, not only permits applying extreme torque but also protects the polished piston surface. Two required to achieve a tight joint.

Model CM50-3

- Range 2-3/4" - 4" Dia. pistons

Model CM50

- Range 4-1/2" - 8" Dia. pistons

Model CM50-2

- Range 9" - 16" Dia. pistons

X-PANDO

Pipe Joint Compound

Model XPPJ

- 1 lb. can
- When properly applied provides tight, leak-proof joints
- For use in metal and masonry surfaces
- Expands as it sets

QUALITY
ELEVATOR PRODUCTS, INC.

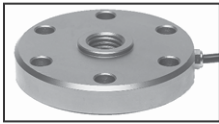
(847) 581-0085 • (800) 222-3688

Fax (847) 581-0095

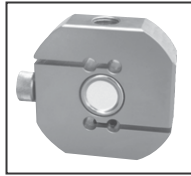
7760 N. Merrimac Ave. • Niles, IL 60714

WEIGHING DEVICES

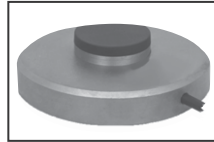
LOAD WEIGHING DEVICES



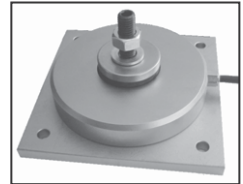
BPH
Load cell designed to measure load on hydraulic elevators between cabin frame and piston.



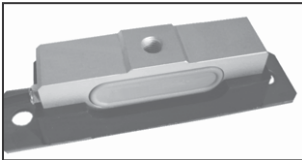
CTC
Load cell designed to measure load at traction machine frame



BPP
Load cell designed to measure load at traction machine or cab frame.



BPP-CB
Load cell designed to measure load at traction machine frame.

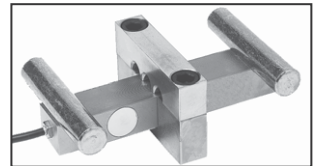


TCA
Load cell designed to measure load under the cab frame.

➡ **A VERSATILE LOAD WEIGHING & CONTROL SYSTEM FOR ANY ELEVATOR INSTALLATION**

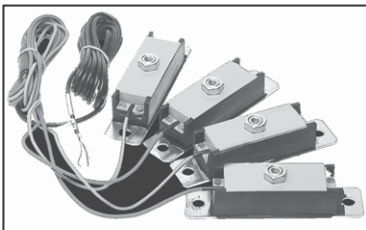
➡ **NOW YOU CAN MEASURE THE LOAD AT THE CAB, MACHINE ROOM OR HOIST ROPES**

➡ **INSTALL LOAD CELLS AT THE MOST CONVENIENT LOCATION**

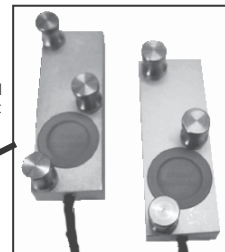
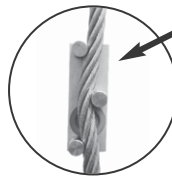


LC
Load cell designed to measure load from a set of elevator ropes/cables.

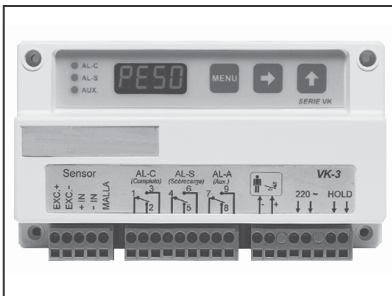
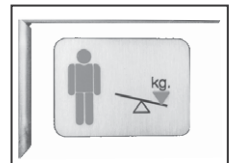
TCE
Load cell designed to measure load under the cab frame.



SW-D
Load cell designed to measure load at individual cables.



MB-D
Visual and sound progressive load display with stainless steel bezel.



VK
Programmable control for measuring and limiting cab loads using up to 16 load cells. Control can detect installation errors and can be DIN rail or panel mounted.

CALL FOR INFORMATION

**QUALITY
ELEVATOR** PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

WOODFOLD ACCORDION GATES

WOODFOLD GATE FEATURES

Woodfold Residential Elevator Accordion Gates are now available from Quality Elevator Products! Simply fill out the work sheet and fax for a quote!!

- Any Width
 - Heights to TenFeet
 - Meets ASME A17.1 (204.4F)
 - Two-week Manufacturing Time*
 - High pressure Laminates Offered
 - Solid Aluminum Panels Available
 - Special Hardware Available
 - Custom Finishes Available
- *See Shipping Schedule below

Tested for compliance

Woodfold accordion gates for elevators have been tested by an independent laboratory to comply with ASME A17.1. Section 204.4f "Strength of doors, gates and their guides." Gates have also been independently tested for ADA compliance (per ADA/BOMA sec. 4.1311) for opening load force.

Architectural Specifications

Residential Elevator Gate(s) shall be accordion-type, factory finished, with panels connected continuously along the top and bottom by a steel hardware hinge system. Individual hinges are to be riveted to those adjoining, and contain stops to maintain a uniform extended position. Extruded vinyl seals shall securely connect all adjoining panels top to bottom. Gates shall be suspended by nylon wheels from an aluminum overhead track. Bottom pins and lead post gib travel in floor guide (by elevator Mfg.). All necessary hardware and moldings shall be included for normal installation. Note: To comply with ADA requirements, certain applications may call for specific handle location placement and accessible finished opening widths.

Unique Hardware Hinge System.

The Woodfold top and bottom hardware hinge system eliminates the stretching of the vinyl panel connectors. Our roller system is riveted to the top steel hardware hinge system allowing doors to "stay put", whether in stacked or extended position. This metal hinge system provides rigidity and strength while the partition or door is fully extended.

Hardware Hinge Colors

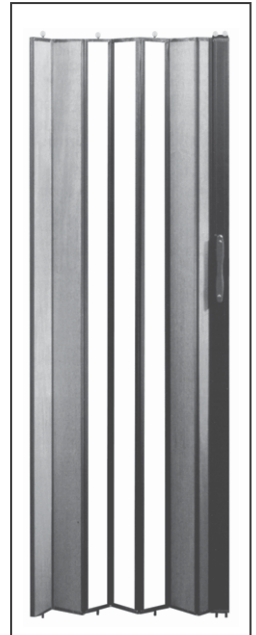
Clear finish supplied with Off-white, Chalk and Amethyst doors. Bronze finish supplied with all others. Gold available at optional cost.

Lead Posts | Visifold Side Channels

Vertical aluminum components are available in clear anodized, bronze, sand and white as standard, each is color coordinated with panel connector finish. Gold available at optional cost.

Panel Connectors

Color-coordinated, extruded vinyl, barbed and imbedded in saw kerfs in panel edges with special adhesives. Supplied as standard in the following colors: White and Off-white, Chalk and Amethyst vinyl; Sand with Hardwood Birch and Oak, Birch and Natural Oak vinyl, Tan, Tahiti and Rattan vinyl; Brown with all other vinyl or hardwood panels.



Guarantee

Woodfold Residential Elevator Gates are guaranteed against failure resulting from defective material and workmanship.

Shipping Schedule

All series with factory standard finishes, two weeks. Custom finishes, three weeks after color approval. All others, "check with factory."

QUALITY
ELEVATOR PRODUCTS, INC.

(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

WOODFOLD ORDER FORM



7760 Merrimac Avenue • Niles, Illinois • 60714
 847-581-0085 • Fax 847-581-0095 • www.qualityelevator.com

Elevator Door Quote Form

Ship To:

Date:

PO #

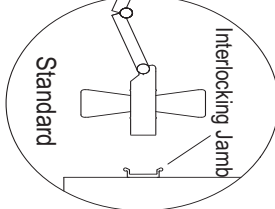
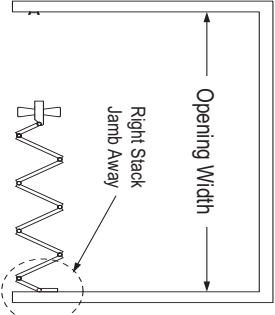
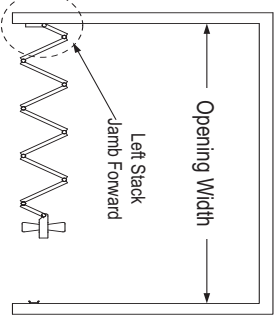
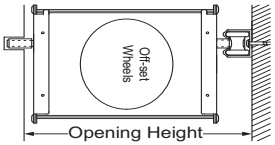
Sidemark

Ordered By

Phone

Size (Opening)		Series	Hardwoods	Vinyls	Latches	Options	Color						
Width	Height						Panel Connector	Track	Hard-ware	Sidestrips	Vis-ible		
Feet	Inches	1600 1600E/1600E	Cherry, Maple, Mahogany, Walnut (with Brown connector), Alder, Birch, Oak (with Sand connector), Special	Cherry, Dark Oak, Light Oak, Walnut, Mahogany, Teak (with brown connector), Oak, Amethyst, White (with White Silver connector), Birch, Maple, Natural Oak, Rattan, Teak, Tan (with Sand connector)	Magnet Thumb turn Two Sides	Left Stack Right Stack Jamb Forward Jamb Away Motorized Off-set Wheels Fire Core Lt Oak & Chalk	Brown Sand White Gray Gold (extra cost)	Bronze Clear Gold (extra cost)	Bronze Clear Gold (extra cost)	Bronze Clear Sand White Gold (extra cost)	Bronze Clear	Price	
Quantity													

VISIFOLD	Supply Sample for Special Stain / Paint	Special Instructions:	ALUMIFOLD
Acrylic Panel Placement	Indicate Hardware and Connector Colors Unfinished or Special Stain / Paint		
Quantity _____ Panel Starting _____ From Lead Post	Hinge Hardware Color Bronze Clear Gold		Panel Style Perforated Solid
	Panel Connector Color Brown Sand White		Panel Color Bronze Clear Gold



01/11/2016



(847) 581-0085 • (800) 222-3688
 Fax (847) 581-0095
 7760 N. Merrimac Ave. • Niles, IL 60714

ORDER FORM

Bill To _____

Ordered By _____

Special Instructions _____

Ship To _____

QTY.	MODEL NO.	DESCRIPTION	UNIT PRICE	TOTAL

Purchased By _____

Fax _____ Phone _____

Required Delivery _____ P.O.# _____



(847) 581-0085 • (800) 222-3688
Fax (847) 581-0095
7760 N. Merrimac Ave. • Niles, IL 60714

	DECIMAL	MM
	$\frac{1}{64}$	0.0156
	$\frac{2}{64}$	0.0312
	$\frac{3}{64}$	0.0468
$\frac{1}{16}$	$\frac{4}{64}$	0.0625
	$\frac{5}{64}$	0.0781
	$\frac{6}{64}$	0.0937
$\frac{1}{8}$	$\frac{7}{64}$	0.1093
	$\frac{8}{64}$	0.125
	$\frac{9}{64}$	0.1406
	$\frac{10}{64}$	0.1562
	$\frac{11}{64}$	0.1718
$\frac{3}{16}$	$\frac{12}{64}$	0.1875
	$\frac{13}{64}$	0.2031
	$\frac{14}{64}$	0.2187
	$\frac{15}{64}$	0.2343
$\frac{1}{4}$	$\frac{16}{64}$	0.250
	$\frac{17}{64}$	0.2656
	$\frac{18}{64}$	0.2812
	$\frac{19}{64}$	0.2968
$\frac{5}{16}$	$\frac{20}{64}$	0.3125
	$\frac{21}{64}$	0.3281
	$\frac{22}{64}$	0.3437
	$\frac{23}{64}$	0.3593
$\frac{3}{8}$	$\frac{24}{64}$	0.375
	$\frac{25}{64}$	0.3906
	$\frac{26}{64}$	0.4062
	$\frac{27}{64}$	0.4218
$\frac{7}{16}$	$\frac{28}{64}$	0.4375
	$\frac{29}{64}$	0.4531
	$\frac{30}{64}$	0.4687
	$\frac{31}{64}$	0.4843
$\frac{1}{2}$	$\frac{32}{64}$	0.500

	DECIMAL	MM
	$\frac{33}{64}$	0.5156
	$\frac{34}{64}$	0.5312
	$\frac{35}{64}$	0.5468
$\frac{9}{16}$	$\frac{36}{64}$	0.5625
	$\frac{37}{64}$	0.5781
	$\frac{38}{64}$	0.5937
$\frac{5}{8}$	$\frac{39}{64}$	0.6093
	$\frac{40}{64}$	0.625
	$\frac{41}{64}$	0.6406
	$\frac{42}{64}$	0.6562
	$\frac{43}{64}$	0.6718
$\frac{11}{16}$	$\frac{44}{64}$	0.6875
	$\frac{45}{64}$	0.7031
	$\frac{46}{64}$	0.7187
	$\frac{47}{64}$	0.7343
$\frac{3}{4}$	$\frac{48}{64}$	0.750
	$\frac{49}{64}$	0.7656
	$\frac{50}{64}$	0.7812
	$\frac{51}{64}$	0.7968
$\frac{13}{16}$	$\frac{52}{64}$	0.8125
	$\frac{53}{64}$	0.8281
	$\frac{54}{64}$	0.8437
	$\frac{55}{64}$	0.8593
$\frac{7}{8}$	$\frac{56}{64}$	0.875
	$\frac{57}{64}$	0.8906
	$\frac{58}{64}$	0.9062
	$\frac{59}{64}$	0.9218
$\frac{15}{16}$	$\frac{60}{64}$	0.9375
	$\frac{61}{64}$	0.9531
	$\frac{62}{64}$	0.9687
	$\frac{63}{64}$	0.9843
1	$\frac{64}{64}$	1.000



Access Elevator & Escalator Supply

POWERED BY



ACCESS IS ALWAYS AROUND

1-800-266-8654 | www.aesupply.com