

NOARK

AC-DC-Hotline.com/noark



Catalog

Contactors and Relays Manual Motor Starters



Excellent Products. Exceptional Value.

ABOUT US

NOARK Electric is a global manufacturer of low-voltage electrical components for industrial applications. We specialize in motor controls and circuit protection for original equipment manufacturers. Our mission is to provide customers with the highest quality products at an exceptional value and back them with world-class service and support. Every NOARK product is tested and certified to the highest industry standards and covered by our exclusive five-year limited warranty.

Research and Development

The entire portfolio of high-quality NOARK products is designed for manufacturing and assembly (DFMA). Each component is developed in-house by our engineering team to meet the strictest standards and performance requirements. This dedication to excellence has led to the development of patented technology found in many of our products.

World-class Manufacturing

After being thoroughly tested, approved and certified – each NOARK product is sent into production at our state-of-the-art manufacturing facilities. This allows us to maintain strict quality control standards throughout the manufacturing process. In addition, NOARK Electric adheres to a policy of environmental protection and sustainability.

North American Distribution

NOARK's distribution centers are located in Addison, TX and Kitchener, ON, with the aim of ensuring prompt and reliable deliveries of the entire product range to our customers all over North America. Our supply chain team works closely with our factories and logistics partners to ensure the availability of our products on the North American market and provide logistics services on the level which our customers expect. NOARK Electric is a subsidiary of the largest electrical manufacturing group in Asia with over 50 thousand employees and sales revenue of \$22 billion USD. We have corporate facilities in Texas, Shanghai and Prague to service the requirements of individual markets and countries.

140+

Countries

300+

Overseas Distributors

20

Overseas Subsidiaries

22

Logistics Centers

3

R & D Centers

10,000,000+

Sq.Ft. Manufacturing Space

50,000+

Employees Worldwide





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Ex9C IEC Contactors

Product Overview

Ex9C contactors are intended for various applications including heavy industrial loads. Nine frame sizes allows optimization of electrical parameters and mechanical dimensions. A range of overload relays are available in a variety of frame sizes to fit respective contactors of given rated current.

Design Features

- Nine frame sizes with rated current up to 1000A at 690Vac
- Coil control voltage available in AC and DC with ranges from 24~600V
- Wide range electronic coil available for 09~500A contactors features built-in surge suppression
- DIN rail 35mm and panel mountable

A

Certifications

- UL 508 Listed, File Number E353866, UL 60947-1 and 60947-4-X1
- Certified for Canada CSA standards 22.2 No.14 under cUL testing
- IEC/EN 60947-4-1
- CE Approved
- CCC Certified





Ex9C IEC Contactors

Product Label/Product Selection Guide

Ex9C Product Label



- 1 Brand
- 2 Product Selection
- 3 Label with UL logo, CE logo and data
- 4 Built-In Auxiliary Contact

Ex9C Product Selection Guide

Ex9C	S	R	09	D	10	A	7	W	B	G
NOARK Ex9C Series	Contactor Type	Function	Rated Current (AC-3)	Coil Type	Auxiliary Contacts	Control Voltage	Frequency	Prewired FVR	Main Power Contacts	Application
	Blank: Ex9C Standard (9~1000A) S: Ex9C Miniature (6~12A)	Blank: Full Voltage Non-Reversing (FVNR) R: Full Voltage Reversing (FVR)	06: 6A 09: 9A 12: 12A 18: 18A 25: 25A 32: 32A 38: 38A 40: 40A 50: 50A 65: 65A 80: 80A 100: 100A 115: 115A 150: 150A 185: 185A 225: 225A 265: 265A 300: 300A 400: 400A 500: 500A 630: 630A 800: 800A 1000: 1000A	Blank: AC D: DC* *:available on Miniature Contactor only E: Vac/dc (115~1000A) F: Wide Range Electronic Coil	10: 1NO (9CS Only) 01: 1NC (9CS Only) 11: 1NO+1NC (9~100A Only) 22: 2NO+2NC (09~38/115~1000A) Blank: no Aux (9CS only)	A: 12V B: 24V* C: 36V D: 42V E: 48V F: 110V G: 120V X: 208V M: 220V P: 230V U: 240V W: 250V N: 277V Q: 380V V: 400V Z: 415V R: 440V T: 480V S: 500V Y: 600V J: 24~60Vac/dc (only available for 09~100A) H: 48~130Vac/dc (not available for 630~1000A) K: 100~250Vac/dc L: 250~500Vac/dc (only available for 115~1000A)	7: 50/60Hz	W: 9~38A Prewired	Blank: 3NO B: 2NO+2NC (9CS Only) C: 4NO (9CS Only)	G: No top mounting accessories for special industry (115~1000A)

* Note: 24Vac is not available at 400A-1000A



Ex9C IEC Contactors

Products

Ex9CS 6A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Non-Reversing



A

Coil Voltage	6A • 3-pole				6A • 4-pole				
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		2NO+2NC		
	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	
Vac • 50/60Hz	24	Ex9CS0610B7	1320001	Ex9CS0601B7	1320055	Ex9CS06B7C	1320109	Ex9CS06B7B	1320415
	36	Ex9CS0610C7	1320002	Ex9CS0601C7	1320056	Ex9CS06C7C	1320110	Ex9CS06C7B	1320416
	42	Ex9CS0610D7	1320003	Ex9CS0601D7	1320057	Ex9CS06D7C	1320111	Ex9CS06D7B	1320417
	48	Ex9CS0610E7	1320004	Ex9CS0601E7	1320058	Ex9CS06E7C	1320112	Ex9CS06E7B	1320418
	110	Ex9CS0610F7	1320005	Ex9CS0601F7	1320059	Ex9CS06F7C	1320113	Ex9CS06F7B	1320419
	120	Ex9CS0610G7	1320006	Ex9CS0601G7	1320060	Ex9CS06G7C	1320114	Ex9CS06G7B	1320420
	208	Ex9CS0610X7	1320018	Ex9CS0601X7	1320072	Ex9CS06X7C	1320126	Ex9CS06X7B	1320432
	220	Ex9CS0610M7	1320007	Ex9CS0601M7	1320061	Ex9CS06M7C	1320115	Ex9CS06M7B	1320421
	230	Ex9CS0610P7	1320008	Ex9CS0601P7	1320062	Ex9CS06P7C	1320116	Ex9CS06P7B	1320422
	240	Ex9CS0610U7	1320010	Ex9CS0601U7	1320064	Ex9CS06U7C	1320118	Ex9CS06U7B	1320424
	277	Ex9CS0610N7	1320009	Ex9CS0601N7	1320063	Ex9CS06N7C	1320117	Ex9CS06N7B	1320423
	380	Ex9CS0610Q7	1320011	Ex9CS0601Q7	1320065	Ex9CS06Q7C	1320119	Ex9CS06Q7B	1320425
	400	Ex9CS0610V7	1320012	Ex9CS0601V7	1320066	Ex9CS06V7C	1320120	Ex9CS06V7B	1320426
	415	Ex9CS0610Z7	1320013	Ex9CS0601Z7	1320067	Ex9CS06Z7C	1320121	Ex9CS06Z7B	1320427
	440	Ex9CS0610R7	1320014	Ex9CS0601R7	1320068	Ex9CS06R7C	1320122	Ex9CS06R7B	1320428
	480	Ex9CS0610T7	1320015	Ex9CS0601T7	1320069	Ex9CS06T7C	1320123	Ex9CS06T7B	1320429
500	Ex9CS0610S7	1320016	Ex9CS0601S7	1320070	Ex9CS06S7C	1320124	Ex9CS06S7B	1320430	
Vdc	12	Ex9CS06D10A	1320325	Ex9CS06D01A	1320340	Ex9CS06DAC	1320355	Ex9CS06DAB	1320523
	24	Ex9CS06D10B	1320326	Ex9CS06D01B	1320341	Ex9CS06DBC	1320356	Ex9CS06DBB	1320524
	48	Ex9CS06D10E	1320327	Ex9CS06D01E	1320342	Ex9CS06DEC	1320357	Ex9CS06DEB	1320525
	110	Ex9CS06D10F	1320328	Ex9CS06D01F	1320343	Ex9CS06DFC	1320358	Ex9CS06DFB	1320526
	220	Ex9CS06D10M	1320329	Ex9CS06D01M	1320344	Ex9CS06DMC	1320359	Ex9CS06DMB	1320527
	250	Ex9CS06D10W	1320553	Ex9CS06D01W	1320556	Ex9CS06DWC	1320559	Ex9CS06DWB	1320571



Ex9C IEC Contactors

Products

Ex9CS 9A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Non-Reversing



Coil Voltage	9A • 3-pole				9A • 4-pole				
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		2NO+2NC		
	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	
Vac • 50/60Hz	24	Ex9CS0910B7	1320019	Ex9CS0901B7	1320073	Ex9CS09B7C	1320127	Ex9CS09B7B	1320433
	36	Ex9CS0910C7	1320020	Ex9CS0901C7	1320074	Ex9CS09C7C	1320128	Ex9CS09C7B	1320434
	42	Ex9CS0910D7	1320021	Ex9CS0901D7	1320075	Ex9CS09D7C	1320129	Ex9CS09D7B	1320435
	48	Ex9CS0910E7	1320022	Ex9CS0901E7	1320076	Ex9CS09E7C	1320130	Ex9CS09E7B	1320436
	110	Ex9CS0910F7	1320023	Ex9CS0901F7	1320077	Ex9CS09F7C	1320131	Ex9CS09F7B	1320437
	120	Ex9CS0910G7	1320024	Ex9CS0901G7	1320078	Ex9CS09G7C	1320132	Ex9CS09G7B	1320438
	208	Ex9CS0910X7	1320036	Ex9CS0901X7	1320090	Ex9CS09X7C	1320144	Ex9CS09X7B	1320450
	220	Ex9CS0910M7	1320025	Ex9CS0901M7	1320079	Ex9CS09M7C	1320133	Ex9CS09M7B	1320439
	230	Ex9CS0910P7	1320026	Ex9CS0901P7	1320080	Ex9CS09P7C	1320134	Ex9CS09P7B	1320440
	240	Ex9CS0910U7	1320028	Ex9CS0901U7	1320082	Ex9CS09U7C	1320136	Ex9CS09U7B	1320442
	277	Ex9CS0910N7	1320027	Ex9CS0901N7	1320081	Ex9CS09N7C	1320135	Ex9CS09N7B	1320441
	380	Ex9CS0910Q7	1320029	Ex9CS0901Q7	1320083	Ex9CS09Q7C	1320137	Ex9CS09Q7B	1320443
	400	Ex9CS0910V7	1320030	Ex9CS0901V7	1320084	Ex9CS09V7C	1320138	Ex9CS09V7B	1320444
	415	Ex9CS0910Z7	1320031	Ex9CS0901Z7	1320085	Ex9CS09Z7C	1320139	Ex9CS09Z7B	1320445
	440	Ex9CS0910R7	1320032	Ex9CS0901R7	1320086	Ex9CS09R7C	1320140	Ex9CS09R7B	1320446
	480	Ex9CS0910T7	1320033	Ex9CS0901T7	1320087	Ex9CS09T7C	1320141	Ex9CS09T7B	1320447
500	Ex9CS0910S7	1320034	Ex9CS0901S7	1320088	Ex9CS09S7C	1320142	Ex9CS09S7B	1320448	
Vdc	12	Ex9CS09D10A	1320330	Ex9CS09D01A	1320345	Ex9CS09DAC	1320360	Ex9CS09DAB	1320528
	24	Ex9CS09D10B	1320331	Ex9CS09D01B	1320346	Ex9CS09DBC	1320361	Ex9CS09DBB	1320529
	48	Ex9CS09D10E	1320332	Ex9CS09D01E	1320347	Ex9CS09DEC	1320362	Ex9CS09DEB	1320530
	110	Ex9CS09D10F	1320333	Ex9CS09D01F	1320348	Ex9CS09DFC	1320363	Ex9CS09DFB	1320531
	220	Ex9CS09D10M	1320334	Ex9CS09D01M	1320349	Ex9CS09DMC	1320364	Ex9CS09DMB	1320532
	250	Ex9CS09D10W	1320554	Ex9CS09D01W	1320557	Ex9CS09DWC	1320560	Ex9CS09DWB	1320572



Ex9C IEC Contactors

Products

Ex9CS 12A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Non-Reversing



A

Coil Voltage	12A • 3-pole				12A • 4-pole				
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		2NO+2NC		
	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	
Vac • 50/60Hz	24	Ex9CS1210B7	1320037	Ex9CS1201B7	1320091	Ex9CS12B7C	1320145	Ex9CS12B7B	1320451
	36	Ex9CS1210C7	1320038	Ex9CS1201C7	1320092	Ex9CS12C7C	1320146	Ex9CS12C7B	1320452
	42	Ex9CS1210D7	1320039	Ex9CS1201D7	1320093	Ex9CS12D7C	1320147	Ex9CS12D7B	1320453
	48	Ex9CS1210E7	1320040	Ex9CS1201E7	1320094	Ex9CS12E7C	1320148	Ex9CS12E7B	1320454
	110	Ex9CS1210F7	1320041	Ex9CS1201F7	1320095	Ex9CS12F7C	1320149	Ex9CS12F7B	1320455
	120	Ex9CS1210G7	1320042	Ex9CS1201G7	1320096	Ex9CS12G7C	1320150	Ex9CS12G7B	1320456
	208	Ex9CS1210X7	1320054	Ex9CS1201X7	1320108	Ex9CS12X7C	1320162	Ex9CS12X7B	1320468
	220	Ex9CS1210M7	1320043	Ex9CS1201M7	1320097	Ex9CS12M7C	1320151	Ex9CS12M7B	1320457
	230	Ex9CS1210P7	1320044	Ex9CS1201P7	1320098	Ex9CS12P7C	1320152	Ex9CS12P7B	1320458
	240	Ex9CS1210U7	1320046	Ex9CS1201U7	1320100	Ex9CS12U7C	1320154	Ex9CS12U7B	1320460
	277	Ex9CS1210N7	1320045	Ex9CS1201N7	1320099	Ex9CS12N7C	1320153	Ex9CS12N7B	1320459
	380	Ex9CS1210Q7	1320047	Ex9CS1201Q7	1320101	Ex9CS12Q7C	1320155	Ex9CS12Q7B	1320461
	400	Ex9CS1210V7	1320048	Ex9CS1201V7	1320102	Ex9CS12V7C	1320156	Ex9CS12V7B	1320462
	415	Ex9CS1210Z7	1320049	Ex9CS1201Z7	1320103	Ex9CS12Z7C	1320157	Ex9CS12Z7B	1320463
	440	Ex9CS1210R7	1320050	Ex9CS1201R7	1320104	Ex9CS12R7C	1320158	Ex9CS12R7B	1320464
	480	Ex9CS1210T7	1320051	Ex9CS1201T7	1320105	Ex9CS12T7C	1320159	Ex9CS12T7B	1320465
500	Ex9CS1210S7	1320052	Ex9CS1201S7	1320106	Ex9CS12S7C	1320160	Ex9CS12S7B	1320466	
Vdc	12	Ex9CS12D10A	1320335	Ex9CS12D01A	1320350	Ex9CS12DAC	1320365	Ex9CS12DAB	1320533
	24	Ex9CS12D10B	1320336	Ex9CS12D01B	1320351	Ex9CS12DBC	1320366	Ex9CS12DBB	1320534
	48	Ex9CS12D10E	1320337	Ex9CS12D01E	1320352	Ex9CS12DEC	1320367	Ex9CS12DEB	1320535
	110	Ex9CS12D10F	1320338	Ex9CS12D01F	1320353	Ex9CS12DFC	1320368	Ex9CS12DFB	1320536
	220	Ex9CS12D10M	1320339	Ex9CS12D01M	1320354	Ex9CS12DMC	1320369	Ex9CS12DMB	1320537
	250	Ex9CS12D10W	1320555	Ex9CS12D01W	1320558	Ex9CS12DWC	1320561	Ex9CS12DWB	1320573



Ex9C IEC Contactors

Products

Ex9C 9~12A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing



Coil Voltage	9A • 3-pole					12A • 3-pole			
	3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	
Vac • 50/60Hz	24	Ex9C0911B7	1320576	Ex9C0922B7	1320774	Ex9C1211B7	1320594	Ex9C1222B7	1320792
	36	Ex9C0911C7	1320577	Ex9C0922C7	1320775	Ex9C1211C7	1320595	Ex9C1222C7	1320793
	42	Ex9C0911D7	1320578	Ex9C0922D7	1320776	Ex9C1211D7	1320596	Ex9C1222D7	1320794
	48	Ex9C0911E7	1320579	Ex9C0922E7	1320777	Ex9C1211E7	1320597	Ex9C1222E7	1320795
	110	Ex9C0911F7	1320580	Ex9C0922F7	1320778	Ex9C1211F7	1320598	Ex9C1222F7	1320796
	120	Ex9C0911G7	1320581	Ex9C0922G7	1320779	Ex9C1211G7	1320599	Ex9C1222G7	1320797
	208	Ex9C0911X7	1320593	Ex9C0922X7	1320791	Ex9C1211X7	1320611	Ex9C1222X7	1320809
	220	Ex9C0911M7	1320582	Ex9C0922M7	1320780	Ex9C1211M7	1320600	Ex9C1222M7	1320798
	230	Ex9C0911P7	1320583	Ex9C0922P7	1320781	Ex9C1211P7	1320601	Ex9C1222P7	1320799
	240	Ex9C0911U7	1320585	Ex9C0922U7	1320783	Ex9C1211U7	1320603	Ex9C1222U7	1320801
	277	Ex9C0911N7	1320584	Ex9C0922N7	1320782	Ex9C1211N7	1320602	Ex9C1222N7	1320800
	380	Ex9C0911Q7	1320586	Ex9C0922Q7	1320784	Ex9C1211Q7	1320604	Ex9C1222Q7	1320802
	400	Ex9C0911V7	1320587	Ex9C0922V7	1320785	Ex9C1211V7	1320605	Ex9C1222V7	1320803
	415	Ex9C0911Z7	1320588	Ex9C0922Z7	1320786	Ex9C1211Z7	1320606	Ex9C1222Z7	1320804
	440	Ex9C0911R7	1320589	Ex9C0922R7	1320787	Ex9C1211R7	1320607	Ex9C1222R7	1320805
	480	Ex9C0911T7	1320590	Ex9C0922T7	1320788	Ex9C1211T7	1320608	Ex9C1222T7	1320806
500	Ex9C0911S7	1320591	Ex9C0922S7	1320789	Ex9C1211S7	1320609	Ex9C1222S7	1320807	
600	Ex9C0911Y7	1320592	Ex9C0922Y7	1320790	Ex9C1211Y7	1320610	Ex9C1222Y7	1320808	
Wide Range Electronic CoilVac/dc	24~60	Ex9C09F11J	1321846	Ex9C09F22J	1321864	Ex9C12F11J	1321847	Ex9C12F22J	1321865
	48~130	Ex9C09F11H	1321852	Ex9C09F22H	1321870	Ex9C12F11H	1321853	Ex9C12F22H	1321871
	100~250	Ex9C09F11K	1321858	Ex9C09F22K	1321876	Ex9C12F11K	1321859	Ex9C12F22K	1321877



Ex9C IEC Contactors

Products

Ex9C 18~25A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing



A

Coil Voltage		18A • 3-pole				25A • 3-pole			
		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact	
		Catalog number	Item number						
Vac • 50/60Hz	24	Ex9C1811B7	1320612	Ex9C1822B7	1320810	Ex9C2511B7	1320630	Ex9C2522B7	1320828
	36	Ex9C1811C7	1320613	Ex9C1822C7	1320811	Ex9C2511C7	1320631	Ex9C2522C7	1320829
	42	Ex9C1811D7	1320614	Ex9C1822D7	1320812	Ex9C2511D7	1320632	Ex9C2522D7	1320830
	48	Ex9C1811E7	1320615	Ex9C1822E7	1320813	Ex9C2511E7	1320633	Ex9C2522E7	1320831
	110	Ex9C1811F7	1320616	Ex9C1822F7	1320814	Ex9C2511F7	1320634	Ex9C2522F7	1320832
	120	Ex9C1811G7	1320617	Ex9C1822G7	1320815	Ex9C2511G7	1320635	Ex9C2522G7	1320833
	208	Ex9C1811X7	1320629	Ex9C1822X7	1320827	Ex9C2511X7	1320647	Ex9C2522X7	1320845
	220	Ex9C1811M7	1320618	Ex9C1822M7	1320816	Ex9C2511M7	1320636	Ex9C2522M7	1320834
	230	Ex9C1811P7	1320619	Ex9C1822P7	1320817	Ex9C2511P7	1320637	Ex9C2522P7	1320835
	240	Ex9C1811U7	1320621	Ex9C1822U7	1320819	Ex9C2511U7	1320639	Ex9C2522U7	1320837
	277	Ex9C1811N7	1320620	Ex9C1822N7	1320818	Ex9C2511N7	1320638	Ex9C2522N7	1320836
	380	Ex9C1811Q7	1320622	Ex9C1822Q7	1320820	Ex9C2511Q7	1320640	Ex9C2522Q7	1320838
	400	Ex9C1811V7	1320623	Ex9C1822V7	1320821	Ex9C2511V7	1320641	Ex9C2522V7	1320839
	415	Ex9C1811Z7	1320624	Ex9C1822Z7	1320822	Ex9C2511Z7	1320642	Ex9C2522Z7	1320840
	440	Ex9C1811R7	1320625	Ex9C1822R7	1320823	Ex9C2511R7	1320643	Ex9C2522R7	1320841
480	Ex9C1811T7	1320626	Ex9C1822T7	1320824	Ex9C2511T7	1320644	Ex9C2522T7	1320842	
500	Ex9C1811S7	1320627	Ex9C1822S7	1320825	Ex9C2511S7	1320645	Ex9C2522S7	1320843	
600	Ex9C1811Y7	1320628	Ex9C1822Y7	1320826	Ex9C2511Y7	1320646	Ex9C2522Y7	1320844	
Wide Range Electronic CoilVac/dc	24~60	Ex9C18F11J	1321848	Ex9C18F22J	1321866	Ex9C25F11J	1321849	Ex9C25F22J	1321867
	48~130	Ex9C18F11H	1321854	Ex9C18F22H	1321872	Ex9C25F11H	1321855	Ex9C25F22H	1321873
	100~250	Ex9C18F11K	1321860	Ex9C18F22K	1321878	Ex9C25F11K	1321861	Ex9C25F22K	1321879



Ex9C IEC Contactors

Products

Ex9C 32~38A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing



Coil Voltage	32A • 3-pole				38A • 3-pole				
	3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Catalog number	Item number							
Vac • 50/60Hz	24	Ex9C3211B7	1320648	Ex9C3222B7	1320846	Ex9C3811B7	1320666	Ex9C3822B7	1320864
	36	Ex9C3211C7	1320649	Ex9C3222C7	1320847	Ex9C3811C7	1320667	Ex9C3822C7	1320865
	42	Ex9C3211D7	1320650	Ex9C3222D7	1320848	Ex9C3811D7	1320668	Ex9C3822D7	1320866
	48	Ex9C3211E7	1320651	Ex9C3222E7	1320849	Ex9C3811E7	1320669	Ex9C3822E7	1320867
	110	Ex9C3211F7	1320652	Ex9C3222F7	1320850	Ex9C3811F7	1320670	Ex9C3822F7	1320868
	120	Ex9C3211G7	1320653	Ex9C3222G7	1320851	Ex9C3811G7	1320671	Ex9C3822G7	1320869
	208	Ex9C3211X7	1320665	Ex9C3222X7	1320863	Ex9C3811X7	1320683	Ex9C3822X7	1320881
	220	Ex9C3211M7	1320654	Ex9C3222M7	1320852	Ex9C3811M7	1320672	Ex9C3822M7	1320870
	230	Ex9C3211P7	1320655	Ex9C3222P7	1320853	Ex9C3811P7	1320673	Ex9C3822P7	1320871
	240	Ex9C3211U7	1320657	Ex9C3222U7	1320855	Ex9C3811U7	1320675	Ex9C3822U7	1320873
	277	Ex9C3211N7	1320656	Ex9C3222N7	1320854	Ex9C3811N7	1320674	Ex9C3822N7	1320872
	380	Ex9C3211Q7	1320658	Ex9C3222Q7	1320856	Ex9C3811Q7	1320676	Ex9C3822Q7	1320874
	400	Ex9C3211V7	1320659	Ex9C3222V7	1320857	Ex9C3811V7	1320677	Ex9C3822V7	1320875
	415	Ex9C3211Z7	1320660	Ex9C3222Z7	1320858	Ex9C3811Z7	1320678	Ex9C3822Z7	1320876
	440	Ex9C3211R7	1320661	Ex9C3222R7	1320859	Ex9C3811R7	1320679	Ex9C3822R7	1320877
	480	Ex9C3211T7	1320662	Ex9C3222T7	1320860	Ex9C3811T7	1320680	Ex9C3822T7	1320878
500	Ex9C3211S7	1320663	Ex9C3222S7	1320861	Ex9C3811S7	1320681	Ex9C3822S7	1320879	
600	Ex9C3211Y7	1320664	Ex9C3222Y7	1320862	Ex9C3811Y7	1320682	Ex9C3822Y7	1320880	
Wide Range Electronic CoilVac/dc	24~60	Ex9C32F11J	1321850	Ex9C32F22J	1321868	Ex9C38F11J	1321851	Ex9C38F22J	1321869
	48~130	Ex9C32F11H	1321856	Ex9C32F22H	1321874	Ex9C38F11H	1321857	Ex9C38F22H	1321875
	100~250	Ex9C32F11K	1321862	Ex9C32F22K	1321880	Ex9C38F11K	1321863	Ex9C38F22K	1321881



Ex9C IEC Contactors

Products

Ex9C 40~100A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing



A

Coil Voltage	40A • 3-pole		50A • 3-pole		65A • 3-pole		80A • 3-pole		100A • 3-pole		
	3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		
	Catalog number	Item number									
Vac • 50/60Hz	24	Ex9C4011B7	1320684	Ex9C5011B7	1320702	Ex9C6511B7	1320720	Ex9C8011B7	1320738	Ex9C10011B7	1320756
	36	Ex9C4011C7	1320685	Ex9C5011C7	1320703	Ex9C6511C7	1320721	Ex9C8011C7	1320739	Ex9C10011C7	1320757
	42	Ex9C4011D7	1320686	Ex9C5011D7	1320704	Ex9C6511D7	1320722	Ex9C8011D7	1320740	Ex9C10011D7	1320758
	48	Ex9C4011E7	1320687	Ex9C5011E7	1320705	Ex9C6511E7	1320723	Ex9C8011E7	1320741	Ex9C10011E7	1320759
	110	Ex9C4011F7	1320688	Ex9C5011F7	1320706	Ex9C6511F7	1320724	Ex9C8011F7	1320742	Ex9C10011F7	1320760
	120	Ex9C4011G7	1320689	Ex9C5011G7	1320707	Ex9C6511G7	1320725	Ex9C8011G7	1320743	Ex9C10011G7	1320761
	208	Ex9C4011X7	1320701	Ex9C5011X7	1320719	Ex9C6511X7	1320737	Ex9C8011X7	1320755	Ex9C10011X7	1320773
	220	Ex9C4011M7	1320690	Ex9C5011M7	1320708	Ex9C6511M7	1320726	Ex9C8011M7	1320744	Ex9C10011M7	1320762
	230	Ex9C4011P7	1320691	Ex9C5011P7	1320709	Ex9C6511P7	1320727	Ex9C8011P7	1320745	Ex9C10011P7	1320763
	240	Ex9C4011U7	1320693	Ex9C5011U7	1320711	Ex9C6511U7	1320729	Ex9C8011U7	1320747	Ex9C10011U7	1320765
	277	Ex9C4011N7	1320692	Ex9C5011N7	1320710	Ex9C6511N7	1320728	Ex9C8011N7	1320746	Ex9C10011N7	1320764
	380	Ex9C4011Q7	1320694	Ex9C5011Q7	1320712	Ex9C6511Q7	1320730	Ex9C8011Q7	1320748	Ex9C10011Q7	1320766
	400	Ex9C4011V7	1320695	Ex9C5011V7	1320713	Ex9C6511V7	1320731	Ex9C8011V7	1320749	Ex9C10011V7	1320767
	415	Ex9C4011Z7	1320696	Ex9C5011Z7	1320714	Ex9C6511Z7	1320732	Ex9C8011Z7	1320750	Ex9C10011Z7	1320768
	440	Ex9C4011R7	1320697	Ex9C5011R7	1320715	Ex9C6511R7	1320733	Ex9C8011R7	1320751	Ex9C10011R7	1320769
480	Ex9C4011T7	1320698	Ex9C5011T7	1320716	Ex9C6511T7	1320734	Ex9C8011T7	1320752	Ex9C10011T7	1320770	
500	Ex9C4011S7	1320699	Ex9C5011S7	1320717	Ex9C6511S7	1320735	Ex9C8011S7	1320753	Ex9C10011S7	1320771	
600	Ex9C4011Y7	1320700	Ex9C5011Y7	1320718	Ex9C6511Y7	1320736	Ex9C8011Y7	1320754	Ex9C10011Y7	1320772	
Wide Range Electronic Coil/Vac/dc	24~60	Ex9C40F11J	1321936	Ex9C50F11J	1321939	Ex9C65F11J	1321942	Ex9C80F11J	1321945	Ex9C100F11J	1321948
	48~130	Ex9C40F11H	1321937	Ex9C50F11H	1321940	Ex9C65F11H	1321943	Ex9C80F11H	1321946	Ex9C100F11H	1321949
	100~250	Ex9C40F11K	1321938	Ex9C50F11K	1321941	Ex9C65F11K	1321944	Ex9C80F11K	1321947	Ex9C100F11K	1321950

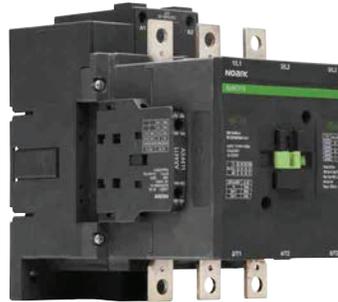


Ex9C IEC Contactors

Products

Ex9C 115~225A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing



Coil Voltage	115A • 3-pole		150A • 3-pole		185A • 3-pole		225A • 3-pole		
	3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Catalog number	Item number							
Vac/dc	24	Ex9C115E22B	1321316	Ex9C150E22B	1321331	Ex9C185E22B	1321346	Ex9C225E22B	1321361
	36	Ex9C115E22C	1321317	Ex9C150E22C	1321332	Ex9C185E22C	1321347	Ex9C225E22C	1321362
	42	Ex9C115E22D	1321318	Ex9C150E22D	1321333	Ex9C185E22D	1321348	Ex9C225E22D	1321363
	48	Ex9C115E22E	1321319	Ex9C150E22E	1321334	Ex9C185E22E	1321349	Ex9C225E22E	1321364
	110	Ex9C115E22F	1321320	Ex9C150E22F	1321335	Ex9C185E22F	1321350	Ex9C225E22F	1321365
	120	Ex9C115E22G	1321321	Ex9C150E22G	1321336	Ex9C185E22G	1321351	Ex9C225E22G	1321366
	208	Ex9C115E22X	1321324	Ex9C150E22X	1321339	Ex9C185E22X	1321354	Ex9C225E22X	1321369
	220	Ex9C115E22M	1321322	Ex9C150E22M	1321337	Ex9C185E22M	1321352	Ex9C225E22M	1321367
	230	Ex9C115E22P	1321323	Ex9C150E22P	1321338	Ex9C185E22P	1321353	Ex9C225E22P	1321368
	240	Ex9C115E22U	1321325	Ex9C150E22U	1321340	Ex9C185E22U	1321355	Ex9C225E22U	1321370
	277	Ex9C115E22N	1321328	Ex9C150E22N	1321643	Ex9C185E22N	1321358	Ex9C225E22N	1321644
	380	Ex9C115E22Q	1321326	Ex9C150E22Q	1321341	Ex9C185E22Q	1321356	Ex9C225E22Q	1321371
	400	Ex9C115E22V	1321327	Ex9C150E22V	1321342	Ex9C185E22V	1321357	Ex9C225E22V	1321372
	415	Ex9C115E22Z	1321651	Ex9C150E22Z	1321343	Ex9C185E22Z	1321653	Ex9C225E22Z	1321373
480	Ex9C115E22T	1321329	Ex9C150E22T	1321344	Ex9C185E22T	1321359	Ex9C225E22T	1321374	
600	Ex9C115E22Y	1321330	Ex9C150E22Y	1321345	Ex9C185E22Y	1321360	Ex9C225E22Y	1321375	
Wide Range Electronic Coil Vac/dc	48~130	Ex9C115F22H	1321434	Ex9C150F22H	1321437	Ex9C185F22H	1321440	Ex9C225F22H	1321443
	100~250	Ex9C115F22K	1321435	Ex9C150F22K	1321438	Ex9C185F22K	1321441	Ex9C225F22K	1321444
	250~500	Ex9C115F22L	1321436	Ex9C150F22L	1321439	Ex9C185F22L	1321442	Ex9C225F22L	1321445



Ex9C IEC Contactors

Products

Ex9C 265~500A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing



A

Coil Voltage	265A • 3-pole		300A • 3-pole		400A • 3-pole		500A • 3-pole		
	3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Catalog number	Item number							
Vac/dc	24	Ex9C265E22B	1321376	Ex9C300E22B	1321391	-	-	-	-
	36	Ex9C265E22C	1321377	Ex9C300E22C	1321392	Ex9C400E22C	1321406	Ex9C500E22C	1321420
	42	Ex9C265E22D	1321378	Ex9C300E22D	1321393	Ex9C400E22D	1321407	Ex9C500E22D	1321421
	48	Ex9C265E22E	1321379	Ex9C300E22E	1321394	Ex9C400E22E	1321408	Ex9C500E22E	1321422
	110	Ex9C265E22F	1321380	Ex9C300E22F	1321395	Ex9C400E22F	1321409	Ex9C500E22F	1321423
	120	Ex9C265E22G	1321381	Ex9C300E22G	1321396	Ex9C400E22G	1321410	Ex9C500E22G	1321424
	208	Ex9C265E22X	1321384	Ex9C300E22X	1321399	Ex9C400E22X	1321413	Ex9C500E22X	1321427
	220	Ex9C265E22M	1321382	Ex9C300E22M	1321397	Ex9C400E22M	1321411	Ex9C500E22M	1321425
	230	Ex9C265E22P	1321383	Ex9C300E22P	1321398	Ex9C400E22P	1321412	Ex9C500E22P	1321426
	240	Ex9C265E22U	1321385	Ex9C300E22U	1321400	Ex9C400E22U	1321414	Ex9C500E22U	1321428
	277	Ex9C265E22N	1321388	Ex9C300E22N	1321645	Ex9C400E22N	1321417	Ex9C500E22N	1321646
	380	Ex9C265E22Q	1321386	Ex9C300E22Q	1321401	Ex9C400E22Q	1321415	Ex9C500E22Q	1321429
	400	Ex9C265E22V	1321387	Ex9C300E22V	1321402	Ex9C400E22V	1321416	Ex9C500E22V	1321430
	415	Ex9C265E22Z	1321654	Ex9C300E22Z	1321403	Ex9C400E22Z	1321655	Ex9C500E22Z	1321431
	480	Ex9C265E22T	1321389	Ex9C300E22T	1321404	Ex9C400E22T	1321418	Ex9C500E22T	1321432
600	Ex9C265E22Y	1321390	Ex9C300E22Y	1321405	Ex9C400E22Y	1321419	Ex9C500E22Y	1321433	
Wide Range Electronic CoilVac/dc	48~130	Ex9C265F22H	1321446	Ex9C300F22H	1321449	Ex9C400F22H	1321452	Ex9C500F22H	1321455
	100~250	Ex9C265F22K	1321447	Ex9C300F22K	1321450	Ex9C400F22K	1321453	Ex9C500F22K	1321456
	250~500	Ex9C265F22L	1321448	Ex9C300F22L	1321451	Ex9C400F22L	1321454	Ex9C500F22L	1321457



Ex9C IEC Contactors

Products

Ex9C 630~1,000A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing



Coil Voltage		630A • 3-pole		800A • 3-pole		1,000A • 3-pole	
		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact	
		Catalog number	Item number	Catalog number	Item number	Catalog number	Item number
Vac/dc	48	Ex9C630E22EG	1321807	Ex9C800E22EG	1321819	Ex9C1000E22EG	1321831
	110	Ex9C630E22FG	1321808	Ex9C800E22FG	1321820	Ex9C1000E22FG	1321832
	120	Ex9C630E22GG	1321809	Ex9C800E22GG	1321821	Ex9C1000E22GG	1321833
	220	Ex9C630E22MG	1321811	Ex9C800E22MG	1321823	Ex9C1000E22MG	1321835
	230	Ex9C630E22PG	1321812	Ex9C800E22PG	1321824	Ex9C1000E22PG	1321836
	240	Ex9C630E22UG	1321813	Ex9C800E22UG	1321825	Ex9C1000E22UG	1321837
	277	Ex9C630E22NG	1321815	Ex9C800E22NG	1321827	Ex9C1000E22NG	1321839
	380	Ex9C630E22QG	1321816	Ex9C800E22QG	1321828	Ex9C1000E22QG	1321840
	400	Ex9C630E22VG	1321817	Ex9C800E22VG	1321829	Ex9C1000E22VG	1321841
	415	Ex9C630E22ZG	1321818	Ex9C800E22ZG	1321830	Ex9C1000E22ZG	1321842
480	EX9C630E22TG	1321843	EX9C800E22TG	1321844	EX9C1000E22TG	1321845	
Wide Range Electronic CoilVac/dc	100~250	EX9C630F22K	1321229	EX9C800F22K	1321232	EX9C1000F22K	1321235
	250~500	EX9C630F22L	1321230	EX9C800F22L	1321233	EX9C1000F22L	1321236



Ex9C IEC Contactors

Products

Ex9C 6A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Pre-wired reversible contactors



A

Coil Voltage	6A • 3-pole				6A • 4-pole		
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		
	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	
Vac • 50/60Hz	24	Ex9CSR0610B7W	1322078	Ex9CSR0601B7W	1322101	Ex9CSR06B7CW	1322123
	36	Ex9CSR0610C7W	1322079	Ex9CSR0601C7W	1322102	Ex9CSR06C7CW	1322124
	42	Ex9CSR0610D7W	1322080	Ex9CSR0601D7W	1322103	Ex9CSR06D7CW	1322125
	48	Ex9CSR0610E7W	1322081	Ex9CSR0601E7W	1322104	Ex9CSR06E7CW	1322126
	110	Ex9CSR0610F7W	1322082	Ex9CSR0601F7W	1322105	Ex9CSR06F7CW	1322127
	120	Ex9CSR0610G7W	1322083	Ex9CSR0601G7W	1322106	Ex9CSR06G7CW	1322128
	208	Ex9CSR0610X7W	1322084	Ex9CSR0601X7W	1322107	Ex9CSR06X7CW	1322129
	220	Ex9CSR0610M7W	1322085	Ex9CSR0601M7W	1322108	Ex9CSR06M7CW	1322130
	230	Ex9CSR0610P7W	1322086	Ex9CSR0601P7W	1322109	Ex9CSR06P7CW	1322131
	240	Ex9CSR0610U7W	1322087	Ex9CSR0601U7W	1322110	Ex9CSR06U7CW	1322132
	277	Ex9CSR0610N7W	1322088	Ex9CSR0601N7W	1322111	Ex9CSR06N7CW	1322133
	380	Ex9CSR0610Q7W	1322089	Ex9CSR0601Q7W	1322112	Ex9CSR06Q7CW	1322134
	400	Ex9CSR0610V7W	1322090	Ex9CSR0601V7W	1322113	Ex9CSR06V7CW	1322135
	415	Ex9CSR0610Z7W	1322091	Ex9CSR0601Z7W	1322114	Ex9CSR06Z7CW	1322136
	440	Ex9CSR0610R7W	1322092	Ex9CSR0601R7W	1322115	Ex9CSR06R7CW	1322137
	480	Ex9CSR0610T7W	1322093	Ex9CSR0601T7W	1322116	Ex9CSR06T7CW	1322138
	500	Ex9CSR0610S7W	1322094	Ex9CSR0601S7W	1322117	Ex9CSR06S7CW	1322139
	Vdc	12	Ex9CSR06D10AW	1322095	-	-	Ex9CSR06DACW
24		Ex9CSR06D10BW	1322096	Ex9CSR06D01BW	1322118	Ex9CSR06DBCW	1322141
48		Ex9CSR06D10EW	1322097	Ex9CSR06D01EW	1322119	Ex9CSR06DECW	1322142
110		Ex9CSR06D10FW	1322098	Ex9CSR06D01FW	1322120	Ex9CSR06DFCW	1322143
220		Ex9CSR06D10MW	1322099	Ex9CSR06D01MW	1322121	Ex9CSR06DMCW	1322144
250		Ex9CSR06D10WW	1322100	Ex9CSR06D01WW	1322122	Ex9CSR06DWCW	1322145

Note: Please contact sales if you need non pre-wired reversible contactors



Ex9C IEC Contactors

Products

Ex9CSR 9A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Pre-wired reversible contactors



Coil Voltage	9A • 3-pole				9A • 4-pole		
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		
	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	
Vac • 50/60Hz	24	Ex9CSR0910B7W	1322146	Ex9CSR0901B7W	1322169	Ex9CSR09B7CW	1322192
	36	Ex9CSR0910C7W	1322147	Ex9CSR0901C7W	1322170	Ex9CSR09C7CW	1322193
	42	Ex9CSR0910D7W	1322148	Ex9CSR0901D7W	1322171	Ex9CSR09D7CW	1322194
	48	Ex9CSR0910E7W	1322149	Ex9CSR0901E7W	1322172	Ex9CSR09E7CW	1322195
	110	Ex9CSR0910F7W	1322150	Ex9CSR0901F7W	1322173	Ex9CSR09F7CW	1322196
	120	Ex9CSR0910G7W	1322151	Ex9CSR0901G7W	1322174	Ex9CSR09G7CW	1322197
	208	Ex9CSR0910X7W	1322152	Ex9CSR0901X7W	1322175	Ex9CSR09X7CW	1322198
	220	Ex9CSR0910M7W	1322153	Ex9CSR0901M7W	1322176	Ex9CSR09M7CW	1322199
	230	Ex9CSR0910P7W	1322154	Ex9CSR0901P7W	1322177	Ex9CSR09P7CW	1322200
	240	Ex9CSR0910U7W	1322155	Ex9CSR0901U7W	1322178	Ex9CSR09U7CW	1322201
	277	Ex9CSR0910N7W	1322156	Ex9CSR0901N7W	1322179	Ex9CSR09N7CW	1322202
	380	Ex9CSR0910Q7W	1322157	Ex9CSR0901Q7W	1322180	Ex9CSR09Q7CW	1322203
	400	Ex9CSR0910V7W	1322158	Ex9CSR0901V7W	1322181	Ex9CSR09V7CW	1322204
	415	Ex9CSR0910Z7W	1322159	Ex9CSR0901Z7W	1322182	Ex9CSR09Z7CW	1322205
	440	Ex9CSR0910R7W	1322160	Ex9CSR0901R7W	1322183	Ex9CSR09R7CW	1322206
480	Ex9CSR0910T7W	1322161	Ex9CSR0901T7W	1322184	Ex9CSR09T7CW	1322207	
500	Ex9CSR0910S7W	1322162	Ex9CSR0901S7W	1322185	Ex9CSR09S7CW	1322208	
Vdc	12	Ex9CSR09D10AW	1322163	Ex9CSR09D01AW	1322186	Ex9CSR09DACW	1322209
	24	Ex9CSR09D10BW	1322164	Ex9CSR09D01BW	1322187	Ex9CSR09DBCW	1322210
	48	Ex9CSR09D10EW	1322165	Ex9CSR09D01EW	1322188	Ex9CSR09DECW	1322211
	110	Ex9CSR09D10FW	1322166	Ex9CSR09D01FW	1322189	Ex9CSR09DFCW	1322212
	220	Ex9CSR09D10MW	1322167	Ex9CSR09D01MW	1322190	Ex9CSR09DMCW	1322213
	250	Ex9CSR09D10WW	1322168	Ex9CSR09D01WW	1322191	Ex9CSR09DWCW	1322214

Note: Please contact sales if you need non pre-wired reversible contactors



Ex9C IEC Contactors

Products

Ex9CSR 12A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Pre-wired reversible contactors



A

Coil Voltage	12A • 3-pole				12A • 4-pole		
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		
	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	
Vac • 50/60Hz	24	Ex9CSR1210B7W	1322215	Ex9CSR1201B7W	1322238	Ex9CSR12B7CW	1322260
	36	Ex9CSR1210C7W	1322216	Ex9CSR1201C7W	1322239	Ex9CSR12C7CW	1322261
	42	Ex9CSR1210D7W	1322217	Ex9CSR1201D7W	1322240	Ex9CSR12D7CW	1322262
	48	Ex9CSR1210E7W	1322218	Ex9CSR1201E7W	1322241	Ex9CSR12E7CW	1322263
	110	Ex9CSR1210F7W	1322219	Ex9CSR1201F7W	1322242	Ex9CSR12F7CW	1322264
	120	Ex9CSR1210G7W	1322220	Ex9CSR1201G7W	1322243	Ex9CSR12G7CW	1322265
	208	Ex9CSR1210X7W	1322221	Ex9CSR1201X7W	1322244	Ex9CSR12X7CW	1322266
	220	Ex9CSR1210M7W	1322222	Ex9CSR1201M7W	1322245	Ex9CSR12M7CW	1322267
	230	Ex9CSR1210P7W	1322223	Ex9CSR1201P7W	1322246	Ex9CSR12P7CW	1322268
	240	Ex9CSR1210U7W	1322224	Ex9CSR1201U7W	1322247	Ex9CSR12U7CW	1322269
	277	Ex9CSR1210N7W	1322225	Ex9CSR1201N7W	1322248	Ex9CSR12N7CW	1322270
	380	Ex9CSR1210Q7W	1322226	Ex9CSR1201Q7W	1322249	Ex9CSR12Q7CW	1322271
	400	Ex9CSR1210V7W	1322227	Ex9CSR1201V7W	1322250	Ex9CSR12V7CW	1322272
	415	Ex9CSR1210Z7W	1322228	Ex9CSR1201Z7W	1322251	Ex9CSR12Z7CW	1322273
	440	Ex9CSR1210R7W	1322229	Ex9CSR1201R7W	1322252	Ex9CSR12R7CW	1322274
	480	Ex9CSR1210T7W	1322230	Ex9CSR1201T7W	1322253	Ex9CSR12T7CW	1322275
	500	Ex9CSR1210S7W	1322231	Ex9CSR1201S7W	1322254	Ex9CSR12S7CW	1322276
Vdc	12	Ex9CSR12D10AW	1322232	-	-	Ex9CSR12DACW	1322277
	24	Ex9CSR12D10BW	1322233	Ex9CSR12D01BW	1322255	Ex9CSR12DBCW	1322278
	48	Ex9CSR12D10EW	1322234	Ex9CSR12D01EW	1322256	Ex9CSR12DECW	1322279
	110	Ex9CSR12D10FW	1322235	Ex9CSR12D01FW	1322257	Ex9CSR12DFCW	1322280
	220	Ex9CSR12D10MW	1322236	Ex9CSR12D01MW	1322258	Ex9CSR12DMCW	1322281
	250	Ex9CSR12D10WW	1322237	Ex9CSR12D01WW	1322259	Ex9CSR12DWCW	1322282

Note: Please contact sales if you need non pre-wired reversible contactors



Ex9C IEC Contactors

Products

Ex9CR 9~12A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Pre-wired reversible contactors



Coil Voltage	9A • 3-pole				12A • 3-pole				
	3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Catalog number	Item number							
Vac • 50/60Hz	24	Ex9CR0911B7W	1322283	Ex9CR0922B7W	1322301	Ex9CR1211B7W	1322319	Ex9CR1222B7W	1322337
	36	Ex9CR0911C7W	1322284	Ex9CR0922C7W	1322302	Ex9CR1211C7W	1322320	Ex9CR1222C7W	1322338
	42	Ex9CR0911D7W	1322285	Ex9CR0922D7W	1322303	Ex9CR1211D7W	1322321	Ex9CR1222D7W	1322339
	48	Ex9CR0911E7W	1322286	Ex9CR0922E7W	1322304	Ex9CR1211E7W	1322322	Ex9CR1222E7W	1322340
	110	Ex9CR0911F7W	1322287	Ex9CR0922F7W	1322305	Ex9CR1211F7W	1322323	Ex9CR1222F7W	1322341
	120	Ex9CR0911G7W	1322288	Ex9CR0922G7W	1322306	Ex9CR1211G7W	1322324	Ex9CR1222G7W	1322342
	208	Ex9CR0911X7W	1322289	Ex9CR0922X7W	1322307	Ex9CR1211X7W	1322325	Ex9CR1222X7W	1322343
	220	Ex9CR0911M7W	1322290	Ex9CR0922M7W	1322308	Ex9CR1211M7W	1322326	Ex9CR1222M7W	1322344
	230	Ex9CR0911P7W	1322291	Ex9CR0922P7W	1322309	Ex9CR1211P7W	1322327	Ex9CR1222P7W	1322345
	240	Ex9CR0911U7W	1322292	Ex9CR0922U7W	1322310	Ex9CR1211U7W	1322328	Ex9CR1222U7W	1322346
	277	Ex9CR0911N7W	1322293	Ex9CR0922N7W	1322311	Ex9CR1211N7W	1322329	Ex9CR1222N7W	1322347
	380	Ex9CR0911Q7W	1322294	Ex9CR0922Q7W	1322312	Ex9CR1211Q7W	1322330	Ex9CR1222Q7W	1322348
	400	Ex9CR0911V7W	1322295	Ex9CR0922V7W	1322313	Ex9CR1211V7W	1322331	Ex9CR1222V7W	1322349
	415	Ex9CR0911Z7W	1322296	Ex9CR0922Z7W	1322314	Ex9CR1211Z7W	1322332	Ex9CR1222Z7W	1322350
	440	Ex9CR0911R7W	1322297	Ex9CR0922R7W	1322315	Ex9CR1211R7W	1322333	Ex9CR1222R7W	1322351
	480	Ex9CR0911T7W	1322298	Ex9CR0922T7W	1322316	Ex9CR1211T7W	1322334	Ex9CR1222T7W	1322352
	500	Ex9CR0911S7W	1322299	Ex9CR0922S7W	1322317	Ex9CR1211S7W	1322335	Ex9CR1222S7W	1322353
600	Ex9CR0911Y7W	1322300	Ex9CR0922Y7W	1322318	Ex9CR1211Y7W	1322336	Ex9CR1222Y7W	1322354	

Note: Please contact sales if you need non pre-wired reversible contactors



Ex9C IEC Contactors

Products

Ex9CR 18~25A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Pre-wired reversible contactors



A

Coil Voltage	18A • 3-pole				25A • 3-pole				
	3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Catalog number	Item number							
Vac • 50/60Hz	24	Ex9CR1811B7W	1322355	Ex9CR1822B7W	1322373	Ex9CR2511B7W	1322391	Ex9CR2522B7W	1322409
	36	Ex9CR1811C7W	1322356	Ex9CR1822C7W	1322374	Ex9CR2511C7W	1322392	Ex9CR2522C7W	1322410
	42	Ex9CR1811D7W	1322357	Ex9CR1822D7W	1322375	Ex9CR2511D7W	1322393	Ex9CR2522D7W	1322411
	48	Ex9CR1811E7W	1322358	Ex9CR1822E7W	1322376	Ex9CR2511E7W	1322394	Ex9CR2522E7W	1322412
	110	Ex9CR1811F7W	1322359	Ex9CR1822F7W	1322377	Ex9CR2511F7W	1322395	Ex9CR2522F7W	1322413
	120	Ex9CR1811G7W	1322360	Ex9CR1822G7W	1322378	Ex9CR2511G7W	1322396	Ex9CR2522G7W	1322414
	208	Ex9CR1811X7W	1322361	Ex9CR1822X7W	1322379	Ex9CR2511X7W	1322397	Ex9CR2522X7W	1322415
	220	Ex9CR1811M7W	1322362	Ex9CR1822M7W	1322380	Ex9CR2511M7W	1322398	Ex9CR2522M7W	1322416
	230	Ex9CR1811P7W	1322363	Ex9CR1822P7W	1322381	Ex9CR2511P7W	1322399	Ex9CR2522P7W	1322417
	240	Ex9CR1811U7W	1322364	Ex9CR1822U7W	1322382	Ex9CR2511U7W	1322400	Ex9CR2522U7W	1322418
	277	Ex9CR1811N7W	1322365	Ex9CR1822N7W	1322383	Ex9CR2511N7W	1322401	Ex9CR2522N7W	1322419
	380	Ex9CR1811Q7W	1322366	Ex9CR1822Q7W	1322384	Ex9CR2511Q7W	1322402	Ex9CR2522Q7W	1322420
	400	Ex9CR1811V7W	1322367	Ex9CR1822V7W	1322385	Ex9CR2511V7W	1322403	Ex9CR2522V7W	1322421
	415	Ex9CR1811Z7W	1322368	Ex9CR1822Z7W	1322386	Ex9CR2511Z7W	1322404	Ex9CR2522Z7W	1322422
	440	Ex9CR1811R7W	1322369	Ex9CR1822R7W	1322387	Ex9CR2511R7W	1322405	Ex9CR2522R7W	1322423
	480	Ex9CR1811T7W	1322370	Ex9CR1822T7W	1322388	Ex9CR2511T7W	1322406	Ex9CR2522T7W	1322424
500	Ex9CR1811S7W	1322371	Ex9CR1822S7W	1322389	Ex9CR2511S7W	1322407	Ex9CR2522S7W	1322425	
600	Ex9CR1811Y7W	1322372	Ex9CR1822Y7W	1322390	Ex9CR2511Y7W	1322408	Ex9CR2522Y7W	1322426	

Note: Please contact sales if you need non pre-wired reversible contactors



Ex9C IEC Contactors

Products

Ex9CR 32~38A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Pre-wired reversible contactors



Coil Voltage	32A • 3-pole				38A • 3-pole				
	3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Catalog number	Item number							
Vac • 50/60Hz	24	Ex9CR3211B7W	1322427	Ex9CR3222B7W	1322445	Ex9CR3811B7W	1322463	Ex9CR3822B7W	1322481
	36	Ex9CR3211C7W	1322428	Ex9CR3222C7W	1322446	Ex9CR3811C7W	1322464	Ex9CR3822C7W	1322482
	42	Ex9CR3211D7W	1322429	Ex9CR3222D7W	1322447	Ex9CR3811D7W	1322465	Ex9CR3822D7W	1322483
	48	Ex9CR3211E7W	1322430	Ex9CR3222E7W	1322448	Ex9CR3811E7W	1322466	Ex9CR3822E7W	1322484
	110	Ex9CR3211F7W	1322431	Ex9CR3222F7W	1322449	Ex9CR3811F7W	1322467	Ex9CR3822F7W	1322485
	120	Ex9CR3211G7W	1322432	Ex9CR3222G7W	1322450	Ex9CR3811G7W	1322468	Ex9CR3822G7W	1322486
	208	Ex9CR3211X7W	1322433	Ex9CR3222X7W	1322451	Ex9CR3811X7W	1322469	Ex9CR3822X7W	1322487
	220	Ex9CR3211M7W	1322434	Ex9CR3222M7W	1322452	Ex9CR3811M7W	1322470	Ex9CR3822M7W	1322488
	230	Ex9CR3211P7W	1322435	Ex9CR3222P7W	1322453	Ex9CR3811P7W	1322471	Ex9CR3822P7W	1322489
	240	Ex9CR3211U7W	1322436	Ex9CR3222U7W	1322454	Ex9CR3811U7W	1322472	Ex9CR3822U7W	1322490
	277	Ex9CR3211N7W	1322437	Ex9CR3222N7W	1322455	Ex9CR3811N7W	1322473	Ex9CR3822N7W	1322491
	380	Ex9CR3211Q7W	1322438	Ex9CR3222Q7W	1322456	Ex9CR3811Q7W	1322474	Ex9CR3822Q7W	1322492
	400	Ex9CR3211V7W	1322439	Ex9CR3222V7W	1322457	Ex9CR3811V7W	1322475	Ex9CR3822V7W	1322493
	415	Ex9CR3211Z7W	1322440	Ex9CR3222Z7W	1322458	Ex9CR3811Z7W	1322476	Ex9CR3822Z7W	1322494
	440	Ex9CR3211R7W	1322441	Ex9CR3222R7W	1322459	Ex9CR3811R7W	1322477	Ex9CR3822R7W	1322495
	480	Ex9CR3211T7W	1322442	Ex9CR3222T7W	1322460	Ex9CR3811T7W	1322478	Ex9CR3822T7W	1322496
	500	Ex9CR3211S7W	1322443	Ex9CR3222S7W	1322461	Ex9CR3811S7W	1322479	Ex9CR3822S7W	1322497
600	Ex9CR3211Y7W	1322444	Ex9CR3222Y7W	1322462	Ex9CR3811Y7W	1322480	Ex9CR3822Y7W	1322498	

Note: Please contact sales if you need non pre-wired reversible contactors



Ex9C IEC Contactors

Products

Ex9CR 40~100A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing



A

Coil Voltage	40A • 3-pole		50A • 3-pole		65A • 3-pole		80A • 3-pole		100A • 3-pole		
	3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		
	Catalog number	Item number									
Vac • 50/60Hz	24	Ex9CR4011B7	1320972	Ex9CR5011B7	1320990	Ex9CR6511B7	1321008	Ex9CR8011B7	1321026	Ex9CR10011B7	1321044
	36	Ex9CR4011C7	1320973	Ex9CR5011C7	1320991	Ex9CR6511C7	1321009	Ex9CR8011C7	1321027	Ex9CR10011C7	1321045
	42	Ex9CR4011D7	1320974	Ex9CR5011D7	1320992	Ex9CR6511D7	1321010	Ex9CR8011D7	1321028	Ex9CR10011D7	1321046
	48	Ex9CR4011E7	1320975	Ex9CR5011E7	1320993	Ex9CR6511E7	1321011	Ex9CR8011E7	1321029	Ex9CR10011E7	1321047
	110	Ex9CR4011F7	1320976	Ex9CR5011F7	1320994	Ex9CR6511F7	1321012	Ex9CR8011F7	1321030	Ex9CR10011F7	1321048
	120	Ex9CR4011G7	1320977	Ex9CR5011G7	1320995	Ex9CR6511G7	1321013	Ex9CR8011G7	1321031	Ex9CR10011G7	1321049
	208	Ex9CR4011X7	1320989	Ex9CR5011X7	1321007	Ex9CR6511X7	1321025	Ex9CR8011X7	1321043	Ex9CR10011X7	1321061
	220	Ex9CR4011M7	1320978	Ex9CR5011M7	1320996	Ex9CR6511M7	1321014	Ex9CR8011M7	1321032	Ex9CR10011M7	1321050
	230	Ex9CR4011P7	1320979	Ex9CR5011P7	1320997	Ex9CR6511P7	1321015	Ex9CR8011P7	1321033	Ex9CR10011P7	1321051
	240	Ex9CR4011U7	1320981	Ex9CR5011U7	1320999	Ex9CR6511U7	1321017	Ex9CR8011U7	1321035	Ex9CR10011U7	1321053
	277	Ex9CR4011N7	1320980	Ex9CR5011N7	1320998	Ex9CR6511N7	1321016	Ex9CR8011N7	1321034	Ex9CR10011N7	1321052
	380	Ex9CR4011Q7	1320982	Ex9CR5011Q7	1321000	Ex9CR6511Q7	1321018	Ex9CR8011Q7	1321036	Ex9CR10011Q7	1321054
	400	Ex9CR4011V7	1320983	Ex9CR5011V7	1321001	Ex9CR6511V7	1321019	Ex9CR8011V7	1321037	Ex9CR10011V7	1321055
	415	Ex9CR4011Z7	1320984	Ex9CR5011Z7	1321002	Ex9CR6511Z7	1321020	Ex9CR8011Z7	1321038	Ex9CR10011Z7	1321056
	440	Ex9CR4011R7	1320985	Ex9CR5011R7	1321003	Ex9CR6511R7	1321021	Ex9CR8011R7	1321039	Ex9CR10011R7	1321057
	480	Ex9CR4011T7	1320986	Ex9CR5011T7	1321004	Ex9CR6511T7	1321022	Ex9CR8011T7	1321040	Ex9CR10011T7	1321058
	500	Ex9CR4011S7	1320987	Ex9CR5011S7	1321005	Ex9CR6511S7	1321023	Ex9CR8011S7	1321041	Ex9CR10011S7	1321059
	600	Ex9CR4011Y7	1320988	Ex9CR5011Y7	1321006	Ex9CR6511Y7	1321024	Ex9CR8011Y7	1321042	Ex9CR10011Y7	1321060



Ex9C IEC Contactors

Products

Ex9CR 115~225A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing



Coil Voltage	115A • 3-pole		150A • 3-pole		185A • 3-pole		225A • 3-pole		
	3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Catalog number	Item number							
Vac/dc	24	Ex9CR115E22B	1321458	Ex9CR150E22B	1321473	Ex9CR185E22B	1321488	Ex9CR225E22B	1321503
	36	Ex9CR115E22C	1321459	Ex9CR150E22C	1321474	Ex9CR185E22C	1321489	Ex9CR225E22C	1321504
	42	Ex9CR115E22D	1321460	Ex9CR150E22D	1321475	Ex9CR185E22D	1321490	Ex9CR225E22D	1321505
	48	Ex9CR115E22E	1321461	Ex9CR150E22E	1321476	Ex9CR185E22E	1321491	Ex9CR225E22E	1321506
	110	Ex9CR115E22F	1321462	Ex9CR150E22F	1321477	Ex9CR185E22F	1321492	Ex9CR225E22F	1321507
	120	Ex9CR115E22G	1321463	Ex9CR150E22G	1321478	Ex9CR185E22G	1321493	Ex9CR225E22G	1321508
	208	Ex9CR115E22X	1321466	Ex9CR150E22X	1321481	Ex9CR185E22X	1321496	Ex9CR225E22X	1321511
	220	Ex9CR115E22M	1321464	Ex9CR150E22M	1321479	Ex9CR185E22M	1321494	Ex9CR225E22M	1321509
	230	Ex9CR115E22P	1321465	Ex9CR150E22P	1321480	Ex9CR185E22P	1321495	Ex9CR225E22P	1321510
	240	Ex9CR115E22U	1321467	Ex9CR150E22U	1321482	Ex9CR185E22U	1321497	Ex9CR225E22U	1321512
	277	Ex9CR115E22N	1321470	Ex9CR150E22N	1321647	Ex9CR185E22N	1321500	Ex9CR225E22N	1321648
	380	Ex9CR115E22Q	1321468	Ex9CR150E22Q	1321483	Ex9CR185E22Q	1321498	Ex9CR225E22Q	1321513
	400	Ex9CR115E22V	1321469	Ex9CR150E22V	1321484	Ex9CR185E22V	1321499	Ex9CR225E22V	1321514
	415	Ex9CR115E22Z	1321652	Ex9CR150E22Z	1321485	Ex9CR185E22Z	1321656	Ex9CR225E22Z	1321515
	480	Ex9CR115E22T	1321471	Ex9CR150E22T	1321486	Ex9CR185E22T	1321501	Ex9CR225E22T	1321516
600	Ex9CR115E22Y	1321472	Ex9CR150E22Y	1321487	Ex9CR185E22Y	1321502	Ex9CR225E22Y	1321517	
Wide Range Electronic CoilVac/dc	48~130	Ex9CR115F22H	1321576	Ex9CR150F22H	1321579	Ex9CR185F22H	1321582	Ex9CR225F22H	1321585
	100~250	Ex9CR115F22K	1321577	Ex9CR150F22K	1321580	Ex9CR185F22K	1321583	Ex9CR225F22K	1321586
	250~500	Ex9CR115F22L	1321578	Ex9CR150F22L	1321581	Ex9CR185F22L	1321584	Ex9CR225F22L	1321587

Note: Please contact sales if you need non pre-wired reversible contactors



Ex9C IEC Contactors

Products

Ex9CR 265~500A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing



A

Coil Voltage	265A • 3-pole		300A • 3-pole		400A • 3-pole		500A • 3-pole		
	3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Catalog number	Item number							
Vac/dc	24	Ex9CR265E22B	1321518	Ex9CR300E22B	1321533	-	-	-	-
	36	Ex9CR265E22C	1321519	Ex9CR300E22C	1321534	Ex9CR400E22C	1321548	Ex9CR500E22C	1321562
	42	Ex9CR265E22D	1321520	Ex9CR300E22D	1321535	Ex9CR400E22D	1321549	Ex9CR500E22D	1321563
	48	Ex9CR265E22E	1321521	Ex9CR300E22E	1321536	Ex9CR400E22E	1321550	Ex9CR500E22E	1321564
	110	Ex9CR265E22F	1321522	Ex9CR300E22F	1321537	Ex9CR400E22F	1321551	Ex9CR500E22F	1321565
	120	Ex9CR265E22G	1321523	Ex9CR300E22G	1321538	Ex9CR400E22G	1321552	Ex9CR500E22G	1321566
	208	Ex9CR265E22X	1321526	Ex9CR300E22X	1321541	Ex9CR400E22X	1321555	Ex9CR500E22X	1321569
	220	Ex9CR265E22M	1321524	Ex9CR300E22M	1321539	Ex9CR400E22M	1321553	Ex9CR500E22M	1321567
	230	Ex9CR265E22P	1321525	Ex9CR300E22P	1321540	Ex9CR400E22P	1321554	Ex9CR500E22P	1321568
	240	Ex9CR265E22U	1321527	Ex9CR300E22U	1321542	Ex9CR400E22U	1321556	Ex9CR500E22U	1321570
	277	Ex9CR265E22N	1321530	Ex9CR300E22N	1321649	Ex9CR400E22N	1321559	Ex9CR500E22N	1321650
	380	Ex9CR265E22Q	1321528	Ex9CR300E22Q	1321543	Ex9CR400E22Q	1321557	Ex9CR500E22Q	1321571
	400	Ex9CR265E22V	1321529	Ex9CR300E22V	1321544	Ex9CR400E22V	1321558	Ex9CR500E22V	1321572
	415	Ex9CR265E22Z	1321657	Ex9CR300E22Z	1321545	Ex9CR400E22Z	1321658	Ex9CR500E22Z	1321573
	480	Ex9CR265E22T	1321531	Ex9CR300E22T	1321546	Ex9CR400E22T	1321560	Ex9CR500E22T	1321574
600	Ex9CR265E22Y	1321532	Ex9CR300E22Y	1321547	Ex9CR400E22Y	1321561	Ex9CR500E22Y	1321575	
Wide Range Electronic Coil Vac/dc	48~130	Ex9CR265F22H	1321588	Ex9CR300F22H	1321591	Ex9CR400F22H	1321594	Ex9CR500F22H	1321597
	100~250	Ex9CR265F22K	1321589	Ex9CR300F22K	1321592	Ex9CR400F22K	1321595	Ex9CR500F22K	1321598
	250~500	Ex9CR265F22L	1321590	Ex9CR300F22L	1321593	Ex9CR400F22L	1321596	Ex9CR500F22L	1321599



Ex9C IEC Contactors

Ex9CS/C Specifications

			Ex9CS/CSR			Ex9C/CR							
			6	9	12	9	12	18	25	32	38	40	50
General Information													
Pole			3, 4			3							
Production Standard			IEC 60947-1, IEC 60947-4-1, UL 60947-1, UL 60947-4-1										
Environmental Testing According to			IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-11, IEC 60068-2-30										
Rated Frequency (Hz)			50/60										
Conventional Free Air Thermal Current Ith (A)	$\theta \leq 104^\circ\text{F}$ ($\theta \leq 40^\circ\text{C}$)		20			25		32	40	50		60	80
	$\theta \leq 140^\circ\text{F}$ ($\theta \leq 60^\circ\text{C}$)		16			19		24	30	38		45	60
	$\theta \leq 158^\circ\text{F}$ ($\theta \leq 70^\circ\text{C}$)		16			19		24	30	38		45	60
Rated Insulating Voltage Ui (V)			690									1,000	
Rated Impulse Withstand Voltage Uimp (kV)			6									8	
Electrical Life (x10 ⁴ cycles)	AC-3	380/400V	120										
	AC-4		5	4	4	6	5	4	5	4		3.5	3
Mechanical Life (x10 ⁴ cycles)			1,000										
Operating Cycles Per Hour (cycles/h)	AC-3	1,200						1,000					
	AC-4	300						150			120		
Environmental Temperature	Transportation or Storage		-76°F to 176°F (-60°C to +80°C)										
	Working At		-4°F to 140°F (-20°C to +60°C)										
	Maximum		-40°F to 158°F (-40°C to +70°C)										
Altitude ft (m)			6,562 (2,000)										
Pollution Degree			Class III										
Rated Operational Current Ie (A)													
At -82 to 131°F (-25 to 40°C)	AC-1	690V	20			25		32	40	50		60	80
	AC-3	380/400V	6	9	12	9	12	18	25	32	38	40	50
	AC-3	660/690V	3.8	4.9		6.7	9	10.6	17.3	21.9		34	39
	AC-4	380/400V	6	9	12	9	12	18	25	32		40	50
	AC-4	660/690V	3.8	4.9		6.7	9	10.6	14	17.3		34	39
Rated Power of 3-phase Motor													
For IEC (kW)	AC-3	230Vac	1.5	2.2	3	2.2	3	4	5.5	7.5	9	11	15
	AC-4		2.2	4	5.5	4	5.5	7.5	11	15	18.5		22
	AC-3	380/400Vac	2.2			3		4	5.5	7.5	10		15
	AC-4		2.2			3		4	5.5	7.5	10		15
	AC-3	660/690Vac	3	4		5.5	7.5	10	15	18.5		30	33
	AC-4		3			4		5.5	7.5	11	15		30
AC-3	1,000Vac	-											
AC-4		-											
UL Rating													
Single-Phase (HP)	110-120Vac		0.5		0.75	0.5	1	1.5	2		3		5
	220-240Vac		1	1.5	2	1.5	2	3		5		7.5	10
Three-Phase (HP)	200-208Vac		1.5	3		3		5	7.5	10		10	15
	220-240Vac		2	3		3		5	7.5	10		15	20
	440-480Vac		3	5	7.5	5	7.5	10	15	20		30	40
	550-600Vac		5	7.5	10	7.5	10	15	20	25		30	40
Coil Voltage (V)			24~500Vac, 12~250Vdc				24~600Vac, 24~250Vac/dc						



Ex9C IEC Contactors

Ex9C Specifications

			Ex9C/CR										
			65	80	100	115	150	185	225	265	300	400	500
General Information													
Pole			3										
Production Standard			IEC 60947-1, IEC 60947-4-1, UL 60947-1, UL 60947-4-1										
Environmental Testing According to			IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-11, IEC 60068-2-30										
Rated Frequency (Hz)			50/60										
Conventional Free Air Thermal Current Ith (A)	$\theta \leq 104^{\circ}\text{F}$ ($\theta \leq 40^{\circ}\text{C}$)		80	125	160	185	215	275	330	400	500	610	
	$\theta \leq 140^{\circ}\text{F}$ ($\theta \leq 60^{\circ}\text{C}$)					170	200	260	300	360	430	550	
	$\theta \leq 158^{\circ}\text{F}$ ($\theta \leq 70^{\circ}\text{C}$)		60	94	140	160	180	206	260	300	400	418	
Rated Insulating Voltage Ui (V)			1,000										
Rated Impulse Withstand Voltage Uimp (kV)			8										
Electrical Life (x10 ⁴ cycles)	AC-3	380/400V	120			100							
	AC-4		3	2.5	20								
Mechanical Life (x10 ⁴ cycles)			1,000			800				500			
Operating Cycles Per Hour (cycles/h)	AC-3		1,000	900		750		500				420	
	AC-4		120			130							
Environmental Temperature	Transportation or Storage		-76°F to 176°F (-60°C to +80°C)										
	Working At		-4°F to 140°F (-20°C to +60°C)										
	Maximum		-40°F to 158°F (-40°C to +70°C)										
Altitude ft (m)			6,562 (2,000)										
Pollution Degree			Class III										
Rated Operational Current Ie (A)													
At -82 to 131°F (-25 to 40°C)	AC-1	690V	80	125	160	185	215	275	330	400	500	610	
	AC-3	380/400V	65	80	100	115	150	185	225	265	300	500	
	AC-3	660/690V	42	49				170			280	450	
	AC-4	380/400V	65	80	100			185			300	500	
	AC-4	660/690V	42	49				170			280	450	
Rated Power of 3-phase Motor													
For IEC (kW)	AC-3	230Vac	18.5	22	25	37	45	55		75	90	132	160
	AC-4												
	AC-3	380/400Vac	30	37	45	55	75	90	110	132	160	220	250
	AC-4												
	AC-3	660/690Vac	37	45		110	132	160	200	250		355	400
	AC-4												
AC-3	1,000Vac	-			75	90	90		132		250	315	
AC-4													
UL Rating													
Ith (A)			80	125	160	185	215	275	330	400	500	610	
Single-Phase (HP)	110-120Vac		5	7.5	10	15	-		-				
	220-240Vac		15	20		25	30	40	-				
Three-Phase (HP)	200-208Vac		20	30	30	40	50	60		75	100	125	150
	220-240Vac		25		40	50	60	75		100	125	150	200
	440-480Vac		50	60		100	125	150		200	250	300	400
	550-600Vac					125	150	200		250	300	400	500
Coil Voltage (V)			24~600Vac			24~600Vac/dc					36~600Vac/dc		

A



Ex9C IEC Contactors

Ex9C Specifications

			Ex9C		
			630	800	1000
General Information					
Pole			3		
Production Standard			IEC 60947-1, IEC 60947-4-1, UL 60947-1, UL 60947-4-1		
Environmental Testing According to			IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-11, IEC 60068-2-30		
Rated Frequency (Hz)			50/60		
Conventional Free Air Thermal Current Ith (A)	$\theta \leq 104^{\circ}\text{F}$ ($\theta \leq 40^{\circ}\text{C}$)		800	1000	1000
	$\theta \leq 140^{\circ}\text{F}$ ($\theta \leq 60^{\circ}\text{C}$)		720	850	850
	$\theta \leq 158^{\circ}\text{F}$ ($\theta \leq 70^{\circ}\text{C}$)		630	750	750
Rated Insulating Voltage Ui (V)			1,000		
Rated Impulse Withstand Voltage Uimp (kV)			8		
Electrical Life ($\times 10^4$ cycles)	AC-3	380/400 V	80	50	
	AC-4		20		
Mechanical Life ($\times 10^4$ cycles)			300		
Operating Cycles Per Hour (cycles/h)	AC-3		300		120
	AC-4		100		
Environmental Temperature	Transportation or Storage		-76°F to 176°F (-60°C to +80°C)		
	Working At		-4°F to 140°F (-20°C to +60°C)		
	Maximum		-40°F to 158°F (-40°C to +70°C)		
Altitude ft (m)			6,562 (2,000)		
Pollution Degree			Class III		
Rated Operational Current Ie (A)					
At -82 to 131°F (-25 to 40°C)	AC-1	690V	800	1000	1000
	AC-3	380/400V	630	800	1000
	AC-3	660/690V	560	650	800
	AC-4	380/400V	225	242	260
	AC-4	660/690V	200	215	230
Rated Power of 3-phase Motor					
For IEC (kW)	AC-3	230Vac	200	250	315
			75		80
	AC-3	380/400Vac	335	450	560
			110	132	150
	AC-3	660/690Vac	560	630	800
			185	200	220
	AC-3	1,000Vac	400	450	500
			150	200	
UL Rating					
Ith (A)			800	1000	1000
Single-Phase (HP)	110-120Vac		-		
	220-240Vac				
Three-Phase (HP)	200-208Vac		-	-	-
	220-240Vac		250	300	350
	440-480Vac		500	600	750
	550-600Vac		600	700	800
Coil Voltage (V)			48-480Vac/dc		



Ex9C IEC Contactors

Ex9CS/C Specifications

			Ex9CS/CSR			Ex9C/CR								
			6	9	12	9	12	18	25	32	38	40	50	
Coil Electrical Parameters														
Tolerance of Control Voltage 50/60Hz	Operation (Uc)	Standard	0.85~1.10											
	Drop-Off (Uc)		0.20~0.75 (AC); 0.10~0.75 (DC)											
	Operation (Uc)	F-Type	-	0.85Ucmin~1.10Ucmax										
	Drop-Off (Uc)		-	0.20Ucmax~0.75Ucmin (AC), 0.10Ucmax~0.75Ucmin (DC)										
Coil Power Consumption														
In Rush (VA)		AC	40			80			85			300		
		F-Type	-			35			60			100		
Power Factor			-											
Sealed (VA)		AC	9			9.5			11.4			34.2		
		F-Type	-			5.1						15		
Power Factor			-											
Pick-Up (W)		DC	4			7						17		
		F-Type	-			35						100		
Hold (W)		DC	4			7						17		
		F-Type	-			2.5						8		
Operating Time (ms)	Operation	Standard	15-40			14-30			18-32			20-30		
		F-Type	-			30-90						50~100		
	Drop-Off	Standard	8-15			6-20			7-22			8-20		
		F-Type				20~110			20~110			20~120		
IEC AC Contactor Working at DC Power Data														
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)											
Working Type: DC-1, Resistive Load	24	1												
		2												
		3												
	48/75	1	15	25	32	40	50	60	70					
		2												
		3												
Environmental Temperature: ≤140°F (≤60°C)	125	1	4	10	15	20	25	50	65					
		2	15	20	25	32	40	60	70					
		3												
	225	1	1											
		2	4				7							
		3	15	20	25	32	40	60	70					
IEC AC Contactor Working at DC Power Data														
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)											
Working Type: DC-2 to DC-5, Inductive Load	24	1												
		2												
		3	15	20	25	32	40	50	65					
	48/75	1	5											
		2	15	20	25									
		3												
Environmental Temperature: ≤140°F (≤60°C)	125	1	1.5	2		3			4					
		2	11											
		3	15	20	25	32	40	50	65					
	225	1	0.5					1				1.5		
		2	1.5	2		3			4					
		3	5	8		32			40		50	65		

A



Ex9C IEC Contactors

Ex9C Specifications

			Ex9C/CR										Ex9C				
			65	80	100	115	150	185	225	265	300	400	500	630	800	1000	
Coil Electrical Parameters																	
Tolerance of Control Voltage 50/60Hz	Operation (Uc)	Standard	0.85~1.10														
	Drop-Off (Uc)		0.20~0.75 (AC); 0.10~0.75 (DC)														
	Operation (Uc)	F-Type	0.20~0.70					0.85Ucmin~1.10Ucmax									
	Drop-Off (Uc)		0.20Ucmax~0.75Ucmin (AC) ; 0.10Ucmax~0.75Ucmin (DC)														
Coil Power Consumption																	
In Rush (VA)	AC		300	330		400		590		600		850					
	F-Type		100									1000					
Power Factor			-														
Sealed (VA)	AC		34.2	36.6		10		10		10		10					
	F-Type		15			18		18		18		18					
Power Factor			-														
Pick-Up (W)	DC		17			400		590		600		850					
	F-Type		100									1000					
Hold (W)	Standard		17			10											
	F-Type		8			5.0											
Operating Time (ms)	Operation	Standard	20-30	20-35		30-65		45-80		70-90		80~120					
		F-Type	50~100			75-120		90-120		110-120		100-150					
	Drop-Off	Standard	8-20	6-20		45-65		50-70		60-80		85~160					
		F-Type	20~120			45-70		60-80		50-100		85-120					
IEC AC Contactor Working at DC Power Data																	
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)														
Working Type: DC-1, Resistive Load Time Data: L/R≤1ms Environmental Temperature: ≤140°F (≤60°C)	24	1	70	100	160	200	275	330	400	430	500						
		2															
		3															
	48/75	1															
		2															
		3															
125	1	65	80	100	115	150	200	300	400								
	2	70	100		160	200	275	330	400	430	500						
	3	1.5		3.4			3.8										
225	1	70	80		160		200	300	400								
	2	100															
	3																
IEC AC Contactor Working at DC Power Data																	
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)														
Working Type: DC-2 to DC-5, Inductive Load Time Data: L/R≤15ms Environmental Temperature: ≤140°F (≤60°C)	24	1	65	100	160		200	300	400								
		2															
		3															
	48/75	1			7.5			11									
		2			160		200	300	400								
		3															
	125	1			4	5	2.5			3							
		2			65	80		160	200	300	400						
		3			100												
	225	1			1.5	2	2										
		2			4	5	7.5			11							
		3			65	100	160	200	300	400							



Ex9C IEC Contactors

Ex9CS/C Specifications

		Ex9CS/CSR			Ex9C/CR							
		6	9	12	9	12	18	25	32	38	40	50
Built-In Auxiliary Contacts												
Auxiliary Contacts		1NO/1NC (3P), None (4P)			1NO+1NC, 2NO+2NC						1NO+1NC	
Rated Operation Voltage Ue (V)		690										
Rated Insulating Voltage Ui (V)		690										
Rated Impulse Withstand Voltage Uimp (kV)		6										
Rated Frequency (Hz)		50/60										
Conventional Free Air Thermal Current Ith (A)		10										
Rated Operational Current Ie (A)												
AC-15	24V	-										
	120V	6										
	230V	-										
	240V	3										
	380V	1.9										
	400V	-										
	600V	1.2										
DC-13	125V	1.1			0.55							
	220V	-			0.31							
	250V	0.55			0.27							
Mounting	Screw (mm)	ø4									ø5	
	N rail (mm)	35/7.5									35/7.5 or 75/7.5	
Dimension LxWxH in [mm]	AC	2.28x1.77x2.28 (58x45x58)			3.58x1.77x3.70 (91x45x94)			3.94x1.77x4.25 (100x45x108)			4.80x2.99x4.84 (122x76x123)	
	DC	2.28x1.77x2.68 (58x45x68)										
Weight lb (kg)	AC	0.40 (0.18)			0.77 (0.35)			0.88 (0.40)			2.71 (1.23)	
	DC	0.57 (0.26)										
Degree of Protection		IP 20 (front side)										
Main Power Terminal Connection												
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable	18-12* (1-2.5) [†]			18-10* (1.5-6) [†]			14-8* (1.5-10) [†]			14-4* (2.5-25) [†]	
	Dual Cable											
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable	18-12* (1-2.5) [†]			18-10* (1.5-6) [†]			14-8* (1.5-10) [†]			14-4* (2.5-25) [†]	
	Dual Cable											
Screw Size ø (mm)		M3			M3.5			M4			M8	
Torque of Terminals in-lb (N.m)		7 (0.80)			15 (1.70)			22 (2.50)			53 (6)	
Bus Bar Terminal Connection												
Bus Bar Size												
Screw Size ø (mm)												
Torque of Terminals in-lb (N.m)												
Auxiliary Contact Terminal Connection												
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable											
	Dual Cable											
Stiff Cable With Cold-Press Terminal AWG (mm ²)	Single Cable	18-12* (1-2.5) [†]										
	Dual Cable											
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable											
	Dual Cable											
Screw Size ø (mm)		M3			M3.5							
Torque of Terminals in-lb (N.m)		7 (0.80)			15 (1.70)							

A

* American Wire Gauge
 † IEC Wire Gauge



Ex9C IEC Contactors

Ex9C Specifications

		Ex9C/CR									
		65	80	100	115	150	185	225	265	300	400
Built-In Auxiliary Contacts											
Auxiliary Contacts		1NO+1NC					2NO+2NC				
Rated Operation Voltage Ue (V)		690									
Rated Insulating Voltage Ui (V)		690									
Rated Impulse Withstand Voltage Uimp (kV)		6									
Rated Frequency (Hz)		50/60									
Conventional Free Air Thermal Current Ith (A)		10									
Rated Operational Current Ie (A)											
AC-15	24V	-			6						
	120V	6			-						
	230V	-			3.13						
	240V	-			3						
	380V	1.9			-						
	400V	-			1.8						
	600V	1.2			-						
DC-13	690V	-			1.04						
	125V	-			0.55						
	220V	-			0.31						
Mounting	Screw (mm)	ø5			ø8			ø9			
	DIN rail (mm)	35/7.5 or 75/7.5			-			-			
Dimension LxWxH in (mm)		4.80x2.99 x4.84 (122x76x123)	5.12x3.43x5.12 (130x87x130)		6.81x4.72x6.85 (173x120x174)			8.35x5.71x8.19 (212x145x208)		8.58x6.30x9.06 (218x160x230)	
Weight lb (kg)		2.71 (1.23)		3.31 (1.50)		6.61 (3)		13.23 (6)		20.94 (9.5)	
Degree of Protection		IP 20			IP 20 (Control Circuit Terminal) ; IP 00 (Main Circuit Terminal)						
Main Power Terminal Connection											
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable	14-4* (2.5-25) [†]		12-1/0 (2.5-50)		(1x) 4 - (2x) 250 MCM ((1x) 25 - (2x) 120)			(1x) 1/0 - (2x) 500 MCM ((1x) 50 - (2x) 240)		
	Dual Cable			12-1 (2.5-42.5)							
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable			12-1/0 (2.5-50)							
	Dual Cable			12-1 (2.5-42.5)							
Screw Size ø (mm)		M8					M10				
Torque of Terminals in-lb (N.m)		53 (6)		79 (9)		159 (18)		310 (35)			
Bus Bar Terminal Connection											
Bus Bar Size		-			2x0.75x0.25 (2x20x5)		2x1x0.25 (2x30x5)		2x1.25x0.25 (2x40x5)		
Screw Size ø (mm)		-			M8		M10		-		
Torque of Terminals in-lb (N.m)		-			159 (18)		310 (35)		-		
Auxiliary Contact Terminal Connection											
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable	18-12* (1-2.5) [†]									
	Dual Cable										
Stiff Cable With Cold-Press Terminal AWG (mm ²)	Single Cable										
	Dual Cable										
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable										
	Dual Cable										
Screw Size ø (mm)		M3.5									
Torque of Terminals in-lb (N.m)		15 (1.70)									

* American Wire Gauge

[†] IEC Wire Gauge



Ex9C IEC Contactors

Ex9C Specifications

		Ex9C		
		630	800	1000
Built-In Auxiliary Contacts				
Auxiliary Contacts		2NO+2NC		
Rated Operation Voltage Ue (V)		690		
Rated Insulating Voltage Ui (V)		690		
Rated Impulse Withstand Voltage Uimp (kV)		6		
Rated Frequency (Hz)		50/60		
Conventional Free Air Thermal Current Ith (A)		10		
Rated Operational Current Ie (A)				
AC-15	24V	6		
	120V	-		
	230V	3.13		
	240V	3		
	380V	-		
	400V	1.8		
	600V	-		
	690V	1.04		
DC-13	125V	0.55		
	220V	0.31		
	250V	0.27		
Mounting	Screw (mm)	11.5		
	DIN rail (mm)	-		
Dimension LxWxH in (mm)		11.73x9.06x10.47 (298x230x262)	12.68x9.06x10.47 (322x230x262)	
Weight lb (kg)		44.53 (20.2)	48.5 (22)	49.16 (22.3)
Degree of Protection		IP 20 (Control Circuit Terminal) IP 00 (Main Circuit Terminal)		
Main Power Terminal Connection				
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable	250~600 4/0~500	3/0~750 3/0~500	
	Dual Cable			
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable			
	Dual Cable			
Screw Size ø (mm)		M12	4*M10	
Torque of Terminals in-lb (N.m)		310 (45)	310 (35)	
Auxiliary Contact Terminal Connection				
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable	18-12* (1-2.5) †		
	Dual Cable			
Stiff Cable With Cold-Press Terminal AWG (mm ²)	Single Cable			
	Dual Cable			
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable			
	Dual Cable			
Screw Size ø (mm)		M3.5		
Torque of Terminals in-lb (N.m)		15 (1.70)		

A

* American Wire Gauge
† IEC Wire Gauge



Ex9C IEC Contactors

Ex9C Specifications

Type C

			Voltage / V							
			200		240		480		600	
MC*	CB	OLR**	HP	SCCR (kA)	HP	SCCR (kA)	HP	SCCR (kA)	HP	SCCR (kA)
Ex9C09...	M1N15T3L	Ex9R38B.../Ex9RE40...	3	65	3	65	5	65	7.5	20
	M1H15T3L	Ex9R38B.../Ex9RE40...	3	100	3	100	5	100	7.5	25
Ex9C12...	M1N15T3L	Ex9R38B.../Ex9RE40...	3	65	3	65	7.5	65	10	20
	M1H15T3L	Ex9R38B.../Ex9RE40...	3	100	3	100	7.5	100	10	25
Ex9C18...	M1N30T3L	Ex9R38B.../Ex9RE40...	5	65	5	65	10	65	15	20
	M1H30T3L	Ex9R38B.../Ex9RE40...	5	100	5	100	10	100	15	25
Ex9C25...	M1N30T3L	Ex9R38B.../Ex9RE40...	-	-	7.5	65	15	65	20	20
	M1H30T3L	Ex9R38B.../Ex9RE40...	-	-	7.5	100	15	100	20	25
	M1N50T3L	Ex9R38B.../Ex9RE40...	7.5	65	-	-	-	-	-	-
	M1H50T3L	Ex9R38B.../Ex9RE40...	7.5	100	-	-	-	-	-	-
Ex9C32...	M1N50T3L	Ex9R38B.../Ex9RE40...	10	65	10	65	20	65	25	20
	M1H50T3L	Ex9R38B.../Ex9RE40...	10	100	10	100	20	100	25	25
Ex9C38...	M1N50T3L	Ex9R38B.../Ex9RE40...	10	65	10	65	20	65	25	20
	M1H50T3L	Ex9R38B.../Ex9RE40...	10	100	10	100	20	100	25	25
Ex9C40...	M1N70T3L	Ex9R100B...	10	65	15	65	30	65	30	20
	M1H70T3L	Ex9R100B...	10	100	15	100	30	100	30	25
Ex9C50...	M1N70T3L	Ex9R100B...	15	65	20	65	40	65	40	20
	M1H70T3L	Ex9R100B...	15	100	20	100	40	100	40	25
Ex9C65...	M1N70T3L	Ex9R100B...	-	-	-	-	-	-	50	20
	M1H70T3L	Ex9R100B...	-	-	-	-	-	-	50	25
	M1N100T3L	Ex9R100B...	20	65	25	65	50	65	-	-
	M1H100T3L	Ex9R100B...	20	100	25	100	50	100	-	-
Ex9C80...	M1N100T3L	Ex9R100B...	-	-	30	65	60	65	60	20
	M1H100T3L	Ex9R100B...	-	-	30	100	60	100	60	25
	M1N150T3L	Ex9R100B...	30	65	-	-	-	-	-	-
	M1H150T3L	Ex9R100B...	30	100	-	-	-	-	-	-
Ex9C100...	M1N100T3L	Ex9R100B...	-	-	-	-	60	65	60	20
	M1H100T3L	Ex9R100B...	-	-	-	-	60	100	60	25
	M1N150T3L	Ex9R100B...	30	100	40	65	-	-	-	-
	M1H150T3L	Ex9R100B...	-	-	40	100	-	-	-	-

* More information about MC (Motor Contactor), Please refer to Product Selection Guide in Chapter A (Ex9C series).

**More information about OLR (Overload Relay), Please refer to Product Selection Guide in Chapter B (Ex9R series).



Ex9C IEC Contactors

Ex9C Specifications

Type C

			Voltage / V							
			200		240		480		600	
MC*	CB	OLR**	HP	SCCR (kA)	HP	SCCR (kA)	HP	SCCR (kA)	HP	SCCR (kA)
Ex9C115...	M2N200T3L	Ex9R185B...	40	65	50	65	100	65	125	20
	M2H200T3L	Ex9R185B...	40	100	50	100	100	100	125	25
Ex9C150...	M2N200T3L	Ex9R185B...	50	65	60	65	125	65	150	20
	M2H200T3L	Ex9R185B...	50	100	60	100	125	100	150	25
Ex9C185...	M2N250T3L	Ex9R185B...	60	65	75	65	150	65	200	20
	M2H250T3L	Ex9R185B...	60	100	75	100	150	100	200	25
Ex9C225...	M2N250T3L	Ex9R500B...	60	65	75	65	150	65	200	20
	M2H250T3L	Ex9R500B...	60	100	75	100	150	100	200	25
Ex9C265...	M3N400T3L	Ex9R500B...	75	65	100	65	200	65	250	25
	M3H400T3L	Ex9R500B...	75	100	100	100	200	100	250	30
Ex9C300...	M3N400T3L	Ex9R500B...	100	65	125	65	250	65	300	25
	M3H400T3L	Ex9R500B...	100	100	125	100	250	100	300	30
Ex9C400...	M4N500T3L	Ex9R500B...	125	65	150	65	300	65	400	30
	M4H500T3L	Ex9R500B...	125	100	150	100	300	100	400	50
Ex9C500...	M4N600T3L	Ex9R500B...	150	65	200	65	400	65	500	30
	M4H600T3L	Ex9R500B...	150	100	200	100	400	100	500	50

* More information about MC (Motor Contactor), Please refer to Product Selection Guide in Chapter A (Ex9C series).

**More information about OLR (Overload Relay), Please refer to Product Selection Guide in Chapter B (Ex9R series).

A



Ex9C IEC Contactors

Ex9C Specifications

Type D

			Voltage / V							
			200		240		480		600	
MC*	CB	OLR**	HP	SCCR (kA)	HP	SCCR (kA)	HP	SCCR (kA)	HP	SCCR (kA)
Ex9C09...	M1MN3T3L	Ex9R38B.../Ex9RE40...	3	65	3	65	5	65	7.5	20
	M1MH3T3L	Ex9R38B.../Ex9RE40...	3	100	3	100	5	100	7.5	25
	M1MN7T3L	Ex9R38B.../Ex9RE40...	3	65	3	65	5	65	7.5	20
	M1MH7T3L	Ex9R38B.../Ex9RE40...	3	100	3	100	5	100	7.5	25
	M1MN15T3L	Ex9R38B.../Ex9RE40...	3	65	3	65	5	65	7.5	20
	M1MH15T3L	Ex9R38B.../Ex9RE40...	3	100	3	100	5	100	7.5	25
Ex9C12...	M1MN15T3L	Ex9R38B.../Ex9RE40...	3	65	3	65	7.5	65	10	20
	M1MH15T3L	Ex9R38B.../Ex9RE40...	3	100	3	100	7.5	100	10	25
Ex9C18...	M1MN30T3L	Ex9R38B.../Ex9RE40...	5	65	5	65	10	65	15	20
	M1MH30T3L	Ex9R38B.../Ex9RE40...	5	100	5	100	10	100	15	25
Ex9C25...	M1MN30T3L	Ex9R38B.../Ex9RE40...	-	-	7.5	65	15	65	20	20
	M1MH30T3L	Ex9R38B.../Ex9RE40...	-	-	7.5	100	15	100	20	25
	M1MN50T3L	Ex9R38B.../Ex9RE40...	7.5	65	-	-	-	-	-	-
	M1MH50T3L	Ex9R38B.../Ex9RE40...	7.5	100	-	-	-	-	-	-
Ex9C32...	M1MN50T3L	Ex9R38B.../Ex9RE40...	10	65	10	65	20	65	25	20
	M1MH50T3L	Ex9R38B.../Ex9RE40...	10	100	10	100	20	100	25	25
Ex9C38...	M1MN50T3L	Ex9R38B.../Ex9RE40...	10	65	10	65	20	65	25	20
	M1MH50T3L	Ex9R38B.../Ex9RE40...	10	100	10	100	20	100	25	25
Ex9C40...	M1MN70T3L	Ex9R100B...	10	65	15	65	30	65	30	20
	M1MH70T3L	Ex9R100B...	10	100	15	100	30	100	30	25
Ex9C50...	M1MN70T3L	Ex9R100B...	15	65	20	65	40	65	40	20
	M1MH70T3L	Ex9R100B...	15	100	20	100	40	100	40	25
Ex9C65...	M1MN70T3L	Ex9R100B...	-	-	-	-	-	-	50	20
	M1MH70T3L	Ex9R100B...	-	-	-	-	-	-	50	25
	M1MN100T3L	Ex9R100B...	20	65	25	65	50	65	-	-
	M1MH100T3L	Ex9R100B...	20	100	25	100	50	100	-	-
Ex9C80...	M1MN100T3L	Ex9R100B...	-	-	30	65	60	65	60	20
	M1MH100T3L	Ex9R100B...	-	-	30	100	60	100	60	25
	M1MN150T3L	Ex9R100B...	30	65	-	-	-	-	-	-
	M1MH150T3L	Ex9R100B...	30	100	-	-	-	-	-	-
Ex9C100...	M1MN100T3L	Ex9R100B...	-	-	-	-	60	65	60	20
	M1MH100T3L	Ex9R100B...	-	-	-	-	60	100	60	25
	M1MN150T3L	Ex9R100B...	30	65	40	65	-	-	-	-
	M1MH150T3L	Ex9R100B...	30	100	40	100	-	-	-	-

* More information about MC (Motor Contactor), Please refer to Product Selection Guide in Chapter A (Ex9C series).

**More information about OLR (Overload Relay), Please refer to Product Selection Guide in Chapter B (Ex9R series).



Ex9C IEC Contactors

Ex9C Specifications

Type D

			Voltage / V							
			200		240		480		600	
MC*	CB	OLR**	HP	SCCR (kA)	HP	SCCR (kA)	HP	SCCR (kA)	HP	SCCR (kA)
Ex9C115...	M2MN250T3L	Ex9R185B...	40	65	50	65	100	65	125	20
	M2MH250T3L	Ex9R185B...	40	100	50	100	100	100	125	25
Ex9C150...	M2MN250T3L	Ex9R185B...	50	65	60	65	125	65	150	20
	M2MH250T3L	Ex9R185B...	50	100	60	100	125	100	150	25
Ex9C185...	M2MN250T3L	Ex9R185B...	60	65	75	65	150	65	200	20
	M2MH250T3L	Ex9R185B...	60	100	75	100	150	100	200	25
Ex9C225...	M2MN250T3L	Ex9R500B...	60	65	75	65	150	65	200	20
	M2MH250T3L	Ex9R500B...	60	100	75	100	150	100	200	25
Ex9C265...	M3MN400T3L	Ex9R500B...	75	65	100	65	200	65	250	25
	M3MH400T3L	Ex9R500B...	75	100	100	100	200	100	250	30
Ex9C300...	M3MN400T3L	Ex9R500B...	100	65	125	65	250	65	300	25
	M3MH400T3L	Ex9R500B...	100	100	125	100	250	100	300	30
Ex9C400...	M4MN600T3L	Ex9R500B...	125	65	150	65	300	65	400	30
	M4MH600T3L	Ex9R500B...	125	100	150	100	300	100	400	50
Ex9C500...	M4MN600T3L	Ex9R500B...	150	65	200	65	400	65	500	30
	M4MH600T3L	Ex9R500B...	150	100	200	100	400	100	500	50

A

* More information about MC (Motor Contactor), Please refer to Product Selection Guide in Chapter A (Ex9C series).

**More information about OLR (Overload Relay), Please refer to Product Selection Guide in Chapter B (Ex9R series).

SCCR Rating

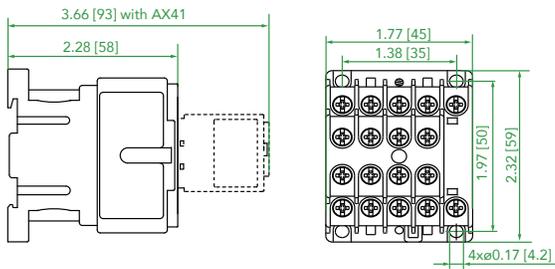
Product	kA (600Vac)	Fuse class	Max. upstream fuse ampere rating
Ex9C115	100	J	400
Ex9C185	100	J	400
Ex9C225	100	J	500



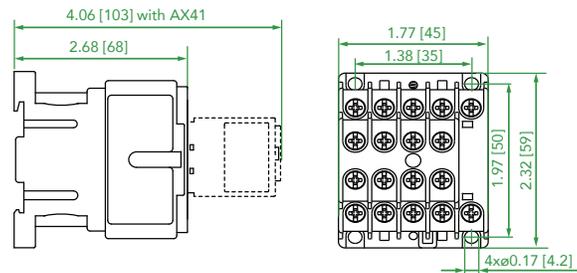
Ex9C IEC Contactors

Ex9CS/C Dimensions

Ex9CS06~12AC

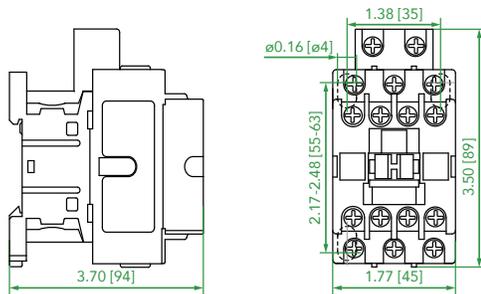


Ex9CSR06~12 DC

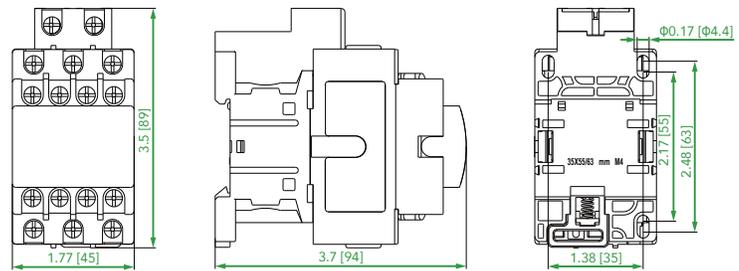


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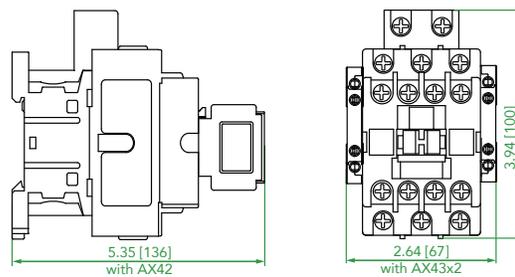
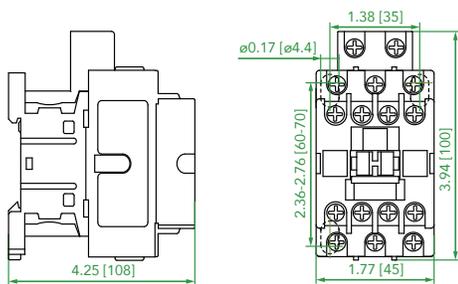
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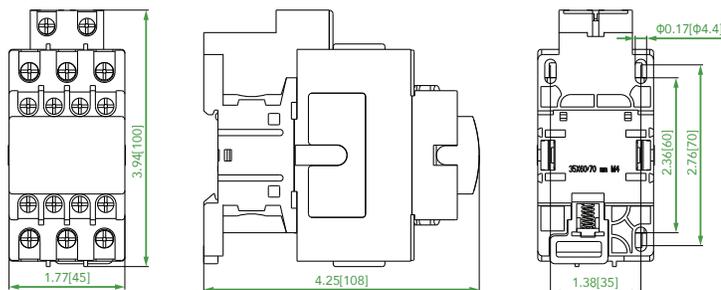
Ex9C09F~18F



Ex9C25~38



Ex9C25F~38F



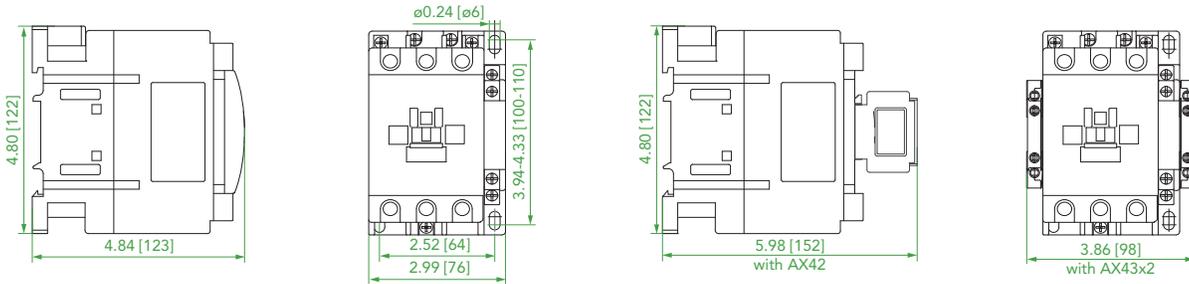


Ex9C IEC Contactors

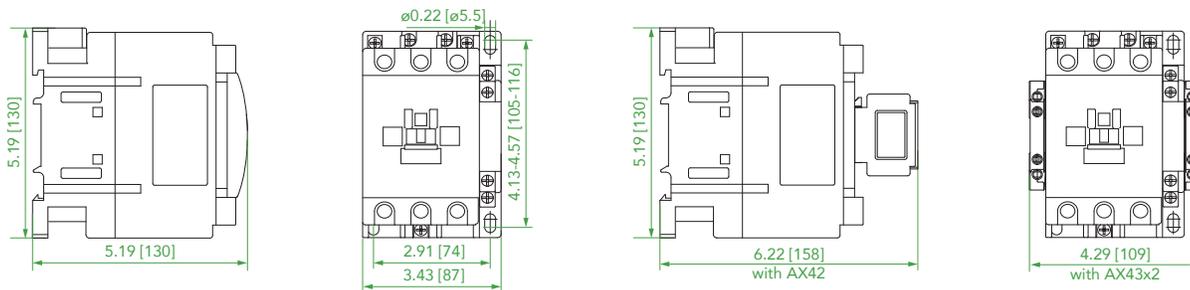
Ex9C Dimensions

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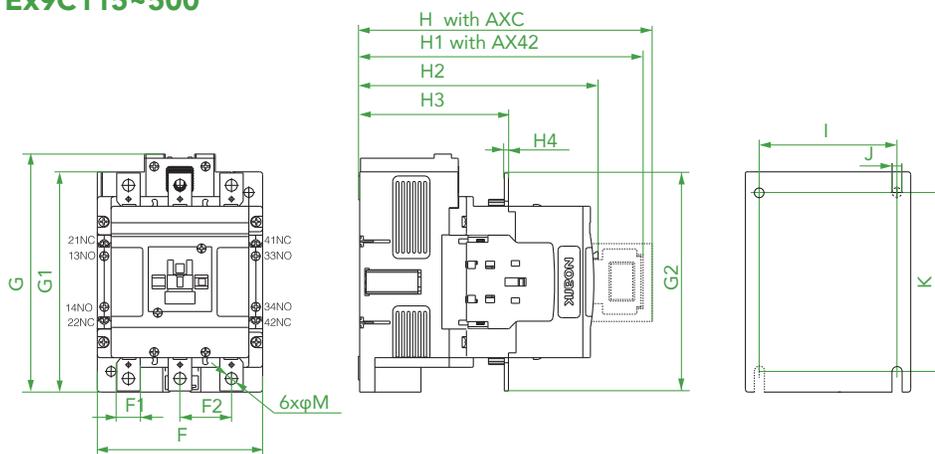
Ex9C40~65



Ex9C80~100



Ex9C115~500



Contactor	G	G1	F	F1	F2	M	H	H1	H2	H3	H4	G2	I	J*	K
Ex9C115~185	6.81 [173]	6.30 [160]	4.75 [120]	0.669 [17]	1.47 [37.4]	ø0.335 [ø8.5]	9.02 [229]	8.11 [206]	6.85 [174]	4.25 [108]	0.118 [3]	6.26 [159]	3.94 [100]	ø0.28 [ø7]	5.12 [130]
Ex9C225~300	8.35 [212]	7.87 [200]	5.71 [145]	0.984 [25]	1.89 [48]	ø0.433 [ø11]	10.35 [263]	9.45 [240]	8.19 [208]	5.28 [134]	0.236 [6]	7.60 [193]	4.72 [120]	ø0.35 [ø9]	7.09 [180]
Ex9C400~500	8.58 [218]	7.87 [200]	6.30 [160]	0.984 [25]	1.89 [48]	ø0.433 [ø11]	11.22 [285]	10.31 [262]	9.06 [230]	5.98 [152]	0.236 [6]	8.41 [213.6]	5.12 [130]	ø0.35 [ø9]	7.09 [180]

*Note: Ex9C115~185 has only two mounting holes as broken circles and the other types have four mounting holes.

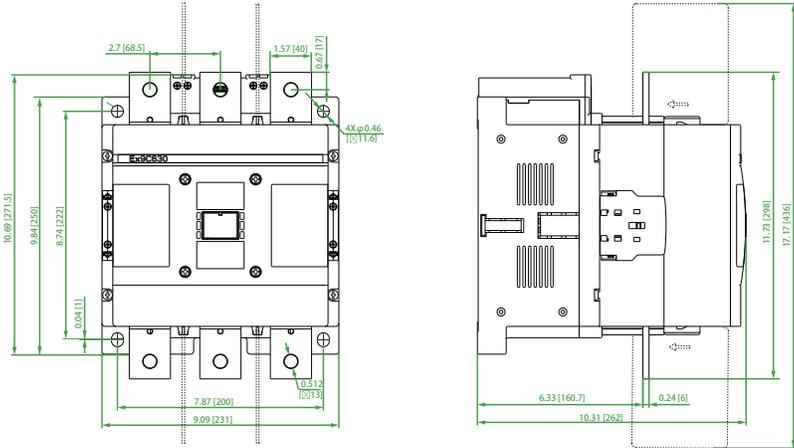


Ex9C IEC Contactors

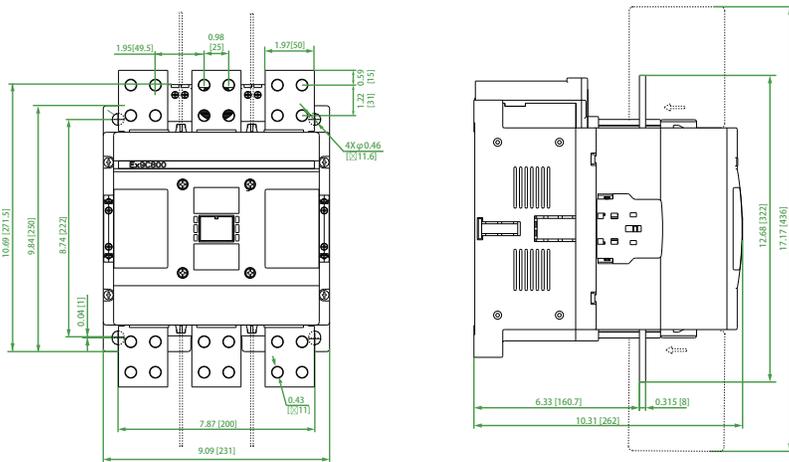
Ex9C Dimensions

Ex9C630

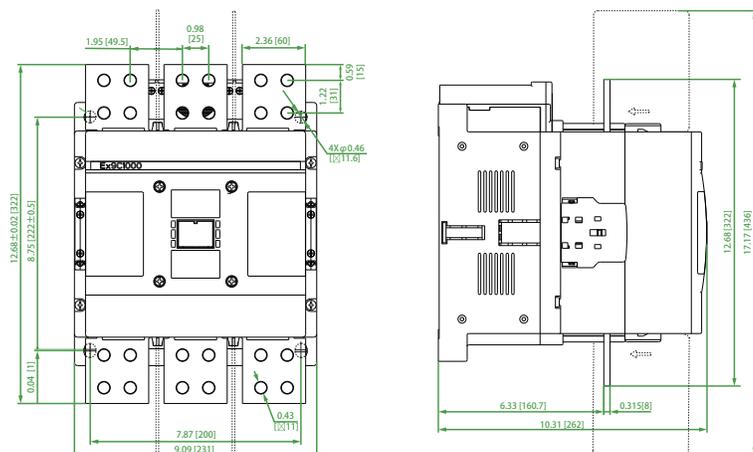
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Ex9C800



Ex9C1000





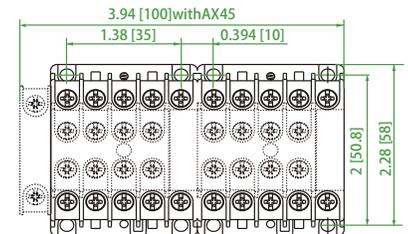
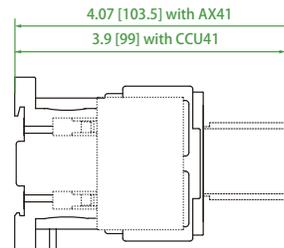
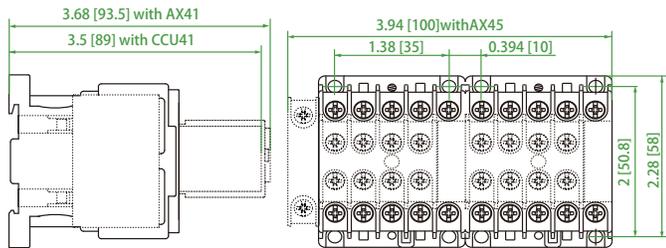
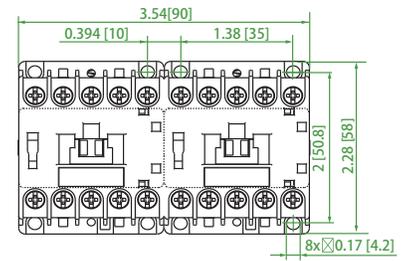
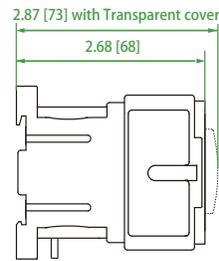
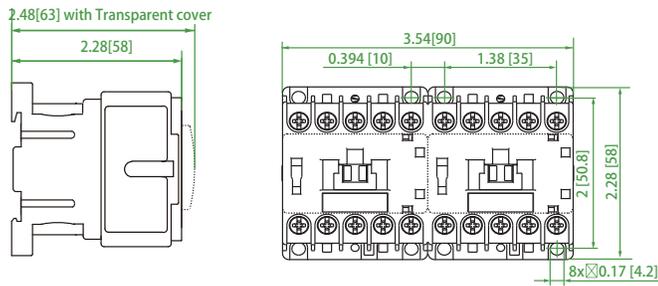
Ex9C IEC Contactors

Ex9CSR/CR Dimensions

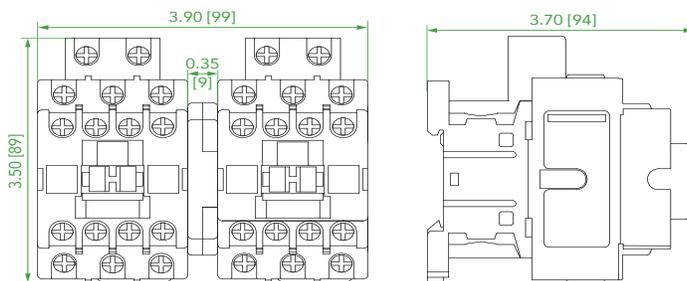
Ex9CSR06~12AC

Ex9CSR06~12 DC

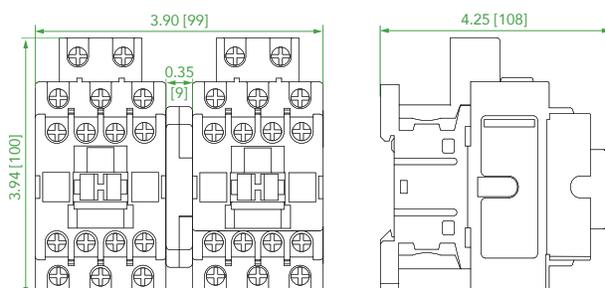
in [mm]



Ex9CR09~18



Ex9CR25~38



A

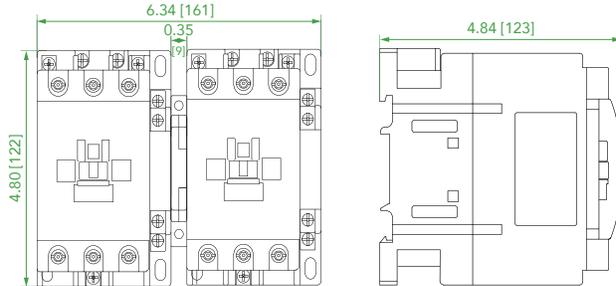


Ex9C IEC Contactors

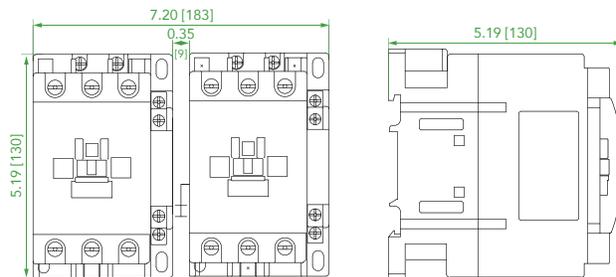
Ex9CR Dimensions

Ex9CR40~65

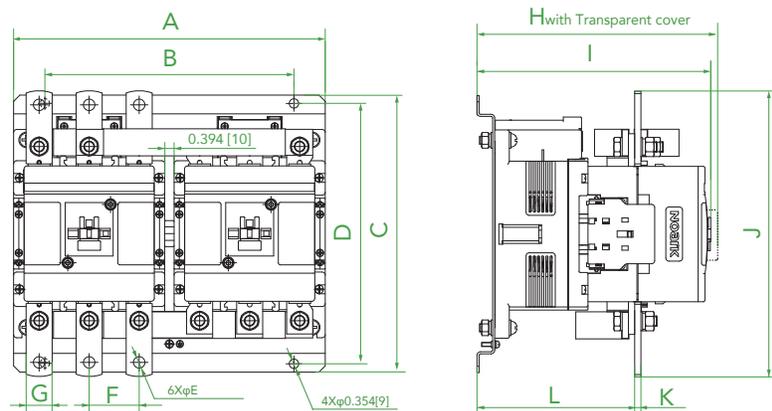
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Ex9CR80~100



Ex9CR115~500



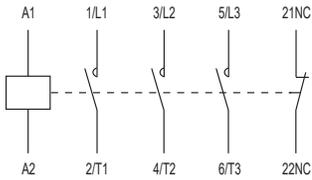
Contactor	A	B	C	D	E	F	G	H	I	J	K	L
Ex9CR115~185	9.80 [249]	7.44 [189]	9.06 [230]	8.43 [214]	0.335 [8.5]	1.47 [37.4]	0.63 [16]	7.72 [196]	7.62 [193.5]	8.76 [222.5]	0.197 [5]	5.05 [128.3]
Ex9CR225~300	11.77 [299]	9.41 [239]	10.47 [266]	9.84 [250]	0.433 [11]	1.89 [48]	0.984 [25]	8.94 [227]	8.84 [224.5]	10.81 [274.5]	0.236 [6]	5.96 [151.3]
Ex9CR400~500	12.95 [329]	10.59 [269]	10.55 [268]	9.96 [253]	0.433 [11]	1.89 [48]	0.984 [25]	9.8 [249]	9.7 [246.5]	11.63 [295.5]	0.236 [6]	6.65 [169]



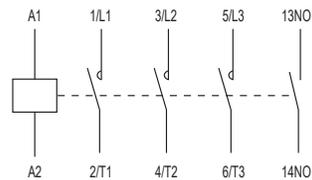
Ex9C IEC Contactors

Ex9CS/C Wiring Diagrams

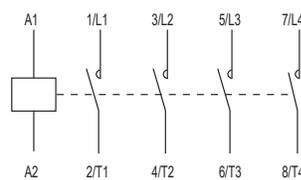
Ex9CS06~12



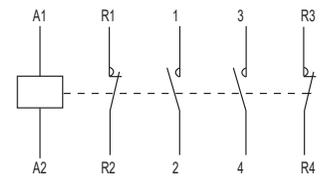
Ex9CS... 3P 1NC



Ex9CS... 3P 1NO

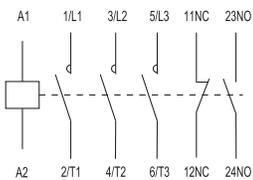


Ex9CS... 4P No Auxiliary

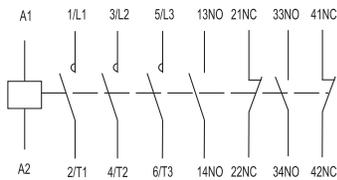


Ex9CS... 4P 2NO+2NC

Ex9C09~38

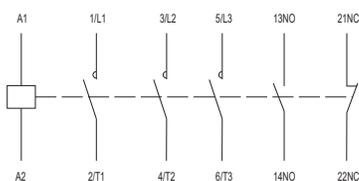


Ex9C... 3P 1NO+1NC



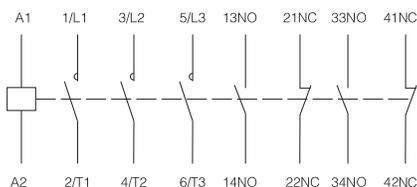
Ex9C... 3P 2NO+2NC

Ex9C40~100



Ex9C... 3P 1NO+1NC

Ex9C115~1000



Ex9C... 3P 2NO+2NC

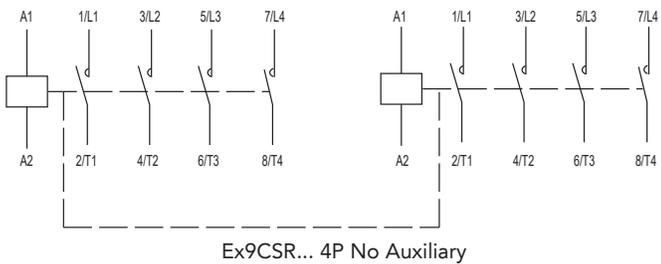
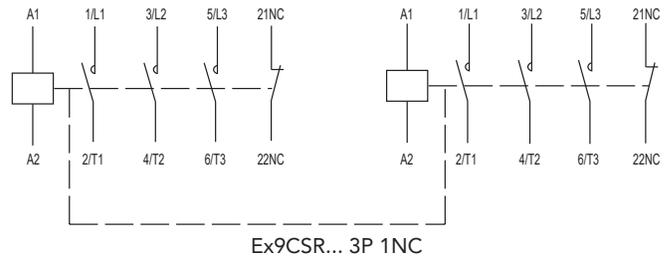
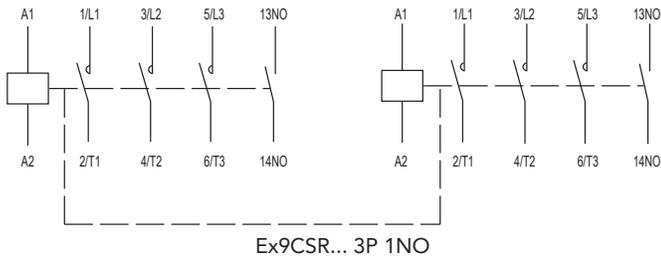
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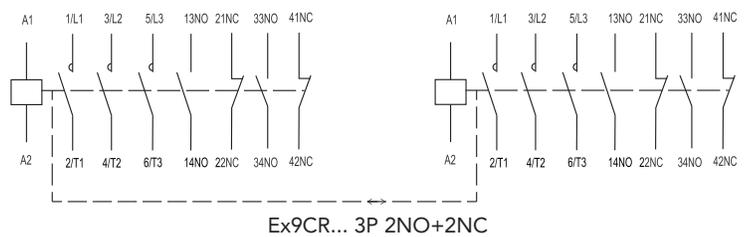
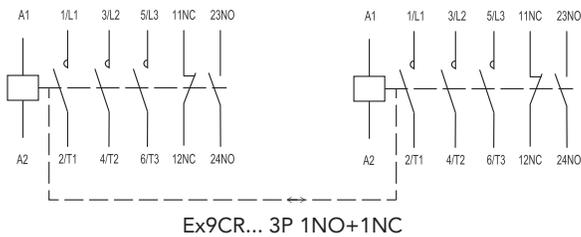
Ex9C IEC Contactors

Ex9CSR/CR Wiring Diagrams

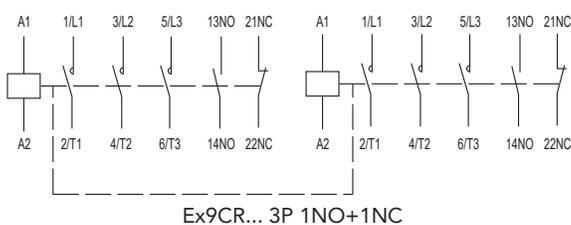
Ex9CSR06~12



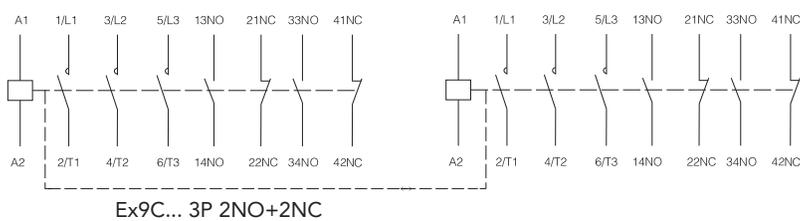
Ex9CR09~38



Ex9CR40~100



Ex9CR115~500

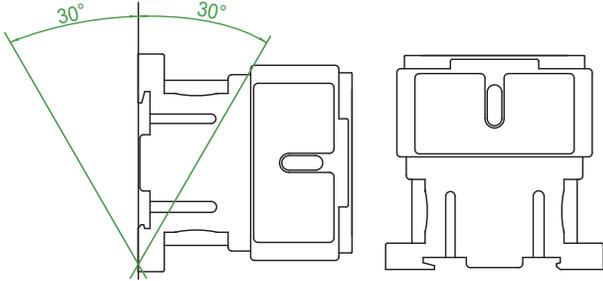




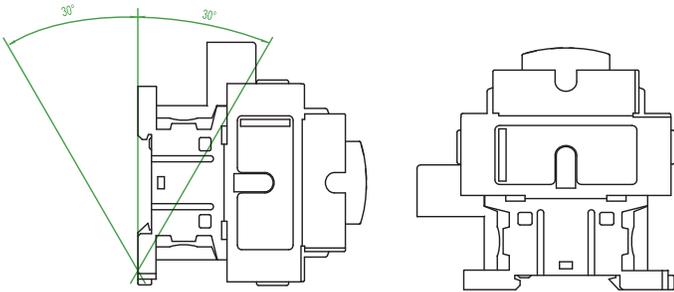
Ex9C IEC Contactors

Ex9CS/C Mounting Positions

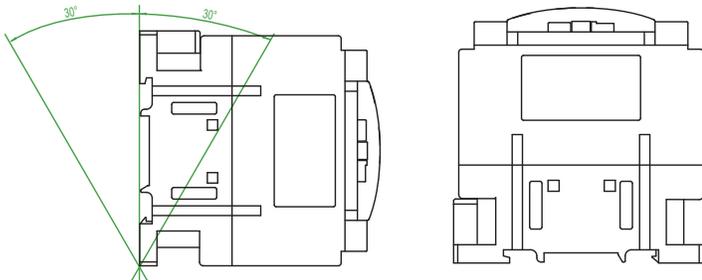
Ex9CS/CSR06~12



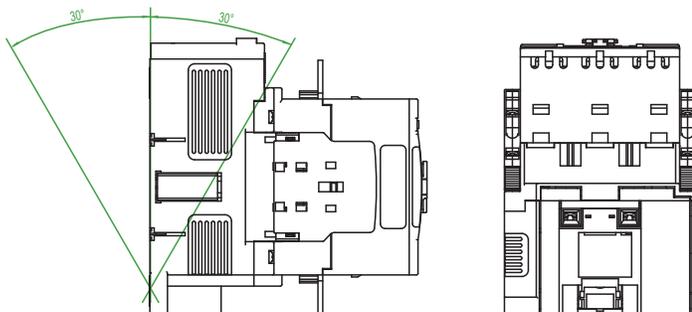
Ex9C/CR09~38



Ex9C/CR40~100



Ex9C/CR115~1000



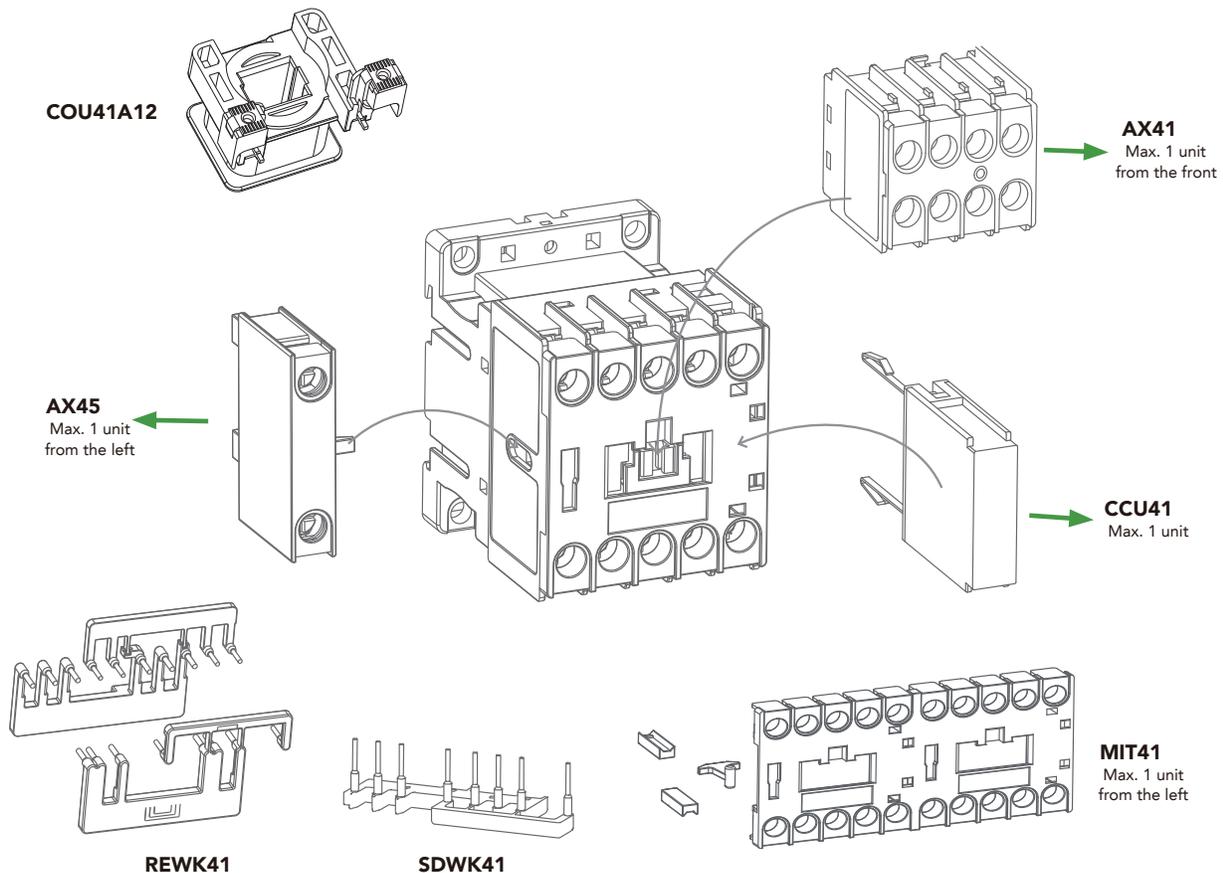
A



Ex9C IEC Contactors

Ex9CS Accessories Overview

The Ex9CS line shares accessories and every contactor can be equipped with one front-mounted unit, one left side-mounted contact and surge suppressor block.



Front-Mounted Auxiliary Contacts (AX41)

- For subsequent mounting
- One unit used with a contactor

Side-Mounted Auxiliary Contacts (AX45)

- For subsequent mounting
- One unit used with a contactor on the left side

Surge Suppressor Blocks (CCU41)

- Reduces voltage peaks in control circuit
- Versions with varistor technology
- Includes cable lugs for connecting to contactor terminals

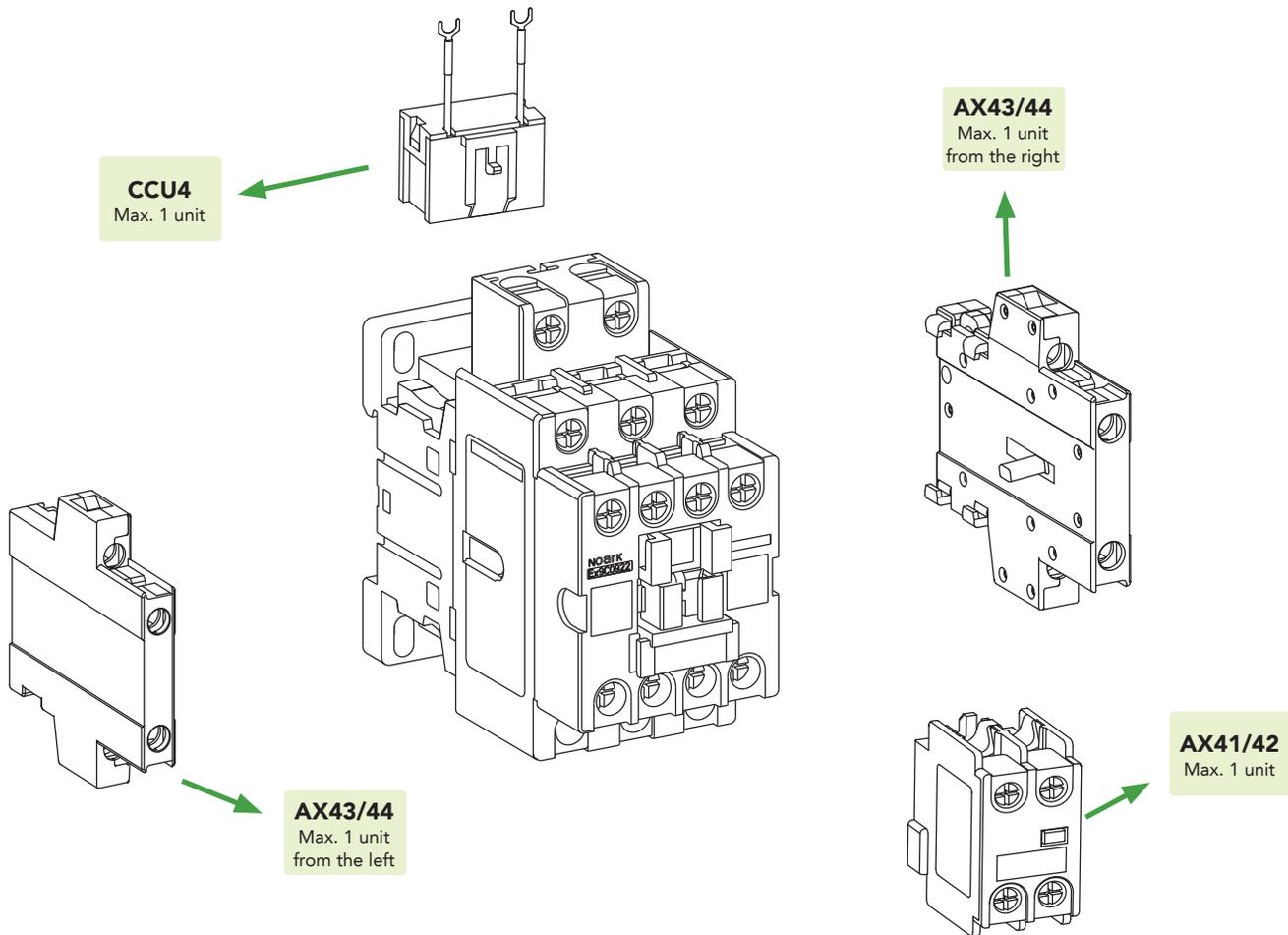
Star Delta Wiring Kit (SDWK41) Reversible Wiring Kit (REWK41)



Ex9C IEC Contactors

Ex9C Accessories Overview

The Ex9C line shares accessories and every contactor can be equipped with one front-mounted unit, two units of side-mounted contact (one from the left, the other from the right) and surge suppressor block.



Front-Mounted Auxiliary Contacts (AX41/AX42)

- For subsequent mounting
- One unit used with a contactor

Side-Mounted Auxiliary Contacts (AX43/AX44)

- For subsequent mounting
- One unit used with a contactor on the left side

Surge Suppressor Blocks (CCU)

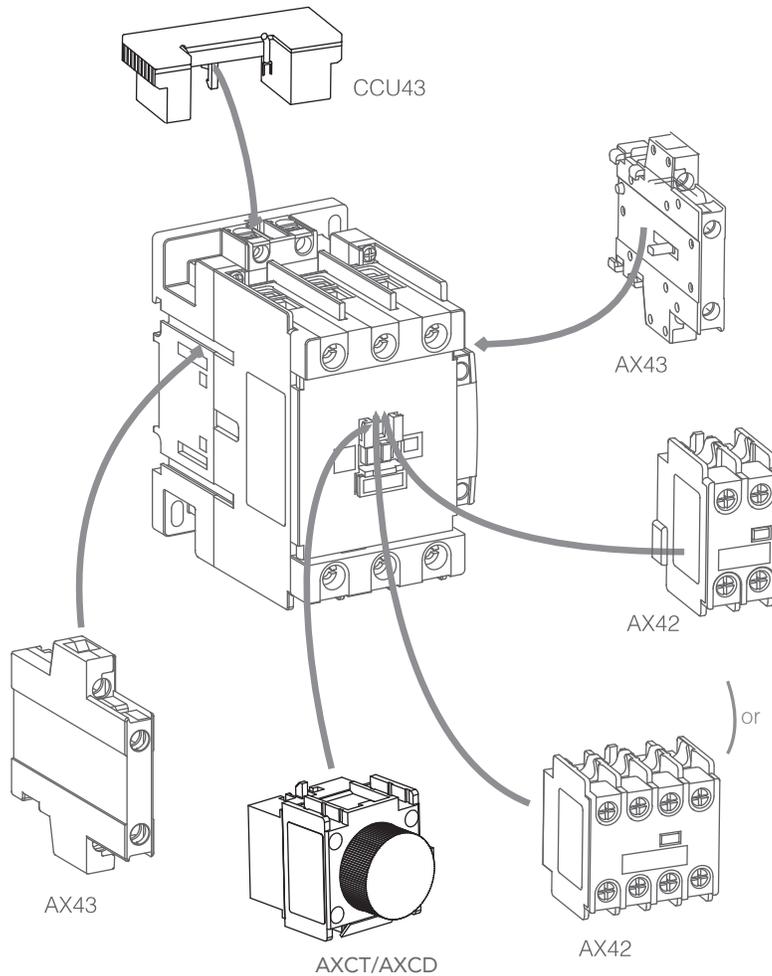
- Reduces voltage peaks in control circuit
- Versions with varistor technology
- Includes cable lugs for connecting to contactor terminals



Ex9C IEC Contactors

Ex9C Accessories Overview

The Ex9C(40-100A) line shares accessories and every contactor can be equipped with one front-mounted unit, two units of side-mounted contact (one from the left, the other from the right) and surge suppressor block.



Front-Mounted Auxiliary Contacts (AX42)

- For subsequent mounting
- One unit used with a contactor

Side-Mounted Auxiliary Contacts (AX43)

- For subsequent mounting
- One unit used with a contactor on the left side another unit on the right side

Surge Suppressor Blocks (CCU43)

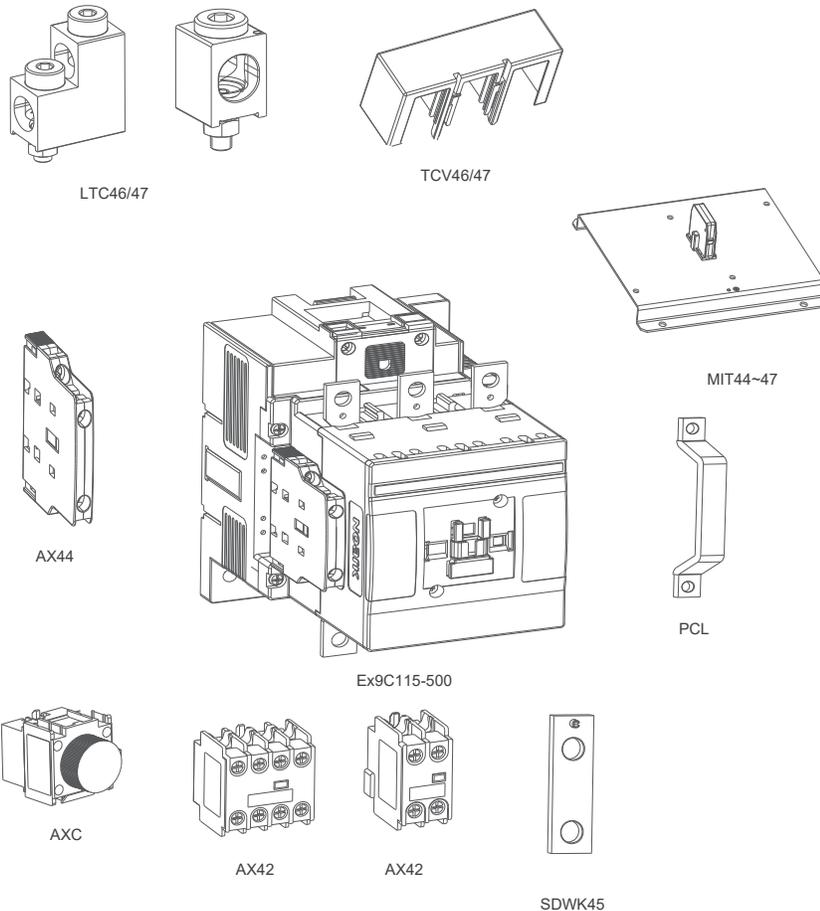
- Reduces voltage peaks in control circuit
- Versions with varistor technology
- Includes cable lugs for connecting to contactor terminals



Ex9C IEC Contactors

Ex9C Accessories Overview

The Ex9C (115-500A) line shares accessories and every contactor can be equipped with one front-mounted unit, one left side-mounted



A

Front-Mounted Auxiliary Contacts (AX42)

- For subsequent mounting
- One unit used with a contactor

Side-Mounted Auxiliary Contacts (AX44)

- For subsequent mounting
- One unit used with a contactor on the left side

Time Delay Relay (AXCD/AXCT)

Mechanical Interlock (MIT44-47)

Surge Suppressor Blocks (CCU41)

- Reduces voltage peaks in control circuit
- Versions with varistor technology
- Includes cable lugs for connecting to contactor terminals

Power (PCL185/PCL300/PCL/500)

- For reversing contactors

Star Delta Wiring Kit (SDWK45)

- Applied in Ex9C115-185 contactor



Ex9C IEC Contactors

Ex9CS/C Accessories: Auxiliary Contact



Front Mount

- For contactors Ex9CS, Ex9CSR, Ex9C and Ex9CR
- For subsequent mounting
- One unit used with a contactor



Side Mount

- For contactors Ex9CS, Ex9C and Ex9CR
- For subsequent mounting
- One unit used with a contactor on the left and one unit on the right

AX4	1	04	UL
Description	Contactor Type and Rated Current	Auxiliary Contact	Device Category
Auxiliary Contact	1: Ex9CS Mini Front Mount 06~12A 2: Ex9C Standard Front Mount 09~500A 3: Ex9C Standard Side Mount 09~100A 4: Ex9C Standard Side Mount 115~500A 5: Ex9CS Mini Side Mount 06~12A	01: 1NC 02: 2NC 04: 4NC 10: 1NO 11: 1NO+1NC 13: 1NO+3NC 20: 2NO 22: 2NO+2NC 31: 3NO+1NC 40: 4NO	UL: UL Listed

	Matched Contactor	Catalog number	Item number
Front Mount	Ex9CS06~12 Ex9CSR06~12 (Front Mount)	AX4104UL	1330001
		AX4113UL	1330002
		AX4122UL	1330003
		AX4131UL	1330004
		AX4140UL	1330005
	Ex9C09~500 Ex9CR09~500 (Front Mount)	AX4202UL	1330006
		AX4204UL	1330009
		AX4211UL	1330007
		AX4213UL	1330010
		AX4220UL	1330008
		AX4222UL	1330011
		AX4231UL	1330012
		AX4240UL	1330013
Side Mount	Ex9C09~100 Ex9CR09~100 (Side Mount)	AX4311UL	1330014
	Ex9C115~1000 Ex9CR115~500 (Side Mount)	AX4402UL	1330016
		AX4411UL	1330015
		AX4420UL	1330209
		AX4501UL	1330241
Ex9CS06~12 (Side Mount)	AX4510UL	1330242	



Ex9C IEC Contactors

Ex9CS/C Accessories: Coil



- Field interchangeable

COU41	A	12	A	UL
Description	Coil Type	Contactors Type and Rated Current	Control Voltage	Device Category
Coil	<p>A: AC, 50/60Hz</p> <p>E: AC/DC</p> <p>F: Wide Range Electronic AC/DC</p>	<p>12: Ex9CS Mini 06~12A</p> <p>18: Ex9C Standard 09~18A</p> <p>38: Ex9C Standard 25~38A</p> <p>65: Ex9C Standard 40~65A</p> <p>100: Ex9C Standard 80~100A</p> <p>185: Ex9C Standard 115~185A</p> <p>300: Ex9C Standard 225~300A</p> <p>500: Ex9C Standard 400~500A</p> <p>1000: Ex9C Standard</p>	<p>B: 24V</p> <p>C: 36V</p> <p>D: 42V</p> <p>E: 48V</p> <p>H: 48~130Vac/dc</p> <p>K: 100~250Vac/dc</p> <p>F: 110V</p> <p>G: 120V</p> <p>X: 208V</p> <p>M: 220V</p> <p>P: 230V</p> <p>U: 240V</p> <p>W: 250V</p> <p>L: 250~500Vac/dc</p> <p>N: 277V</p> <p>Q: 380V</p> <p>V: 400V</p> <p>Z: 415V</p> <p>R: 440V</p> <p>T: 480V</p> <p>S: 500V</p> <p>Y: 600V</p>	<p>UL: UL Listed</p>

A



Ex9C IEC Contactors

Ex9CS/C Accessories: Coil

Accessory Description	Coil Voltage	AC Coil						
		Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	
		06~12A		25~38A		80~100A		
Coil	24	COU41A12BUL	1330036	COU41A38BUL	1330084	COU41A100BUL	1330132	
	36	COU41A12CUL	1330037	COU41A38CUL	1330085	COU41A100CUL	1330133	
	42	COU41A12DUL	1330038	COU41A38DUL	1330086	COU41A100DUL	1330134	
	48	COU41A12EUL	1330039	COU41A38EUL	1330087	COU41A100EUL	1330135	
	110	COU41A12FUL	1330040	COU41A38FUL	1330088	COU41A100FUL	1330136	
	120	COU41A12GUL	1330041	COU41A38GUL	1330089	COU41A100GUL	1330137	
	208	COU41D12XUL	1330053	COU41A38XUL	1330101	COU41A100XUL	1330149	
	220	COU41A12MUL	1330042	COU41A38MUL	1330090	COU41A100MUL	1330138	
	230	COU41A12PUL	1330043	COU41A38PUL	1330091	COU41A100PUL	1330139	
	240	COU41A12UUL	1330045	COU41A38UUL	1330093	COU41A100UUL	1330141	
	277	COU41A12NUL	1330044	COU41A38NUL	1330092	COU41A100NUL	1330140	
	380	COU41A12QUL	1330046	COU41A38QUL	1330094	COU41A100QUL	1330142	
	400	COU41A12VUL	1330047	COU41A38VUL	1330095	COU41A100VUL	1330143	
	415	COU41A12ZUL	1330048	COU41A38ZUL	1330096	COU41A100ZUL	1330144	
	440	COU41A12RUL	1330049	COU41A38RUL	1330097	COU41A100RUL	1330145	
	480	COU41A12TUL	1330050	COU41A38TUL	1330098	COU41A100TUL	1330146	
	500	COU41A12SUL	1330051	COU41A38SUL	1330099	COU41A100SUL	1330147	
	600	COU41A12YUL	1330052	COU41A38YUL	1330100	COU41A100YUL	1330148	
			09~18A		40~65A			
		24	COU41A18BUL	1330060	COU41A65BUL	1330108		
		36	COU41A18CUL	1330061	COU41A65CUL	1330109		
		42	COU41A18DUL	1330062	COU41A65DUL	1330110		
		48	COU41A18EUL	1330063	COU41A65EUL	1330111		
		110	COU41A18FUL	1330064	COU41A65FUL	1330112		
		120	COU41A18GUL	1330065	COU41A65GUL	1330113		
		208	COU41A18XUL	1330077	COU41A65XUL	1330125		
	220	COU41A18MUL	1330066	COU41A65MUL	1330114			
	230	COU41A18PUL	1330067	COU41A65PUL	1330115			
	240	COU41A18UUL	1330069	COU41A65UUL	1330117			
	277	COU41A18NUL	1330068	COU41A65NUL	1330116			
	380	COU41A18QUL	1330070	COU41A65QUL	1330118			
	400	COU41A18VUL	1330071	COU41A65VUL	1330119			
	415	COU41A18ZUL	1330072	COU41A65ZUL	1330120			
	440	COU41A18RUL	1330073	COU41A65RUL	1330121			
	480	COU41A18TUL	1330074	COU41A65TUL	1330122			
	500	COU41A18SUL	1330075	COU41A65SUL	1330123			
	600	COU41A18YUL	1330076	COU41A65YUL	1330124			



Ex9C IEC Contactors

Ex9CS/C Accessories: Coil

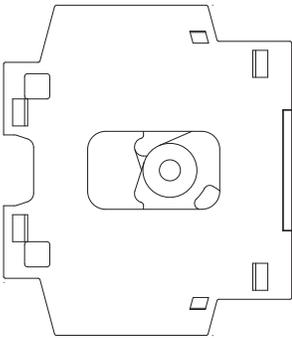
Accessory Description	Coil Voltage	AC/DC Coil						
		Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	
Coil		115~185A		225~300A		400~500A		
	24	COU41E185BUL	1330155	COU41E300BUL	1330173	-	-	
	36	COU41E185CUL	1330156	COU41E300CUL	1330174	COU41E500CUL	1330192	
	42	COU41E185DUL	1330157	COU41E300DUL	1330175	COU41E500DUL	1330193	
	48	COU41E185EUL	1330158	COU41E300EUL	1330176	COU41E500EUL	1330194	
	110	COU41E185FUL	1330159	COU41E300FUL	1330177	COU41E500FUL	1330195	
	120	COU41E185GUL	1330160	COU41E300GUL	1330178	COU41E500GUL	1330196	
	208	COU41E185XUL	1330163	COU41E300XUL	1330181	COU41E500XUL	1330199	
	220	COU41E185MUL	1330161	COU41E300MUL	1330179	COU41E500MUL	1330197	
	230	COU41E185PUL	1330162	COU41E300PUL	1330180	COU41E500PUL	1330198	
	240	COU41E185UUL	1330164	COU41E300UUL	1330182	COU41E500UUL	1330200	
	277	COU41E185NUL	1330167	COU41E300NUL	1330185	COU41E500NUL	1330203	
	380	COU41E185QUL	1330165	COU41E300QUL	1330183	COU41E500QUL	1330201	
	400	COU41E185VUL	1330166	COU41E300VUL	1330184	COU41E500VUL	1330202	
	480	COU41E185TUL	1330168	COU41E300TUL	1330186	COU41E500TUL	1330204	
	600	COU41E185YUL	1330169	COU41E300YUL	1330187	COU41E500YUL	1330205	
	Wide Range Electronic AC/DC Coil							
			115~185A		225~300A		400~500A	
		48~130	COU41F185HUL	1330170	COU41F300HUL	1330188	COU41F500HUL	1330206
		100~250	COU41F185KUL	1330171	COU41F300KUL	1330189	COU41F500KUL	1330207
	250~500	COU41F185LUL	1330172	COU41F300LUL	1330190	COU41F500LUL	1330208	

A



Ex9C IEC Contactors

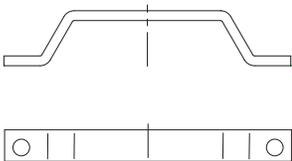
Ex9CS/C Accessories: Mechanical Interlock and Power



*NOTE: MIT41 cannot be installed by end user.

MIT4	1	UL
↓	↓	↓
Description	Contactor Type and Rated Current	Device Category
Mechanical Interlock	1: Ex9CS Mini 06~12A* 2: Ex9C Standard 09~38A 3: Ex9C Standard 40~100A 4: Ex9C Standard 115~185A 5: Ex9C Standard 225~300A 6: Ex9C Standard 400~500A 8: Ex9C Standard 09~38A and 40~100A 9: Ex9C Standard 40~100A and 115~185A 10: Ex9C Standard 115~185A, 225~300A, 400~500A, 630~1000A	UL: UL Listed

Accessory Description	Catalog number	Item number
Mechanical Interlock	MIT41UL	1330026
	MIT42UL	1330027
	MIT43UL	1330028
	MIT44UL	1330029
	MIT45UL	1330030
	MIT46UL	1330031
	MIT48UL	1330232
	MIT49UL	1330233
	MIT410UL	1330234



PCL	185	UL
↓	↓	↓
Description	Contactor Type and Rated Current	Device Category
Power Connection	185: Ex9C Standard 115~185A 300: Ex9C Standard 225~300A 500: Ex9C Standard 400~500A	UL: UL Listed

Accessory Description	Catalog number	Item number
Power Connection	PCL185UL	1330032
	PCL300UL	1330033
	PCL500UL	1330034



Ex9C IEC Contactors

Ex9CS/C Accessories: Surge Suppressor Block

Selective Protection LSI



CCU4	1	A	UL
Description	Contactor Type and Rated Current	Voltage Protection Scope	Device Category
Surge Suppressor Block	1: Ex9CS Mini 06~12A	A: 24~48Vac	UL: UL Listed
	2: Ex9C Standard 09~38A	B: 110~240Vac	
	3: Ex9C Standard 40~100A	C: 380~415Vac	

Accessory Description	Matched Contactor	Catalog number	Item number
Surge Suppressor Block	Ex9CS06~12	CCU41AUL	1330017
		CCU41BUL	1330018
		CCU41CUL	1330019
	Ex9C09~38	CCU42AUL	1330020
		CCU42BUL	1330021
		CCU42CUL	1330022
	Ex9C40~100	CCU43AUL	1330023
		CCU43BUL	1330024
		CCU43CUL	1330025

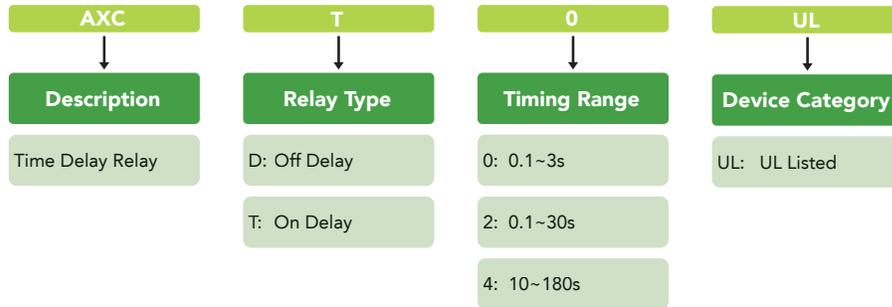
- Reduces voltage peaks in control circuit
- Versions with varistor (CCU41) and RC circuit technology (CCU42 and CCU43)
- Includes cable lugs for connecting to contactor terminals

A



Ex9C IEC Contactors

Ex9CS/C Accessories: Time Delay Relay, Lugs, Wiring Kit



Accessory Description	Matched Contactor	Catalog number	Item number
Time Delay Relay (Pneumatic Timer)	Ex9C09~500	AXCD0UL	1311730
		AXCD2UL	1311729
		AXCD4UL	1311731
		AXCT0UL	1311726
		AXCT2UL	1311727
		AXCT4UL	1311728



Accessory Description	Suitable For	Catalog number	Item number	Comment
Star Delta Wiring Kit (SDWK)	Ex9CS or Ex9CSR	SDWK41	1330216	-
	Ex9C 115-185	SDWK45	1330217	45mm terminal x 6pcs
	Ex9C 115-185	SDWK45-L	1330035	45mm terminal x 4pcs 70mm terminal x 2pcs



REWK41

Accessory Description	Suitable For	Catalog number	Item number
Reversible wiring kit (REWK)	Ex9CS	REWK41	1330252



Ex9C IEC Contactors

Ex9CS/C Accessories: Terminal Lugs, Terminal Cover



LTC	25	N	B	A
Description	Type	Device Category	Number of Holes	Others
Terminal Lugs	25: for Ex9C630 26: for Ex9C800/1000 46: for Ex9C115~185 47: for Ex9C225~500	N: UL Approval	A: 1 Hole * 115~185A B: 2 Holes * 225~630A C: 3 Holes * 630~1000A D: 4 Holes * 800~1000A	

Accessory Description	Type	Number of Holes	Catalog number	Item number
Terminal Lugs	630A	2 Holes	LTC25NBA	1102622
		3 Holes	LTC25NCA	1102623
	800/1000A	3 Holes	LTC26NCA	1102624
		4 Holes	LTC26NDA	1102625
	115~185A	1 Hole	LTC46NA1	1330218
225~500A	2 Holes	LTC47NB2	1330221	



TCV	46
Description	Type
Terminal Cover	46: for Ex9C115~185 47: for Ex9C225~500

Accessory Description	Type	Catalog number	Item number
Terminal Cover	115~185A	TCV46	1330222
	225~500A	TCV47	1330223



Ex9C IEC Contactors

Ex9CS/C Accessory Specifications

	Auxiliary Contact																	
	CS/CSR					C/CR								C/CR				
	Front Mount					Front Mount								Side Mount				
	AX41					AX42								AX43		AX44		
	04	13	22	31	40	02	04	11	13	20	22	31	40	11	02	11	20	
UL Standard File Number	E353866																	
IEC Standard File Number	IEC/EN 60947-5-1																	
Certifications	UL Listed, CSA, CCC, RoHS																	
Electrical Parameters																		
Contacts	4NC	1NO+ 3NC	2NO+ 2NC	3NO+ 1NC	4NO	2NC	4NC	1NO+ 1NC	1NO+ 3NC	2NO	2NO+ 2NC	3NO+ 1NC	4NO	1NO+ 1NC	2NC	1NO+ 1NC	2NO	
Rated Frequency (Hz)	50/60																	
Rated Working Voltage Ue	AC-15 (V)	380/400/415												24/230/400/690				
	DC-13 (V)	220/250												125/250				
Rated Working Current Ie	AC-15 (A)	1.9A												6.00 (24V) 3.13 (230V) 1.80 (400V) 1.04 (690V)				
	DC-13 (A)	0.31												0.55 (125V) 0.27 (250V)				
Rated Capacity	AC-15 (VA)	720																
	DC-13 (W)	69																
Rated Thermal Current Ith (A)	10																	
Rated Impulse Withstand Voltage Uimp (kV)	6 (1.2/50ms)																	
Rated Insulation Voltage Ui (V)	690																	
Mechanical Parameters																		
Device Width in (mm)	1.46 (37)					1.89 (48)								0.43 (11)		0.39 (10)		
Device Height in (mm)	1.54 (39)					1.46 (37)								2.72 (69)		2.52 (64)		
Device Depth in (mm)	1.30 (33)					1.02 (26)			1.77 (45)					2.76 (70)		2.68 (68)		
Degree of Protection	IP 20																	
Terminals	Lift																	
Terminal Capacity AWG (mm ²)	18-12 (1-2.5)																	
Torque of Terminals in-lb (N.m)	7 (0.80)					15 (1.70)												



Ex9C IEC Contactors

Ex9CS/C Accessory Specifications

	Surge Suppressor Block		
	CCU41	CCU42	CCU43
Electrical Parameters			
Internal Technology	Varistor	Resistance	
Control Coil Voltage U _c (Protection Range)	24-48Vac/dc 110-240Vac/dc 380-415Vac/dc		
Maximum Peak Voltage U _p (U _c)	2kV	3kV	
Mechanical Parameters			
Matched Contactor Type	Ex9CS06-12	Ex9C09-38	Ex9C40-100
Mounting	Mounts to Contactor Control Coil Terminals		
Weight lb (kg)	0.04 (0.02)		

A

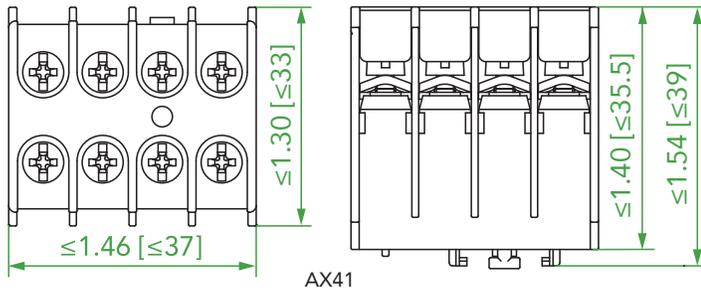


Ex9C IEC Contactors

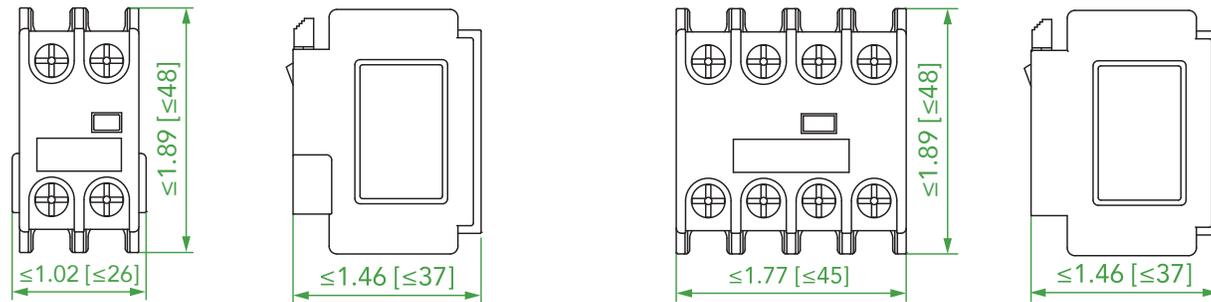
Ex9CS/C Accessory Dimensions

in [mm]

AX41/42 Front Mount Auxiliary Contact



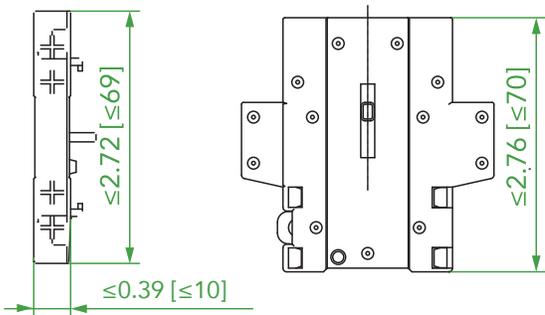
AX41



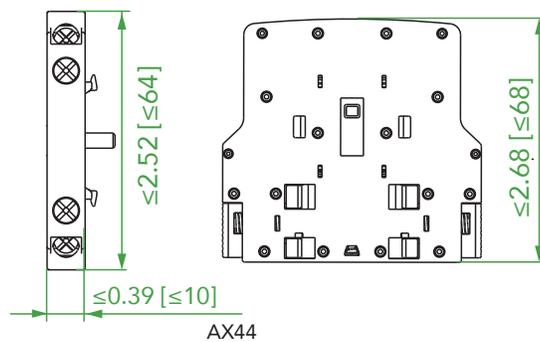
AX42 2P

AX42 4P

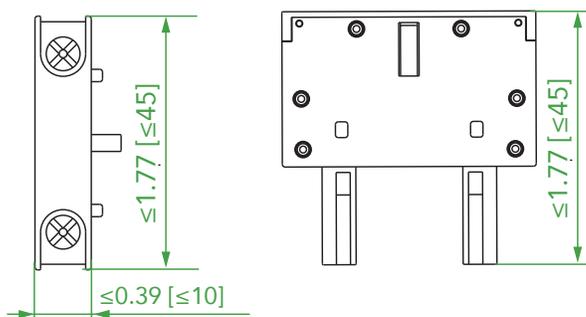
AX43/44/45 Side Mount Auxiliary Contact



AX43



AX44



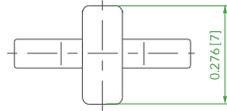
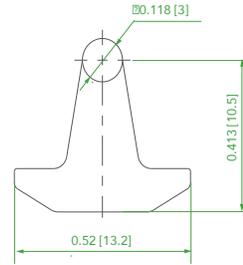
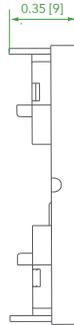
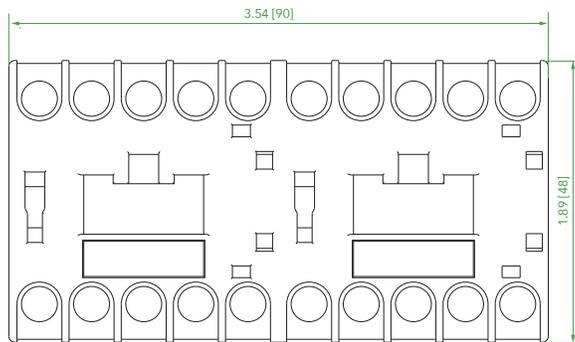
AX45



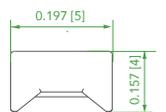
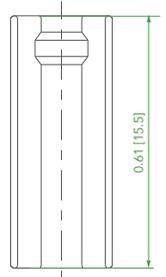
Ex9C IEC Contactors

Ex9CS/C Accessory Dimensions

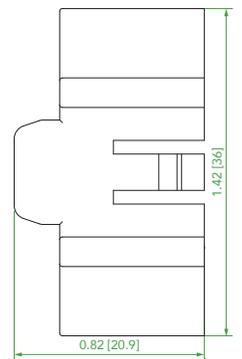
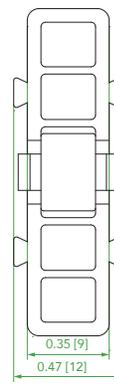
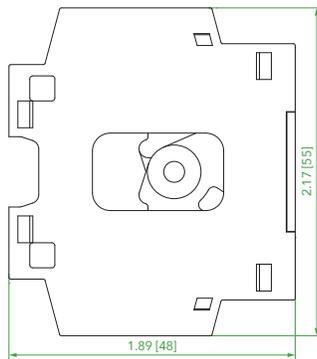
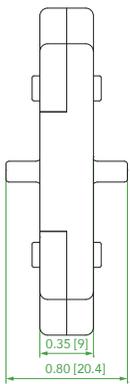
MIT41 Mechanical Interlock Kit



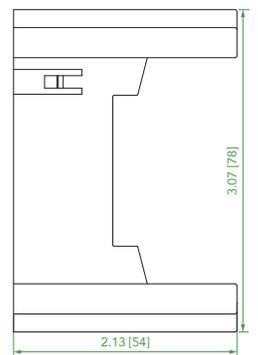
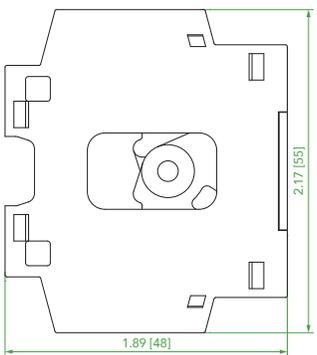
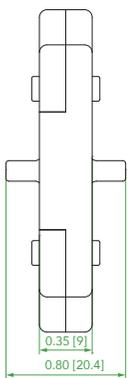
in [mm]



MIT42 Mechanical Interlock Kit



MIT43 Mechanical Interlock Kit

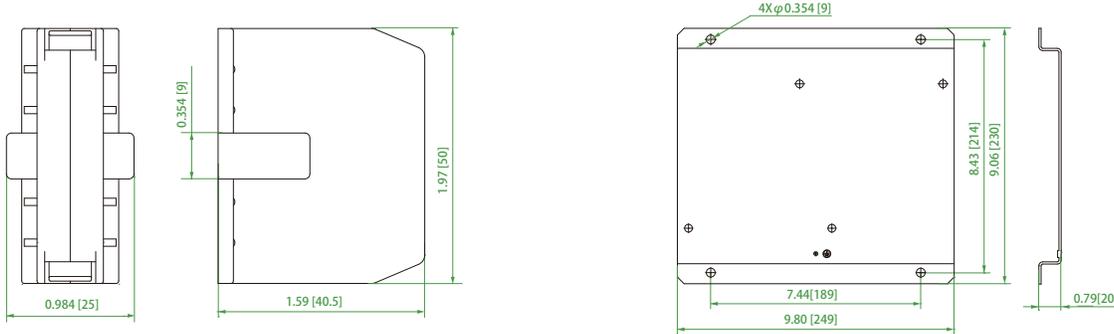




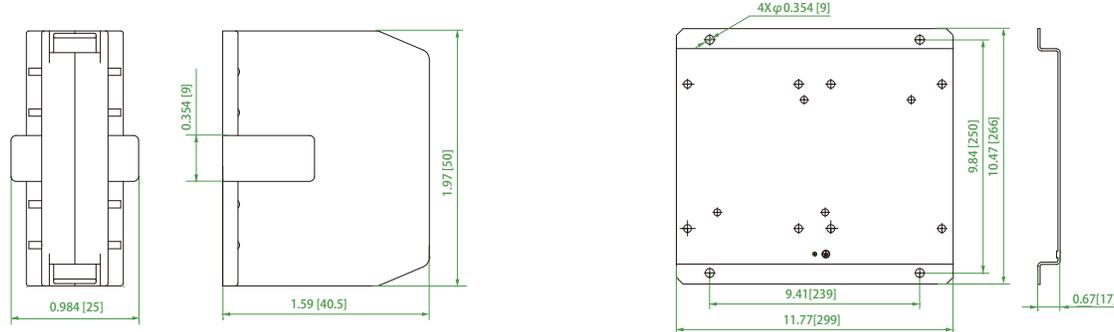
Ex9C IEC Contactors Ex9CS/C Accessory Dimensions

MIT44 Mechanical Interlock Kit Unit: in [mm]

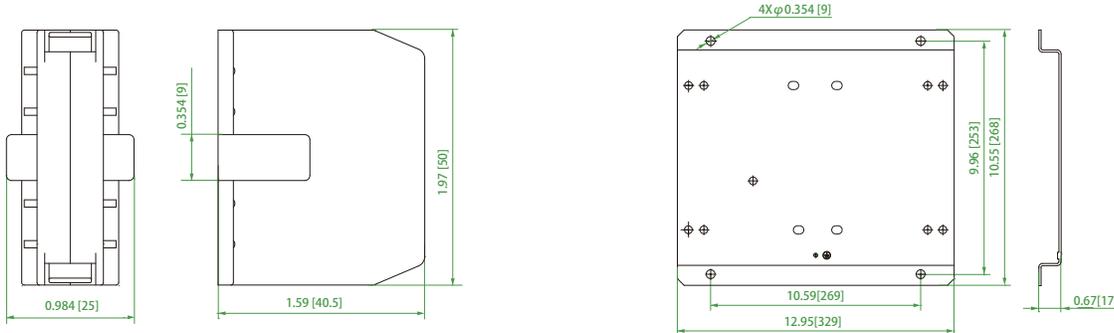
in [mm]



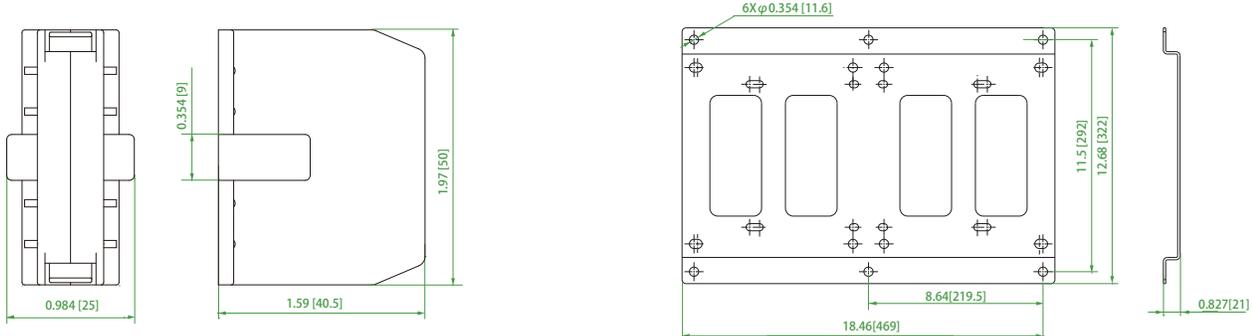
MIT45 Mechanical Interlock Kit Unit: in [mm]



MIT46 Mechanical Interlock Kit Unit: in [mm]



MIT47 Mechanical Interlock Kit Unit: in [mm]



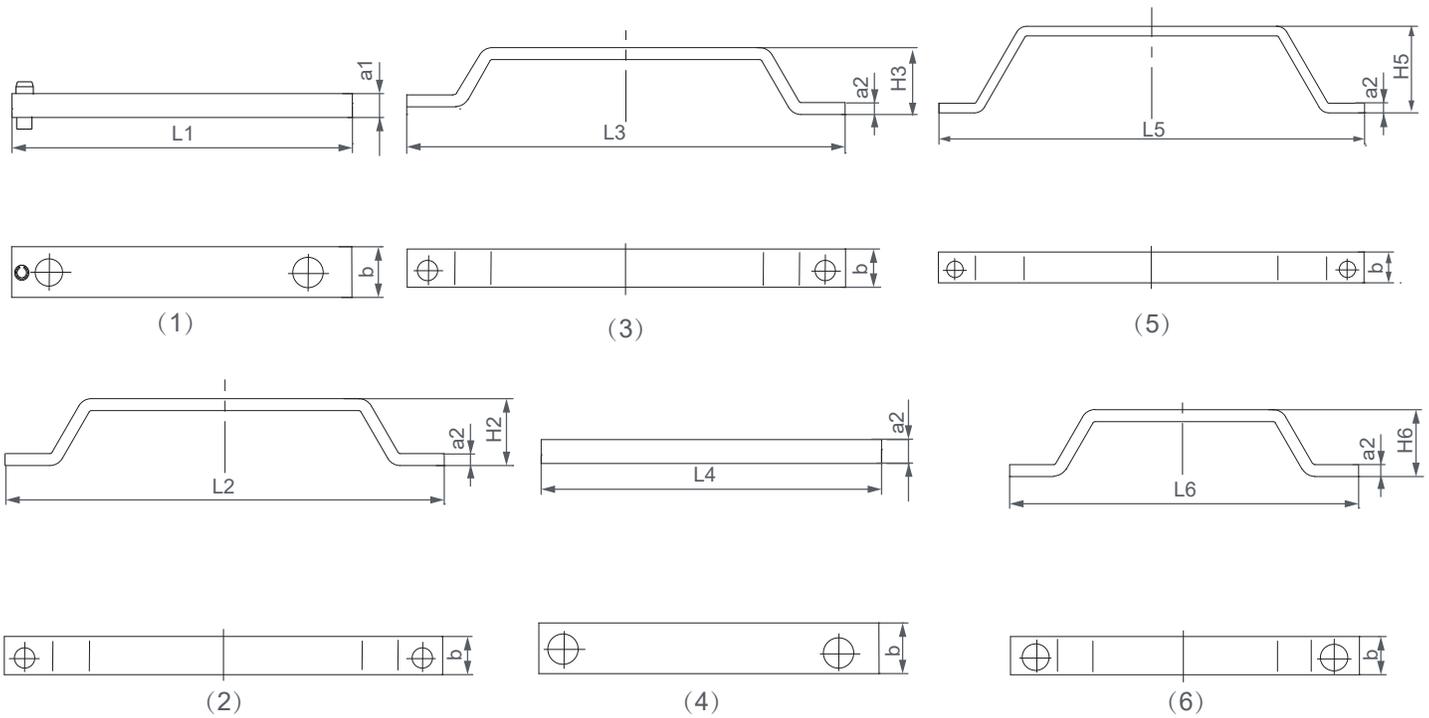


Ex9C IEC Contactors

Ex9CS/C Accessory Dimensions

PCL185/300/500
Power Connection Kit

in [mm]



A

Code	TYPE	a1	a2	b	L1	H2	L2	H3	L3	L4	H5	L5	H6	L6
PCL185		0.197 [5]	0.197 [5]	0.63 [16]	2.13 [54]	0.906 [23]	7.22 [183.4]	1.1 [28]	7.22 [183.4]	2.8 [71.2]	1.77 [45]	8.7 [221]	1.1 [28]	5.75 [146]
PCL300		0.236 [6]	0.236 [6]	0.984 [25]	2.83 [72]	1.26 [32]	8.94 [227]	1.65 [42]	8.94 [227]	3.27 [83]	1.97 [50]	10.83 [275]	1.26 [32]	7.05 [179]
PCL500		0.236 [6]	0.315 [8]	0.984 [25]	2.83 [72]	1.34 [34]	9.53 [242]	1.73 [44]	9.53 [242]	3.86 [98]	2.05 [52]	11.42 [290]	1.34 [34]	7.64 [194]



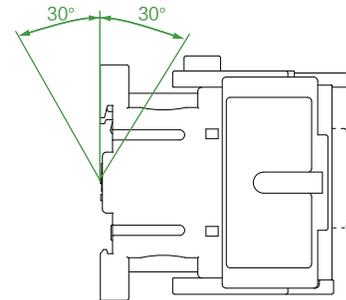
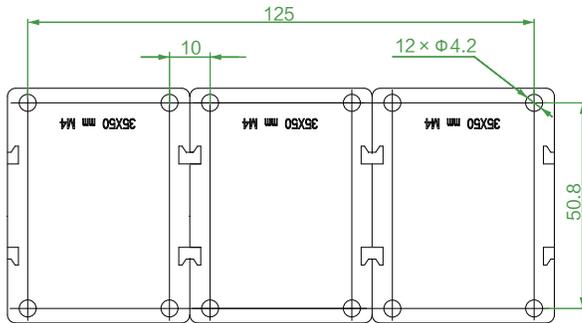
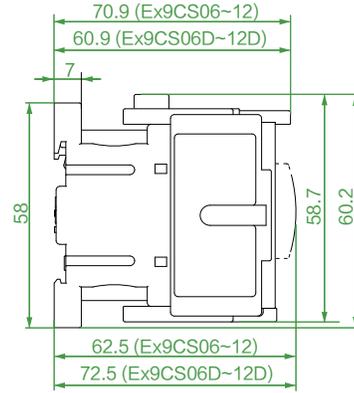
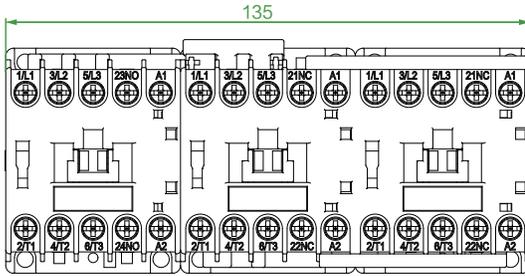
Ex9C IEC Contactors

Ex9CS/C Accessory Dimensions

SDWK41

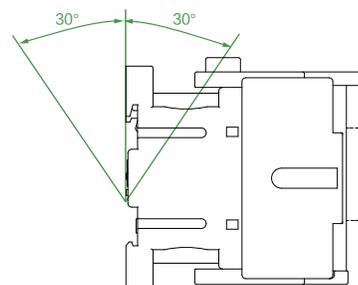
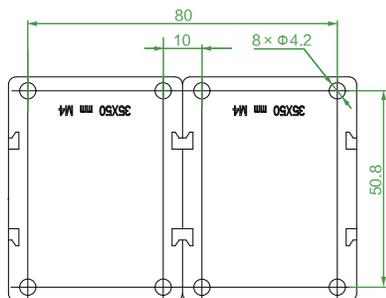
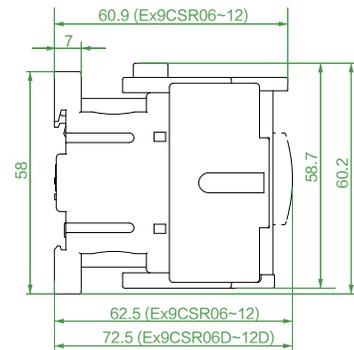
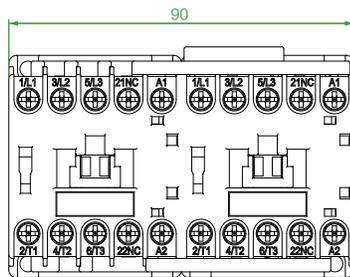
Star-Delta wiring kit

mm



REWK41

Reversible wiring kit:



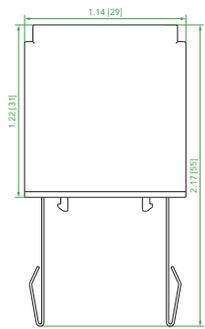


Ex9C IEC Contactors

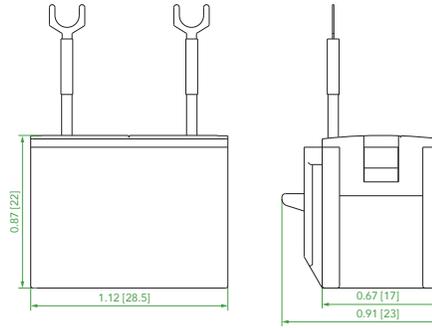
Ex9CS/C Accessory Dimensions

CCU4 Surge Suppressor Block

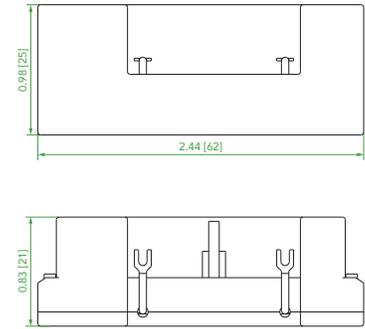
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CCU41

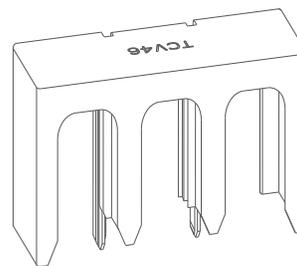
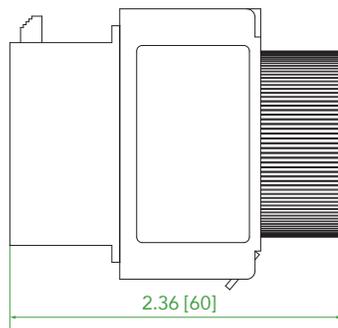
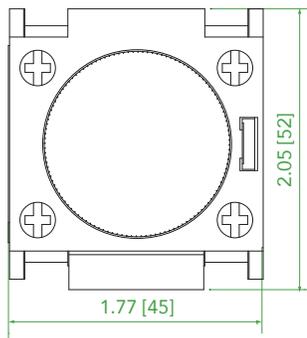


CCU42

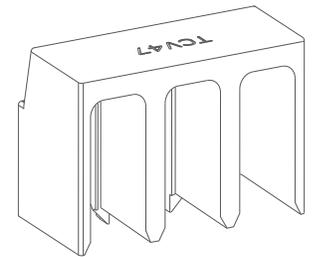


CCU43

AXC Time Delay Relay



TCV46



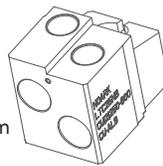
TCV47

LTC Terminal Lugs



LTC46NA1

1-Hole
75/90°C
Al/Cu Wire Only
3 AWG~350kcmil
3 AWG~2/0AWG 124lb-in/14N·m
3/0 AWG~350kcmil 213lb-in/24N·m



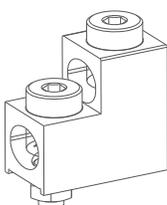
LTC25NB

2-Holes
75/90°C
Al/Cu Wire Only
(2)250kcmil-600kcmil
398 lb-in/pulg/po
(2)120-300mm²
45N·m



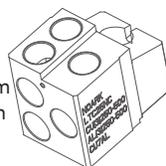
LTC26NC

3-Holes
75°C/90°C
Al/Cu Wire
(3)3/0 AWG-750kcmil
310 lb-in/pulg/po
(3)95-300mm²
35N·m



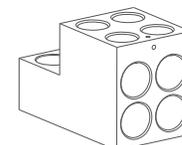
LTC47NB2

2-Holes
75/90°C
Al/Cu Wire Only
2/0 AWG~500kcmil
2/0 AWG~250kcmil 195lb-in/22N·m
300kcmil~500kcmil 310lb-in/35N·m



LTC25NC

3-Holes
75/90°C
Al/Cu Wire Only
(3)250kcmil-500kcmil
398 lb-in/pulg/po
(3)120-240mm²
45N·m



LTC26ND

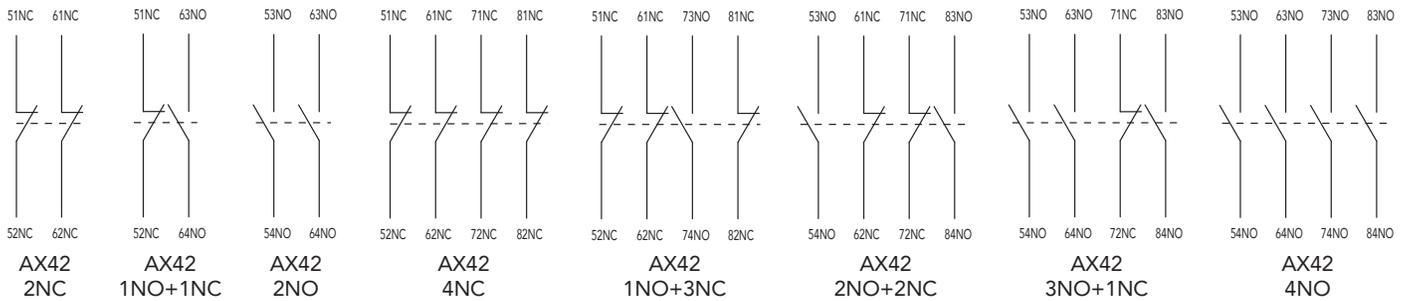
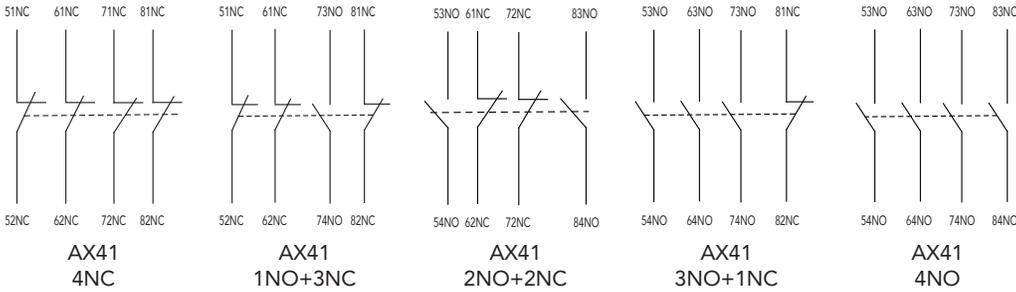
4-Holes
75°C/90°C
Al/Cu Wire
(4)3/0 AWG-500kcmil
310 lb-in/pulg/po
(4)95-240mm²
35N·m



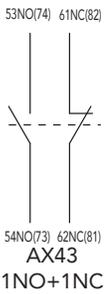
Ex9C IEC Contactors

Ex9CS/C Accessory Wiring Diagrams

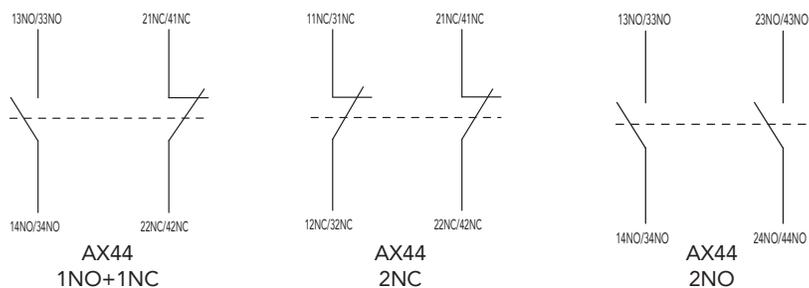
AX41/42 Front Mount Auxiliary Contact



AX43 Side Mount Auxiliary Contact



AX44 Side Mount Auxiliary Contact

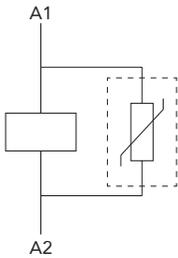




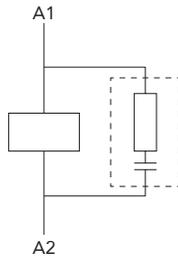
Ex9C IEC Contactors

Ex9CS/C Accessory Wiring Diagrams

CCU4 Surge Suppressor Block



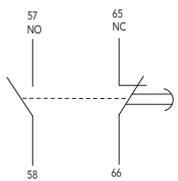
CCU41



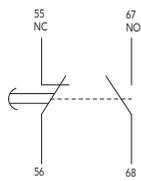
CCU42
CCU43



AXC Time Delay Relay



AXCD



AXCT



Ex9R Thermal Overload Relays

Product Overview

Design Features

- For use with Ex9C and Ex9CR*
- Rated current up to 500A @ 600Vac, 50/60Hz
- Overload protection trip Class 10 and Class 10A
- Phase loss sensitivity
- Adjustable current setting for overload protection
- Automatic or manual reset selectable
- Status indication
- STOP and TEST function
- Direct mount to contactors or 35mm DIN rail mounting base option
- 5-year limited warranty



Certifications

- UL Listed, File Number E353865, UL 60947-1 and 60947-4-1
- Certified for Canada CSA standards under cUL testing
- IEC/EN 60947-4-1
- CE Approved
- CCC Certified

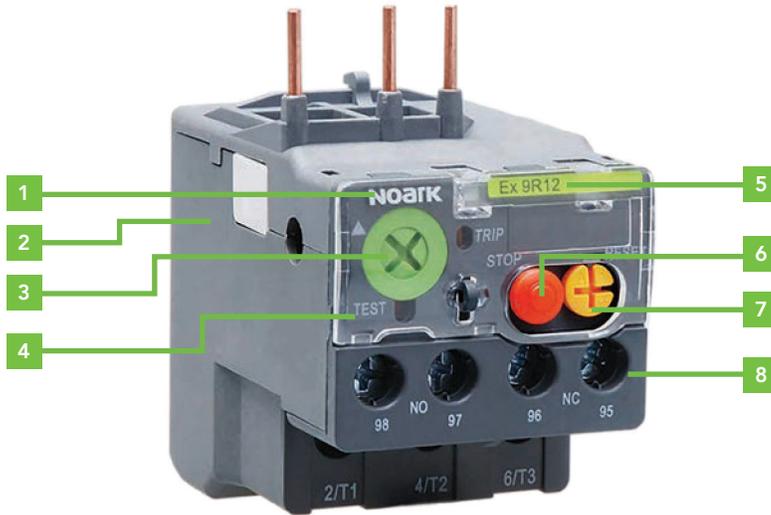




Ex9R Thermal Overload Relays

Product Label/Product Selection Guide

Ex9R Product Label



- 1 Brand
- 2 Label with UL Logo, CE Logo and Data
- 3 Adjustable Current Range
- 4 Push to Test
- 5 Product Series/Frame Amperage
- 6 Manual Stop
- 7 Manual/Auto Reset
- 8 Auxiliary Contacts

B

Ex9R Product Selection Guide

Ex9R	12	B	0.16A
NOARK Ex9R Series	Frame Size	Trip Class*	Setting Amperage
	12: 12A	B: Class 10	0.16A: 0.1~0.16A 0.25A: 0.16~0.25A 0.4A: 0.25~0.4A 0.63A: 0.4~0.63A 1A: 0.63~1A 1.6A: 1~1.6A 2.5A: 1.6~2.5A 4A: 2.5~4A 6A: 4~6A 8A: 5.5~8A 10A: 7~10A 12A: 9~12A 13A: 9~13A 18A: 12~18A 24A: 16~24A 32A: 23~32A 38A: 30~38A 40A: 30~40A 50A: 37~50A 65A: 48~65A 70A: 55~70A 80A: 63~80A 100A: 80~104A 115A: 75~115A 150A: 110~150A 185A: 140~210A 225A: 160~225A 300A: 210~300A 400A: 280~400A 500A: 380~500A
	38: 38A		
	100: 100A		
	185: 185A		
	500: 500A		

Note: Consult NOARK for information on Tripping Class 10A.



Ex9R Thermal Overload Relays

Products

Ex9R 12~100A



Current Range Amp (Min-Max)	12A		38A		100A	
	Use with Contactors: Ex9CS06~12		Use with Contactors: Ex9C09~38		Use with Contactors: Ex9C40~100	
	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number
0.1~0.16	Ex9R12B0.16A	1420001	-	-	-	-
0.16~0.25	Ex9R12B0.25A	1420002	-	-	-	-
0.25~0.4	Ex9R12B0.4A	1420003	-	-	-	-
0.4~0.63	Ex9R12B0.63A	1420004	-	-	-	-
0.63~1	Ex9R12B1A	1420005	Ex9R38B1A	1420013	-	-
1~1.6	Ex9R12B1.6A	1420006	Ex9R38B1.6A	1420014	-	-
1.6~2.5	Ex9R12B2.5A	1420007	Ex9R38B2.5A	1420015	-	-
2.5~4	Ex9R12B4A	1420008	Ex9R38B4A	1420016	-	-
4~6	Ex9R12B6A	1420009	Ex9R38B6A	1420017	-	-
5.5~8	Ex9R12B8A	1420010	Ex9R38B8A	1420018	-	-
7~10	Ex9R12B10A	1420011	Ex9R38B10A	1420019	-	-
9~12	Ex9R12B12A	1420012	-	-	-	-
9~13	-	-	Ex9R38B13A	1420020	-	-
12~18	-	-	Ex9R38B18A	1420021	-	-
16~24	-	-	Ex9R38B24A	1420022	-	-
23~32	-	-	Ex9R38B32A	1420023	Ex9R100B32A	1420025
30~38	-	-	Ex9R38B38A	1420024	-	-
30~40	-	-	-	-	Ex9R100B40A	1420026
37~50	-	-	-	-	Ex9R100B50A	1420027
48~65	-	-	-	-	Ex9R100B65A	1420028
55~70	-	-	-	-	Ex9R100B70A	1420029
63~80	-	-	-	-	Ex9R100B80A	1420030
80~104	-	-	-	-	Ex9R100B104A	1420046



Ex9R Thermal Overload Relays

Products

Ex9R 185~500A



B

	185A		500A	
Current Range Amp (Min-Max)	Use with Contactors: Ex9C115~185		Use with Contactors: Ex9C225~500	
	Catalog number	Item number	Catalog number	Item number
75~115	Ex9R185B115A	1420032	-	-
110~150	Ex9R185B150A	1420033	-	-
140~210	Ex9R185B210A	1420047	-	-
160~225	-	-	Ex9R500B225A	1420035
210~300	-	-	Ex9R500B300A	1420036
280~400	-	-	Ex9R500B400A	1420037
380~500	-	-	Ex9R500B500A	1420038



Ex9R Thermal Overload Relays

Specifications

		Ex9R	
Tripping Class		Class 10/10A	
Operating Frequency (Hz)		50/60	
Phase Failure Protection Function		Yes	
Automatic and Manual Reset			
Temperature Compensation			
Tripping Indicator			
Test and Stop Pushbutton			
Environmental Conditions	Altitude ft (m)	6,562 (2,000)	
	Pollution Degree	Class III	
Rated Tripping Current (In)		1.2	
Sensitivity to Phase Failure (In)		30%	
Rated Working Voltage (V)		600	
Rated Impulse Withstand Voltage Uimp		6kV	
Auxiliary Contacts	Number of Contacts		1NO+1NC
	Rated Operating Voltage Ue (V)	AC-15	220/380
		DC-13	220
	Rated Operating Current Ie (A)	AC-15	1.64 / 0.95
		DC-13	0.13
	Circuit Continuous Current		5A 600Vac, 1A 300Vdc
	Contact Rating		B600, R300
	Terminal Wire Range AWG (mm ²)		#18-12 (1-2.5)
Terminal Torque in-lb (N.m)		15 (1.70)	
Terminal Wire Strip Length in (mm)		0.43 (11)	



Ex9R Thermal Overload Relays

Specifications

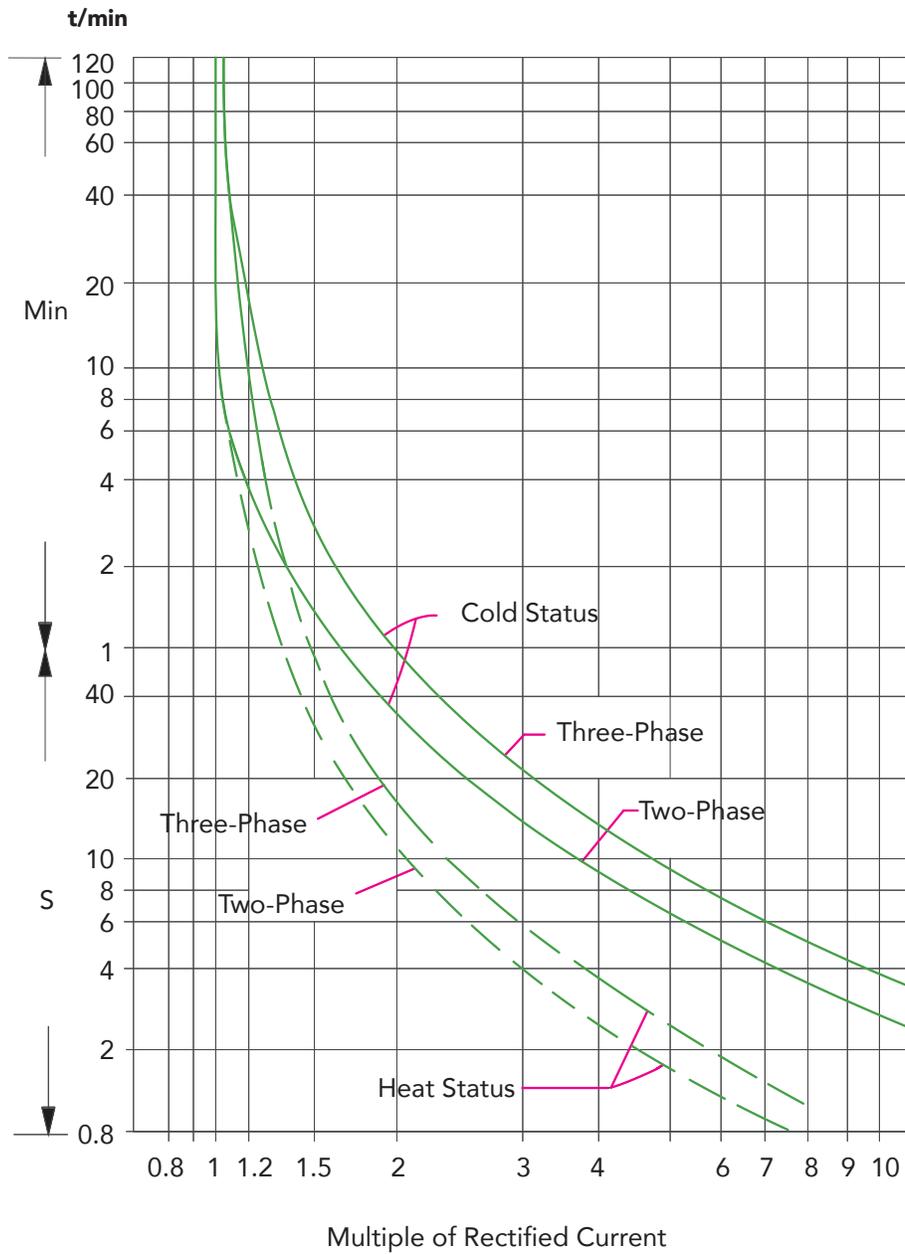
Ex9R	12A											
Current Rated (A)	0.16~1.6						2.5~12					
Current Setting Range (A)	0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~12
Short Circuit Rating, 3 Phase at 600Vac (kA)	1						5					
Power Terminal	#18-12AWG											
Power Terminal Torque in-lb (N.m)	15 (1.7)											
Power Terminal Wire Strip Length in (mm)	0.43 (11)											
Matched Contactor Type	Ex9CS06~12											
Matched Adapter	AD51											
	38A											
Current Rated (A)	1~1.6				2.5~38							
Current Setting Range (A)	0.63~1	1~1.6	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~13	12~18	16~24	23~32	30~38
Short Circuit Rating, 3 Phase at 600Vac (kA)	1				5							
Power Terminal	#18-10 AWG / #8 AWG Str											
Power Terminal Torque in-lb (N.m)	22 (2.5)											
Power Terminal Wire Strip Length in (mm)	0.51 (13)											
Matched Contactor Type	Ex9C09~38											
Matched Adapter	AD56											
	100A											
Current Rated (A)	32~50						65~104					
Current Setting Range (A)	23~32	30~40	37~50	48~65	55~70	63~80	80~104					
Short Circuit Rating, 3 Phase at 600Vac (kA)	5						10					
Power Terminal	#12-10 AWG / #8-1 AWG Str											
Power Terminal Torque in-lb (N.m)	80 (9)											
Power Terminal Wire Strip Length in (mm)	0.71 (18)											
Matched Contactor Type	Ex9C40~100											
Matched Adapter	AD53											
	185A											
Current Rated (A)	115~210											
Current Setting Range (A)	75~115				110~150				140~210			
Short Circuit Rating, 3 Phase at 600Vac (kA)	10											
Power Terminal	Bus Bar Only											
Power Terminal Torque in-lb (N.m)	159 (18)											
Power Terminal Wire Strip Length in (mm)	-											
Matched Contactor Type	Ex9C115~185											
Matched Adapter	AD54											
	500A											
Current Rated (A)	225~500											
Current Setting Range (A)	160~225			210~300			280~400			380~500		
Short Circuit Rating, 3 Phase at 600 Vac (kA)	30											
Power Terminal	Bus Bar Only											
Power Terminal Torque in-lb (N.m)	310 (35)											
Power Terminal Wire Strip Length in (mm)	-											
Matched Contactor Type	Ex9C225~500											
Matched Adapter	AD55											

B



Ex9R Thermal Overload Relays

Trip Curves

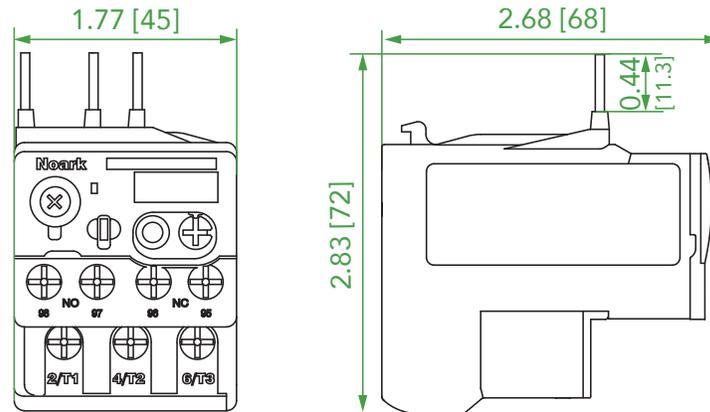




Ex9R Thermal Overload Relays

Ex9R12 Dimensions

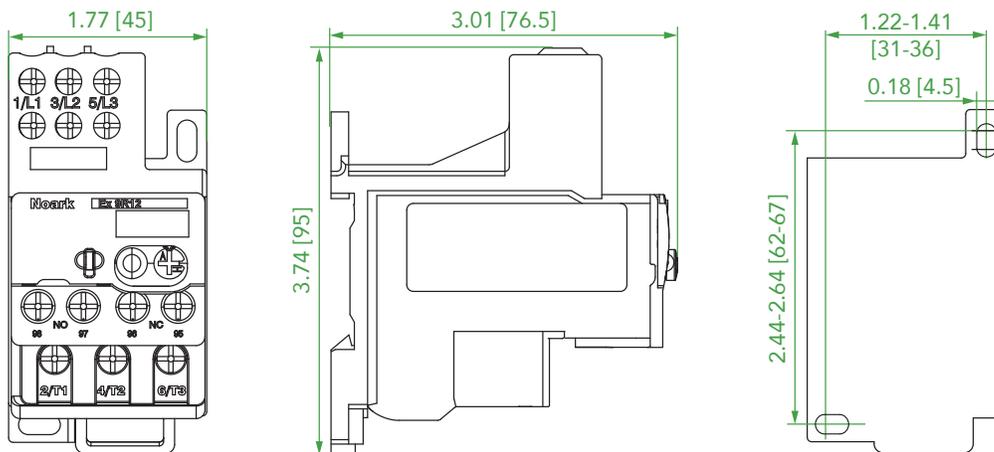
Ex9R12



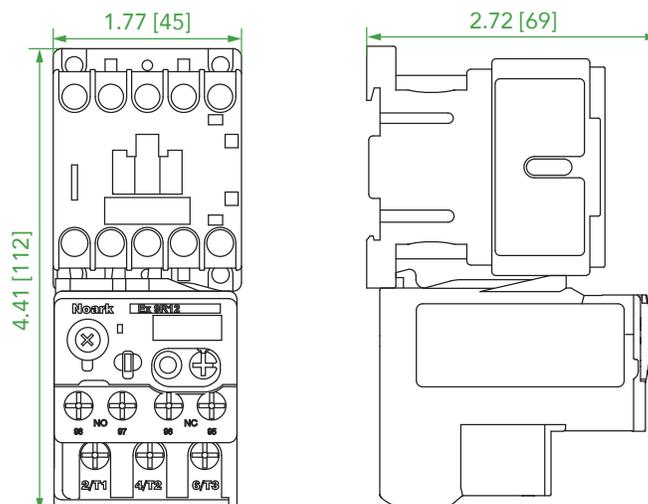
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B

Ex9R12+AD51



Ex9R12+Ex9CS06~12

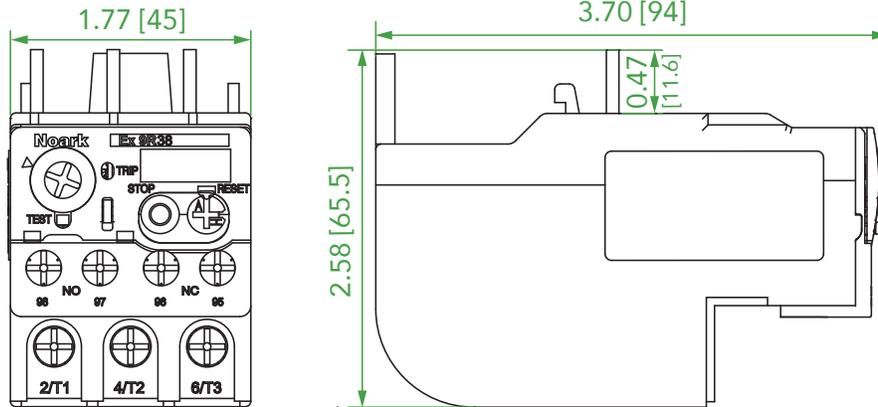




Ex9R Thermal Overload Relays

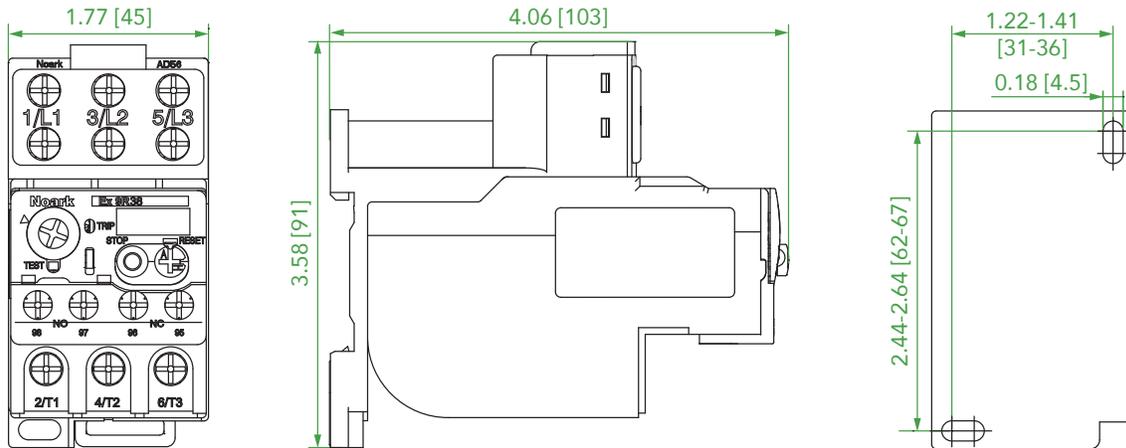
Ex9R38 Dimensions

Ex9R38

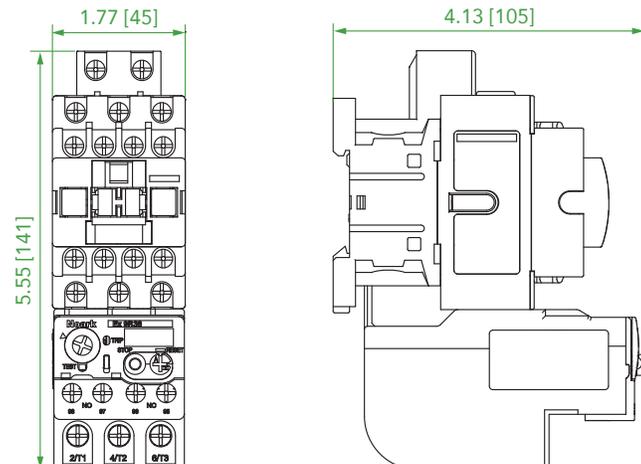


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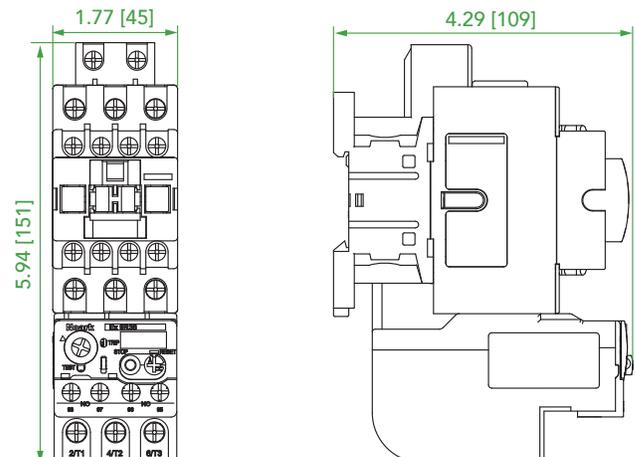
Ex9R38+AD56



Ex9R38+Ex9C09~18



Ex9R38+Ex9C25~38

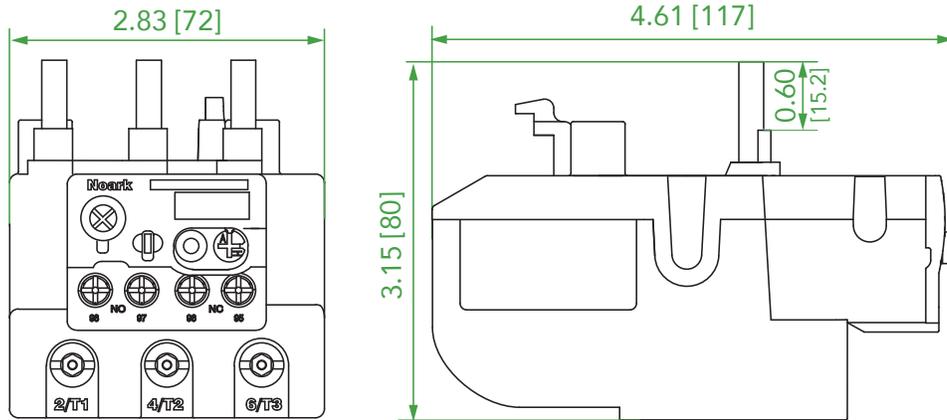




Ex9R Thermal Overload Relays

Ex9R100 Dimensions

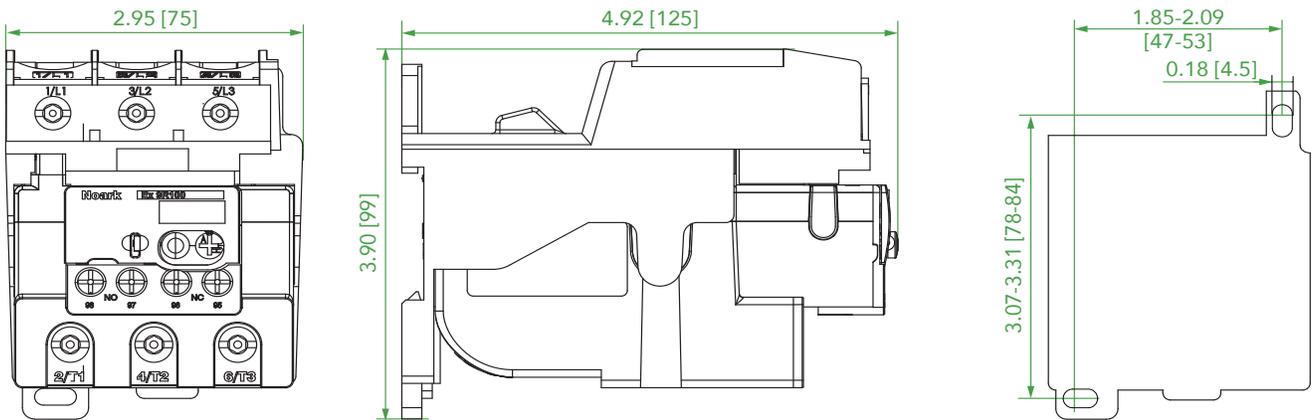
Ex9R100



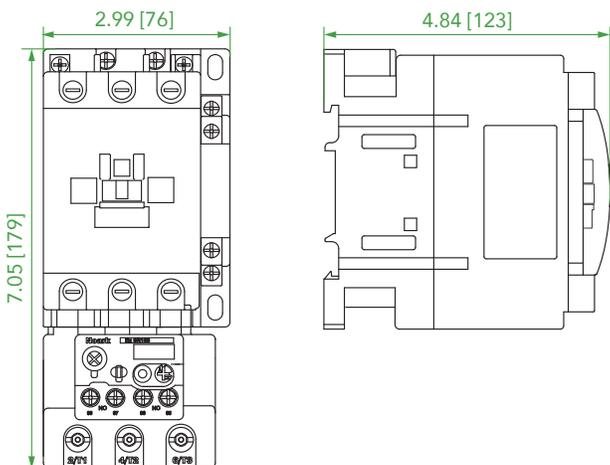
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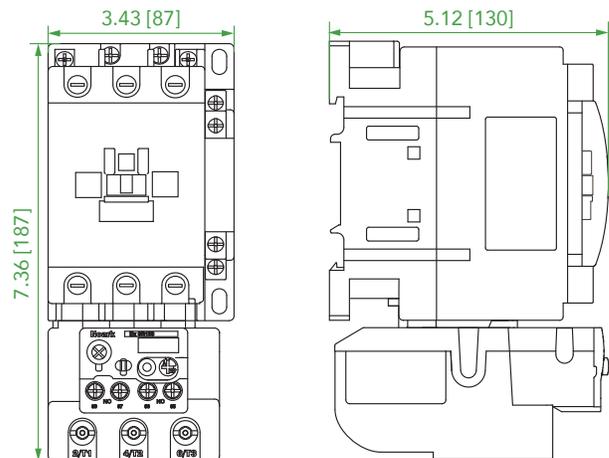
Ex9R100+AD53



Ex9R100+Ex9C40~65



Ex9R100+Ex9C80~100



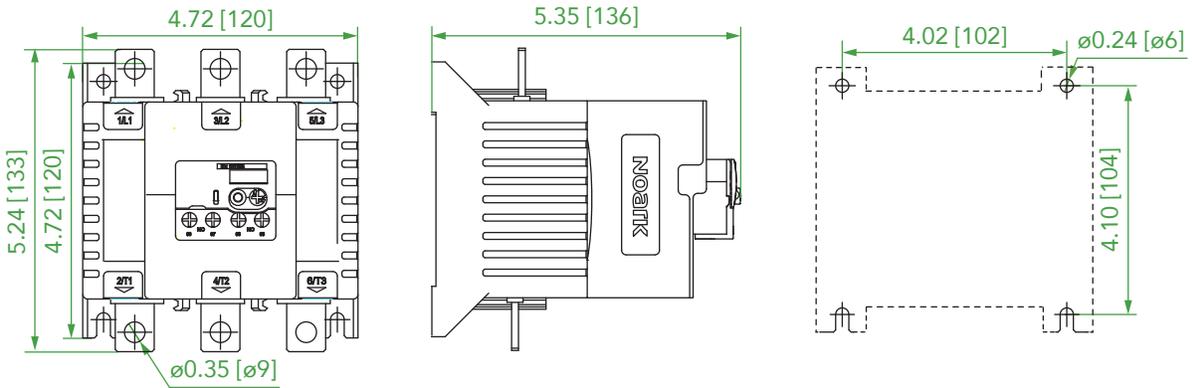


Ex9R Thermal Overload Relays

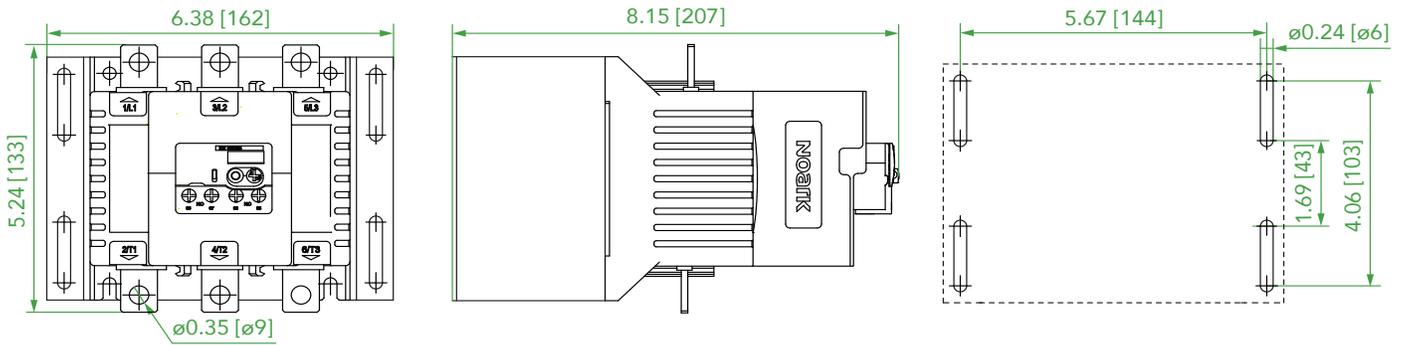
Ex9R185 Dimensions

Ex9R185

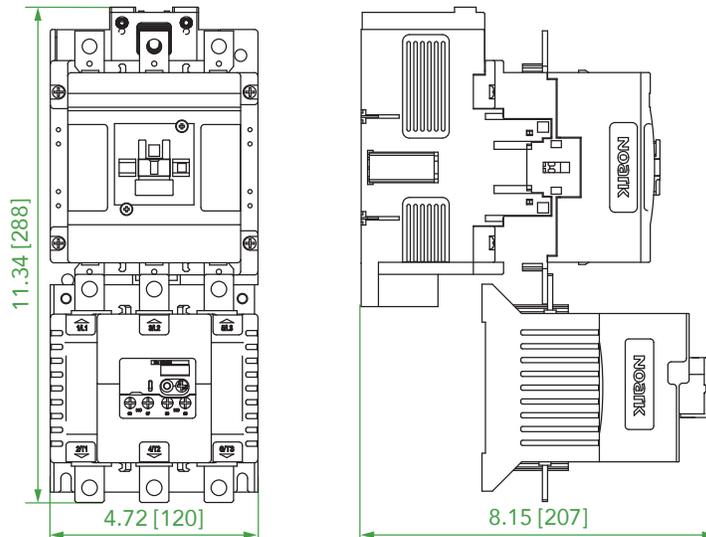
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Ex9R185+AD54



Ex9R185+Ex9C115~185



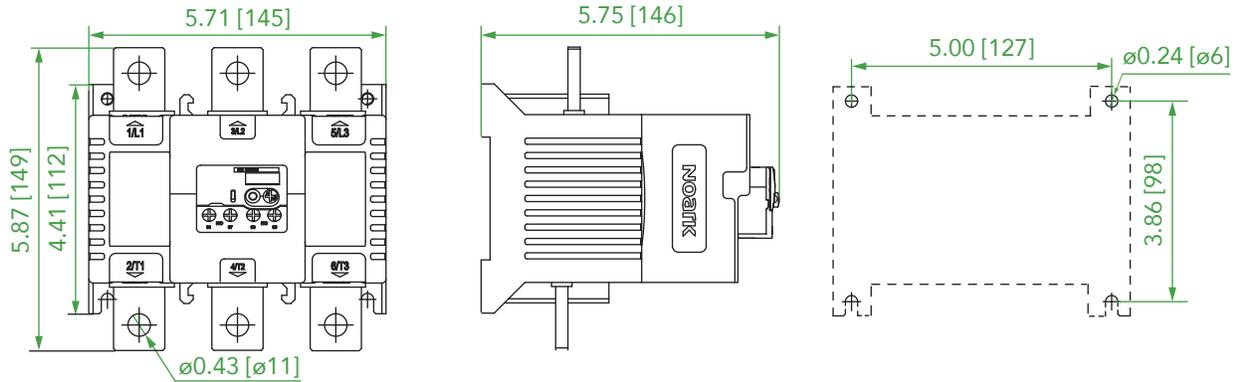


Ex9R Thermal Overload Relays

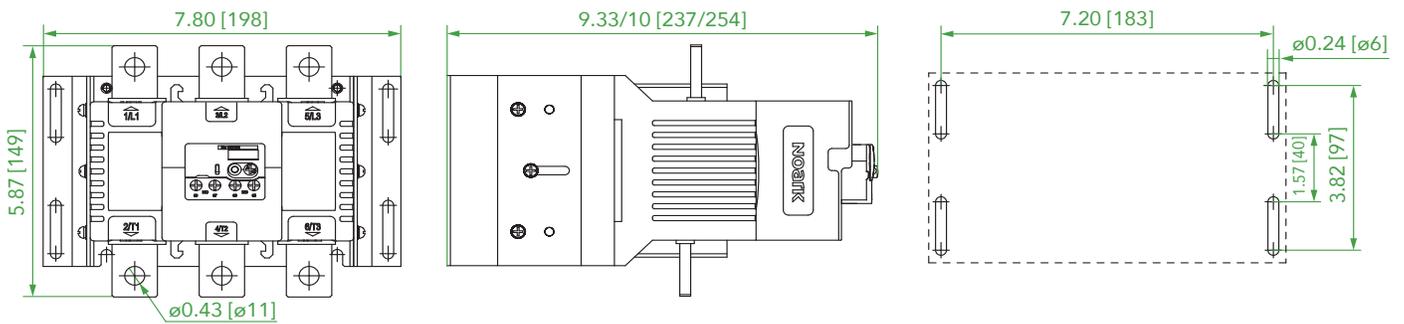
Ex9R500 Dimensions

Ex9R500

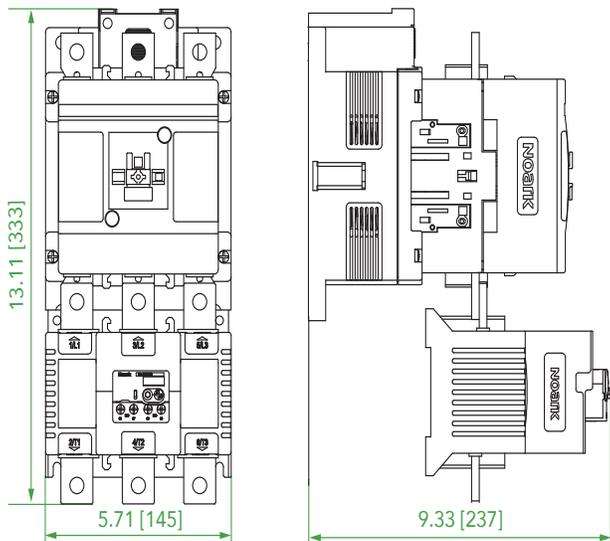
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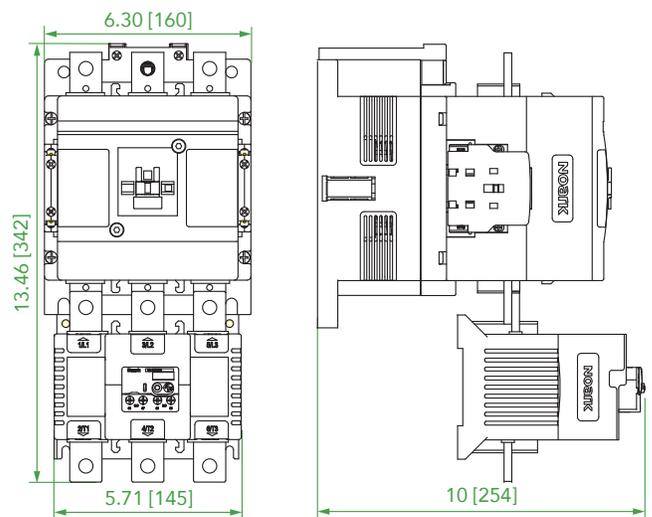
Ex9R500+AD55



Ex9R500+Ex9C225~300



Ex9R500+Ex9C400~500

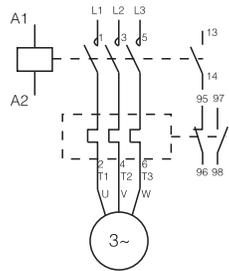
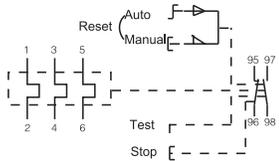




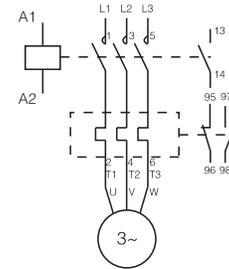
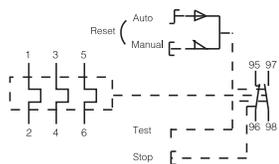
Ex9R Thermal Overload Relays

Wiring Diagrams

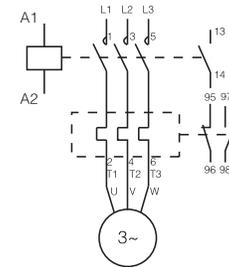
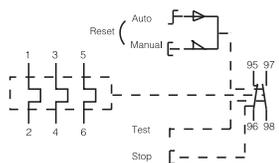
Ex9R12



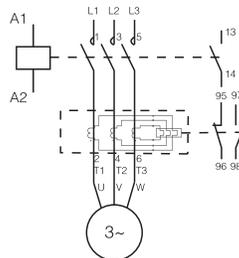
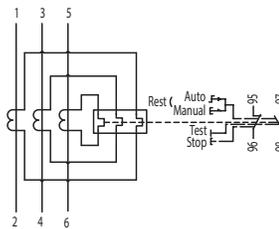
Ex9R38



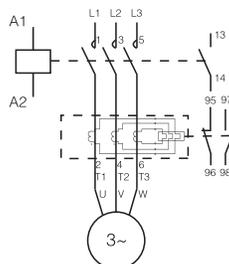
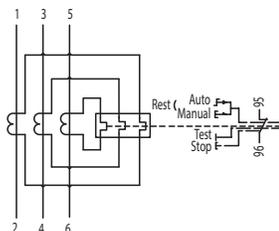
Ex9R100



Ex9R185



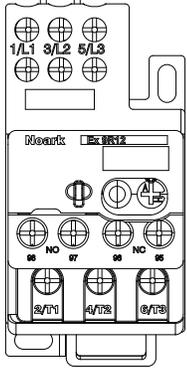
Ex9R500





Ex9R Thermal Overload Relays

Ex9R Accessories: Mounting Base



AD51 shown with Ex9R12 for reference only

AD	51
Description	Relay Type
Mounting Base	51: Ex9R12
	56: Ex9R38
	53: Ex9R100
	54: Ex9R185
	55: Ex9R500

B

Accessory Description	Catalog number	Item number
Mounting Base	AD51	1420039
	AD56	1420040
	AD53	1420041
	AD54	1420042
	AD55	1420043

Mounting Base	AD51	AD56	AD53	AD54	AD55
Current Rating (A)	12	38	104	185	500
Voltage (Vac)	600				
Terminal Wire Range	#18-12AWG	#18-10 AWG / #8 AWG Str	#12-10 AWG / #8-1 AWG, Str	-	
Terminal Torque in-lb (N.m)	7 (0.80)	22 (2.50)	80 (9)		
Wire Strip Length in (mm)	0.39 (10)	0.51 (13)	0.71 (18)		
Matched Contactor Type	Ex9CS6~12	Ex9C09~38	Ex9C40~100	Ex9C115~185	Ex9C225~500



Ex9RE Electronic Thermal Overload Relay

Product Overview

NOARK Electric Ex9RE40 electronic thermal overload relays are designed to provide dependable and accurate protection for motors if an overload or phase failure occur. They also offer jam, stall and current unbalance protection. The Ex9RE40 is available with coil voltages of 24Vac/dc, 110Vac and 220Vac with current ranges from 0.1A to 40A. Each unit has selectable trip class settings of 5, 10, 20 and 30 providing a wide range of coverage with fewer products. They are also equipped with integrated diagnostics via LED lights to allow for quick status identification. Control settings are protected by a clear plastic cover.

Design Features

- Coil voltages: 24Vac/dc, 110Vac, 220Vac
- Available in 4 current ranges: 0.1~0.5A, 0.4~2A, 1.8~9A, 8~40A
- Integrated diagnostics with LED indicators
- Selectable trip class: 5, 10, 20, 30
- 1 NO + 1 NC auxiliary contact
- Manual or automatic reset
- Compact 45mm size
- Easily mounts on NOARK Ex9C 09~38A contactor or on DIN 35mm
- 5 year limited warranty

Certifications

- UL 60947-4-1, UL 60947-5-1
- GB/T 14048.4, GB/T 14048.5
- IEC/EN 60947-4-1, IEC/EN 60947-5-1





Ex9RE Electronic Thermal Overload Relay

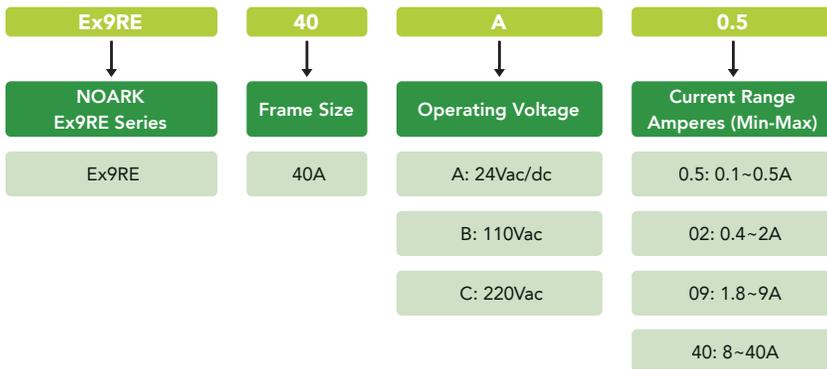
Product Label/Product Selection Guide

Ex9RE Product Label



- 1 Brand
- 2 Adjustable Current Range
- 3 Manual Reset
- 4 Operating Voltage
- 5 Product Series/Frame Amperage
- 6 Tripping class
- 7 Push to test
- 8 Auxiliary Contacts

Ex9RE Product Selection Guide





Ex9RE Electronic Thermal Overload Relay Products

Ex9RE 40A



Current Range Amp (Min-Max)	40 A		
	Operating Voltage	Catalog number	Item number
0.1-0.5	24 Vac/dc	Ex9RE40A0.5	1420048
	110Vac	Ex9RE40B0.5	1420049
	220Vac	Ex9RE40C0.5	1420050
0.4-2	24 Vac/dc	Ex9RE40A02	1420051
	110Vac	Ex9RE40B02	1420052
	220Vac	Ex9RE40C02	1420053
1.8-9	24 Vac/dc	Ex9RE40A09	1420054
	110Vac	Ex9RE40B09	1420055
	220Vac	Ex9RE40C09	1420056
8-40	24 Vac/dc	Ex9RE40A40	1420057
	110Vac	Ex9RE40B40	1420058
	220Vac	Ex9RE40C40	1420059



Ex9RE Electronic Thermal Overload Relay

Specifications

General Information		Ex9RE
Number of Poles		3
Mounting		Mounts on DIN rail 35mm, contactor or base
Rated Insulation Voltage Ui (V)	IEC	690
	UL, CSA	600
Rated Operating Voltage Ue (V)	AC 50/60HZ	24, 110, 220
	DC	24
Rated Impulse Withstand Voltage Uimp (kV)		6
Product certifications		UL, CE, CB, CCC
Degree of protection		IP 20 (front face)
Ambient air temperature around the device (°C)	Storage	- 55°C to + 80°C
	Normal operation without derating	- 25°C to + 40°C
Maximum operating altitude (m)		2000
Shock resistance		15gn-11ms
Vibration resistance		4gn
Surge withstand (kV)		6
Immunity to fast transient currents (kV)		2
Electromagnetic compatibility		Class B
Electrical characteristics of power circuit		
Setting range (A)		0.1-40
Tripping class		5/10/20/30
Rated impulse withstand voltage Uimp		690V
Frequency limits (Hz)		50-60
Connection by cable or lug-clamps		
Flexible cable without cable end (1 conductor) (AWG/mm ²)	Min	18/1
	Max	8/10
Flexible cable with cable end (1 conductor) (AWG/mm ²)	Min	18/1
	Max	8/10
Ø of screw (mm)		M4
Tightening torque (Lb.in/N.m)		18/2.0
Short circuit current rating		25kA @ 600Vac with MCCB M1; @ 600Vac max. with fuse 100kA @ 480Vac with MCCB M1; @ 600Vac max. with fuse





Ex9RE Electronic Thermal Overload Relay Specifications

Auxiliary contact characteristics		
Rated Insulation Voltage U_i (V)	IEC	250
Rated Operating Voltage U_e (V)	AC-15	AC250V/3A
	DC-13	DC30V/3A
Rated Impulse Withstand Voltage U_{imp} (V)		2.5
Contact type		1NO+1NC
Conventional thermal current (A)		3
Short-circuit protection (A)		RT36-00/4
Connection by cable or lug-clamps		
Flexible cable without cable end (1 or 2 conductors) (AWG/mm ²)	Min	1 × (18/1)
	Max	2 × (12/2.5)
Flexible cable with cable end (1 or 2 conductors) (AWG/mm ²)	Min	1 × (18/1)
	Max	1 × (16/1.5) + 1 × (12/2.5)
Ø of screw (mm)		M3
Tightening torque (Lb.in/N.m)		7/0.8

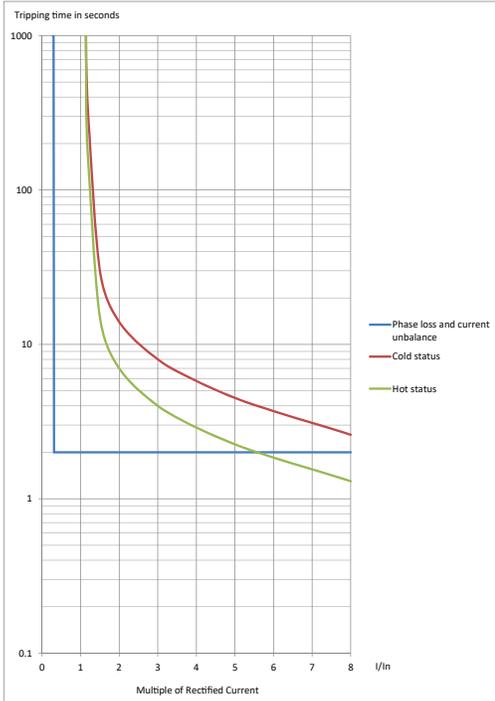
Operating characteristics		
Reset	Manual	Reset button
	Automatic	120s fixed
Status and fault signalling (see Instruction Booklet for details)		2 LEDs
Stop/Test		Stop/Test button
Sensitivity to current unbalance		phase difference >36%, trip in 2s
Stall and jam protection		>480% FLA, trip in 3s



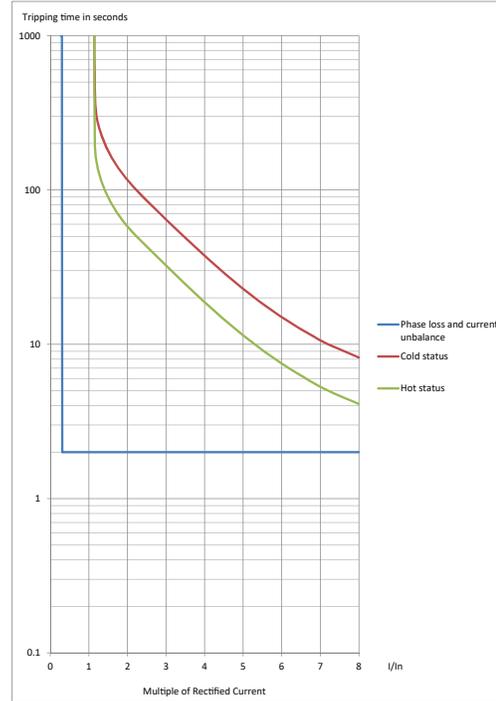
Ex9RE Electronic Thermal Overload Relay

Trip Curves

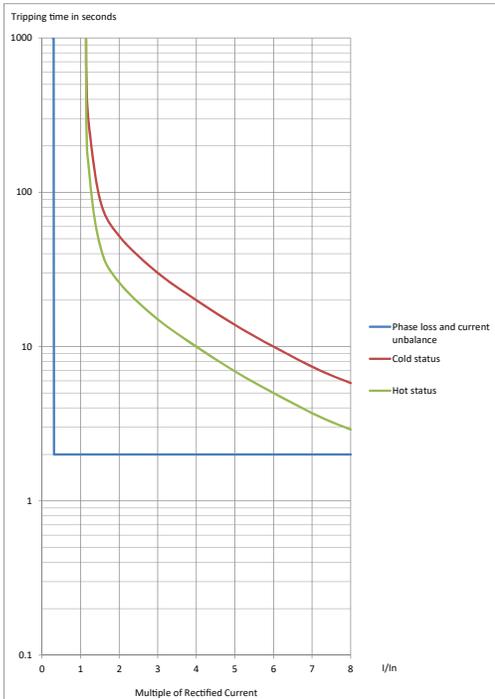
Class 5



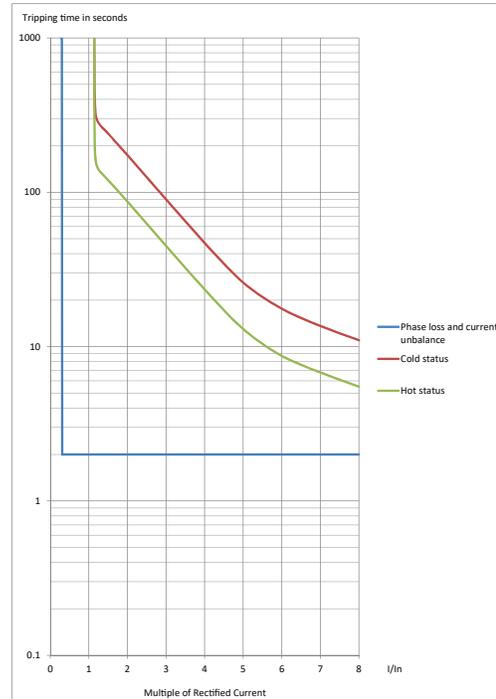
Class 20



Class 10



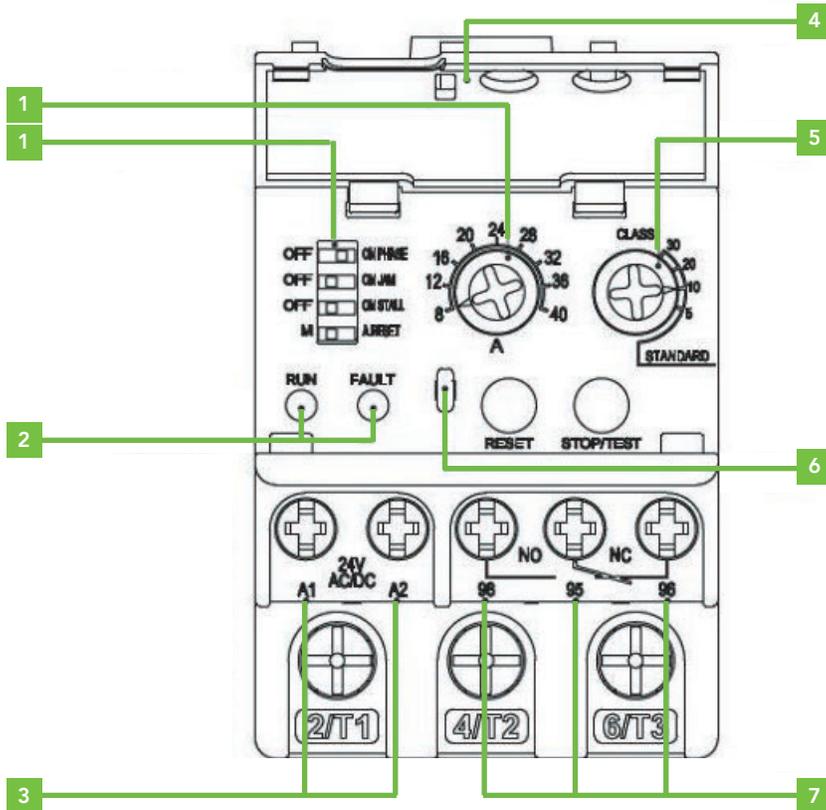
Class 30





Ex9RE Electronic Thermal Overload Relay

Control Functions



- 1 Current setting Dip switch (1)
- 2 Action indication (2)
- 3 Power supply
- 4 Transparent cover
- 5 Trip Class setting
- 6 Lock
- 7 Relay output

- (1) Select function by Dip SW.
- Dip SW1: Current imbalance OFF/ON
 - Dip SW2: Jam OFF/ON
 - Dip SW3: Stall OFF/ON
 - Dip SW4: Reset Manual/Auto

(2) Combined signals from red and green LEDs indicate motor status including trip causes.

Condition	LED Signal (Pulse Chart)	
	Green LED	Red LED
Power on	On	Off
Steady state	On	Off
Current imbalance	Off	On
Stall	Off	On
Jam	Off	On
Others	Off	On

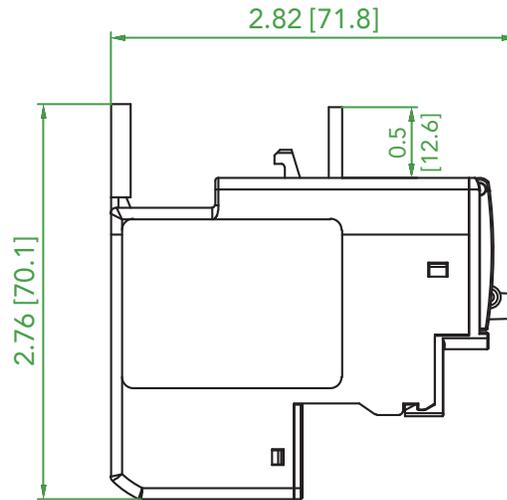
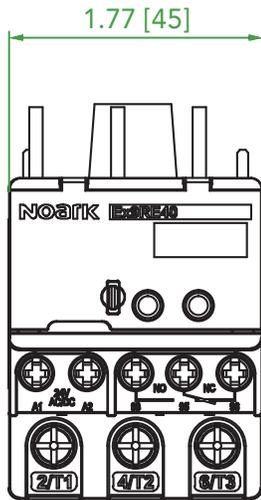


Ex9RE Electronic Thermal Overload Relay

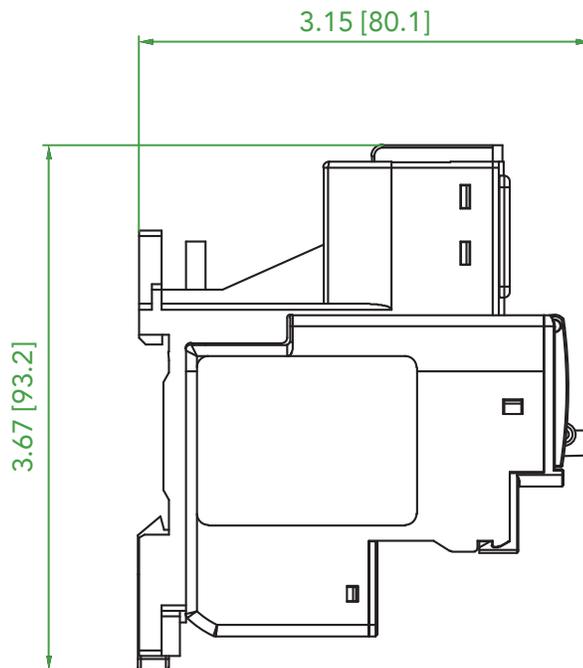
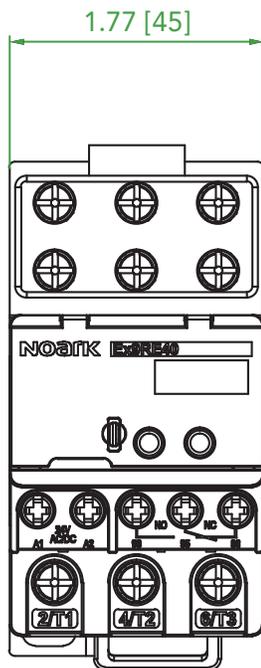
Dimensions

Ex9RE40

in [mm]



Ex9RE40+AD57



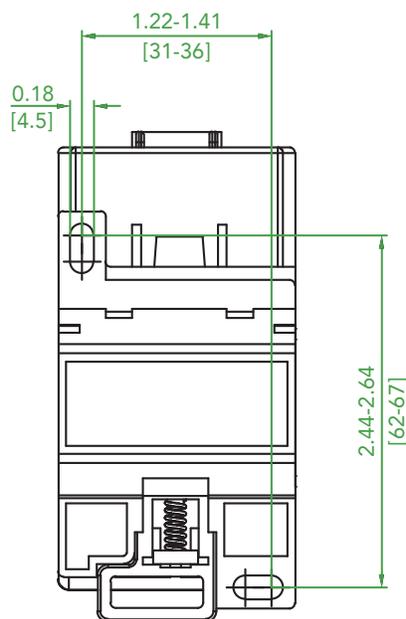
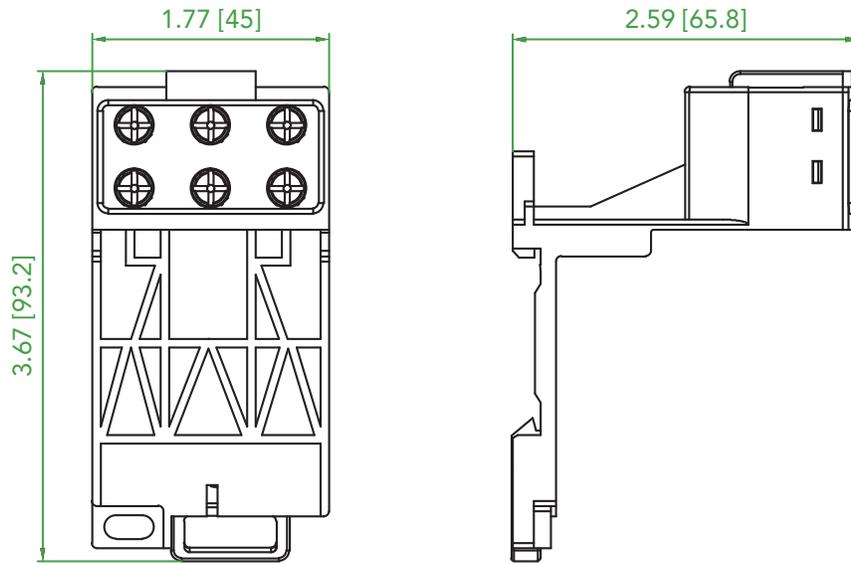


Ex9RE Electronic Thermal Overload Relay

Dimensions

AD57

in [mm]



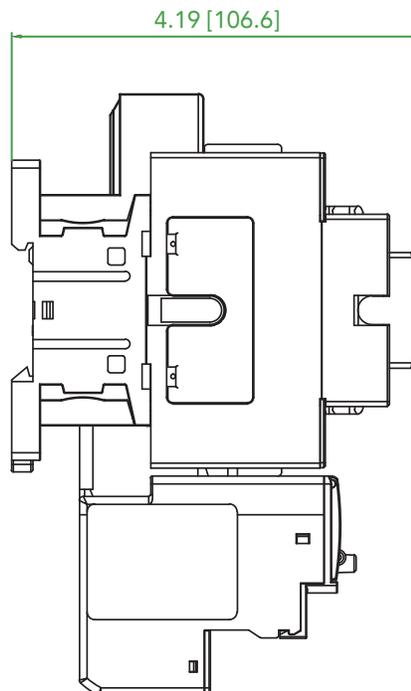
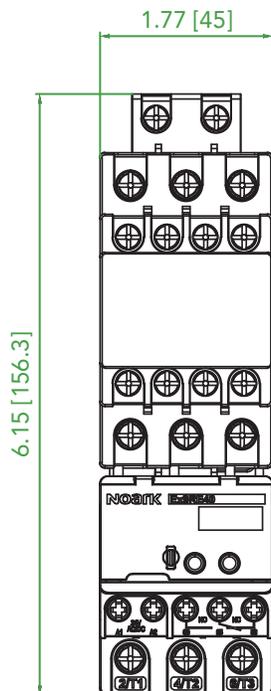
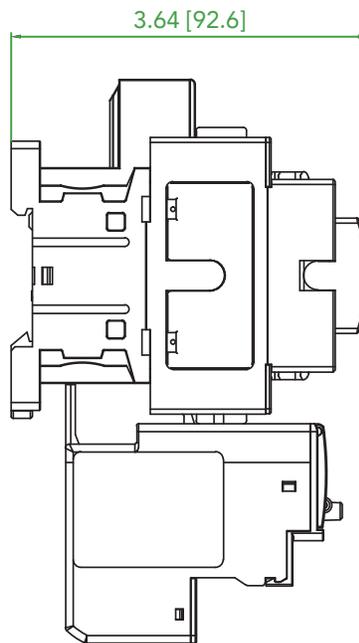
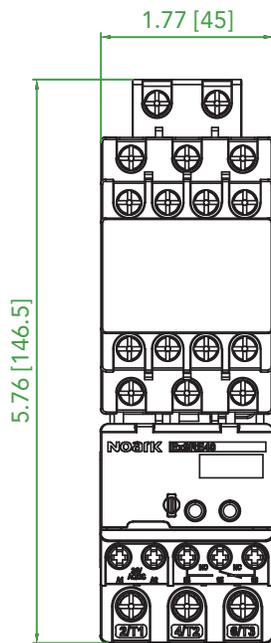


Ex9RE Electronic Thermal Overload Relay

Accessory Dimensions

Ex9RE40+Ex9C09~18

in [mm]





Ex9CD/CM IEC Contactors

Product Overview

Ex9CDS are general purpose contactors used mainly for controlling 3-phase motors and power circuits up to 600Vac. This entry level line includes magnetic coils and basic accessories for front and side mounting.

Design Features

- AC-3 contactor ratings up to 630A and AC-1 contactor ratings up to 800A
- Coil voltages from 24~480Vac, 50/60Hz
- Full Voltage Non-Reversing (FVNR) and Full Voltage Reversing (FVR)
- 5kA @ 600Vac
- Built-on NO or NC auxiliary contacts on 9~32A frames
- IP 20 finger and back-of hand safe
- 3 and 4-pole versions including 2NO+2NC and 4NO configurations
- 95A mounts on standard 35mm DIN rail (40~95A can also mount on 75mm DIN rail)
- Compatible with Ex9RD thermal overload relays
- Plug-on accessories for reduced installation time
- Coil replacement on standard contactor from 9~630A

Certifications

- UL Listed, File Number E353866
- Certified for Canada CSA standards 22.2 No. 14 under cUL testing
- IEC/EN 60947
- CE Compliant

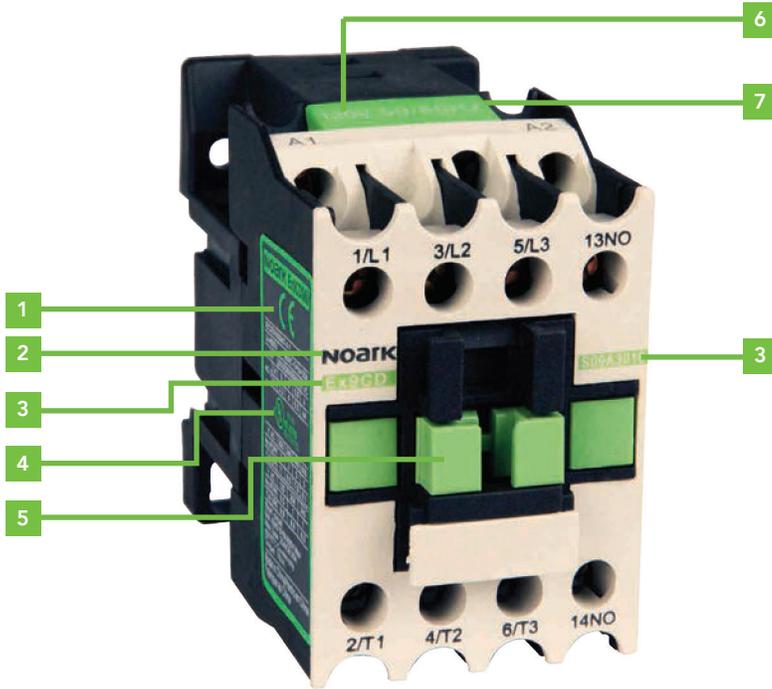




Ex9CD/CM IEC Contactors

Product Label/Product Selection Guide

Ex9CD/CM Product Label



1	CE Mark
2	Brand
3	Product Selection
4	UL Listed Mark
5	Coil Indicator
6	AC Coil Voltage
7	Frequency

Ex9CD/CM Product Selection Guide

Ex9C	D	S	09	A	30	G	7	A
NOARK Ex9C Series	Contactor Type	Function	Rated Current AC-3	Terminal	Pole	Coil Voltage ¹	Frequency	Auxiliary Contacts (Built In)
	D: Ex9CD Standard (9~630A) M: Ex9CM Miniature (9~12A)	S: Full Voltage Non-Reversing (FVNR) R: Full Voltage Reversing (FVR)	06: 6A 09: 9A 12: 12A 18: 18A 25: 25A 32: 32A 40: 40A 50: 50A 65: 65A 80: 80A 95: 95A 115: 115A 150: 150A 185: 185A 225: 225A 265: 265A 330: 330A 400: 400A 500: 500A 630: 630A	A: Screw Terminals	30: 3NO 40: 4NO 22: 2NO+2NC	B: 24V F: 110V G: 120V P: 230V U: 240V T: 480V	7: 50/60Hz	A: 1NO Mini Type B: 1NC (6~12A) A: 1NO Standard Type B: 1NC (9~32A) C: 1NO+1NC Standard Type AC Coil: (40~95A) Blank Standard Type None (115~630A)

Notes:
1. Consult NOARK for information on 277~440V products

115~265A: 110~480Vac Coil available
330~630A: 110~380Vac Coil available



Ex9CD/CM IEC Contactors

Products

Ex9CMS 6~9A Miniature

- Auxiliary contacts are front mounted
- FVNR, 50/60Hz



Coil Voltage (Vac)	6A				9A			
	3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact		3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact	
	Catalog number	Item number						
24	Ex9CMS06A30B7A	1311137	Ex9CMS06A30B7B	1311113	Ex9CMS09A30B7A	1311233	Ex9CMS09A30B7B	1311209
48	Ex9CMS06A30E7A	1313334	Ex9CMS06A30E7B	1313310	Ex9CMS09A30E7A	1313430	Ex9CMS09A30E7B	1313406
110	Ex9CMS06A30F7A	1311129	Ex9CMS06A30F7B	1311105	Ex9CMS09A30F7A	1311225	Ex9CMS09A30F7B	1311201
120	Ex9CMS06A30G7A	1311131	Ex9CMS06A30G7B	1311107	Ex9CMS09A30G7A	1311227	Ex9CMS09A30G7B	1311203
220	Ex9CMS06A30M7A	1313328	Ex9CMS06A30M7B	1313304	Ex9CMS09A30M7A	1313424	Ex9CMS09A30M7B	1313400
230	Ex9CMS06A30P7A	1311133	Ex9CMS06A30P7B	1311109	Ex9CMS09A30P7A	1311229	Ex9CMS09A30P7B	1311205
240	Ex9CMS06A30U7A	1311135	Ex9CMS06A30U7B	1311111	Ex9CMS09A30U7A	1311231	Ex9CMS09A30U7B	1311207
277	Ex9CMS06A30N7A	1313336	Ex9CMS06A30N7B	1313312	Ex9CMS09A30N7A	1313432	Ex9CMS09A30N7B	1313408
380	Ex9CMS06A30Q7A	1313330	Ex9CMS06A30Q7B	1313306	Ex9CMS09A30Q7A	1313426	Ex9CMS09A30Q7B	1313402
440	Ex9CMS06A30R7A	1313332	Ex9CMS06A30R7B	1313308	Ex9CMS09A30R7A	1313428	Ex9CMS09A30R7B	1313404
480	Ex9CMS06A30T7A	1311139	Ex9CMS06A30T7B	1311115	Ex9CMS09A30T7A	1311235	Ex9CMS09A30T7B	1311211
Coil Voltage (Vac)	4-pole (4NO)		4-pole (2NO+2NC)		4-pole (4NO)		4-pole (2NO+2NC)	
	Catalog number	Item number						
24	Ex9CMS06A40B7	1311065	Ex9CMS06A22B7	1311089	Ex9CMS09A40B7	1311161	Ex9CMS09A22B7	1311185
48	Ex9CMS06A40E7	1313262	Ex9CMS06A22E7	1313286	Ex9CMS09A40E7	1313358	Ex9CMS09A22E7	1313382
110	Ex9CMS06A40F7	1311057	Ex9CMS06A22F7	1311081	Ex9CMS09A40F7	1311153	Ex9CMS09A22F7	1311177
120	Ex9CMS06A40G7	1311059	Ex9CMS06A22G7	1311083	Ex9CMS09A40G7	1311155	Ex9CMS09A22G7	1311179
220	Ex9CMS06A40M7	1313256	Ex9CMS06A22M7	1313280	Ex9CMS09A40M7	1313352	Ex9CMS09A22M7	1313376
230	Ex9CMS06A40P7	1311061	Ex9CMS06A22P7	1311085	Ex9CMS09A40P7	1311157	Ex9CMS09A22P7	1311181
240	Ex9CMS06A40U7	1311063	Ex9CMS06A22U7	1311087	Ex9CMS09A40U7	1311159	Ex9CMS09A22U7	1311183
277	Ex9CMS06A40N7	1313264	Ex9CMS06A22N7	1313288	Ex9CMS09A40N7	1313360	Ex9CMS09A22N7	1313384
380	Ex9CMS06A40Q7	1313258	Ex9CMS06A22Q7	1313282	Ex9CMS09A40Q7	1313354	Ex9CMS09A22Q7	1313378
440	Ex9CMS06A40R7	1313260	Ex9CMS06A22R7	1313284	Ex9CMS09A40R7	1313356	Ex9CMS09A22R7	1313380
480	Ex9CMS06A40T7	1311067	Ex9CMS06A22T7	1311091	Ex9CMS09A40T7	1311163	Ex9CMS09A22T7	1311187



Ex9CD/CM IEC Contactors

Products

Ex9CMS 12A Miniature

- Auxiliary contacts are front mounted
- FVNR, 50/60Hz



Coil Voltage (Vac)	12A			
	3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CMS12A30B7A	1311329	Ex9CMS12A30B7B	1311305
48	Ex9CMS12A30E7A	1313526	Ex9CMS12A30E7B	1313502
110	Ex9CMS12A30F7A	1311321	Ex9CMS12A30F7B	1311297
120	Ex9CMS12A30G7A	1311323	Ex9CMS12A30G7B	1311299
220	Ex9CMS12A30M7A	1313520	Ex9CMS12A30M7B	1313496
230	Ex9CMS12A30P7A	1311325	Ex9CMS12A30P7B	1311301
240	Ex9CMS12A30U7A	1311327	Ex9CMS12A30U7B	1311303
277	Ex9CMS12A30N7A	1313528	Ex9CMS12A30N7B	1313504
380	Ex9CMS12A30Q7A	1313522	Ex9CMS12A30Q7B	1313498
440	Ex9CMS12A30R7A	1313524	Ex9CMS12A30R7B	1313500
480	Ex9CMS12A30T7A	1311331	Ex9CMS12A30T7B	1311307
Coil Voltage (Vac)	4-pole (4NO)		4-pole (2NO+2NC)	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CMS12A40B7	1311257	Ex9CMS12A22B7	1311281
48	Ex9CMS12A40E7	1313454	Ex9CMS12A22E7	1313478
110	Ex9CMS12A40F7	1311249	Ex9CMS12A22F7	1311273
120	Ex9CMS12A40G7	1311251	Ex9CMS12A22G7	1311275
220	Ex9CMS12A40M7	1313448	Ex9CMS12A22M7	1313472
230	Ex9CMS12A40P7	1311253	Ex9CMS12A22P7	1311277
240	Ex9CMS12A40U7	1311255	Ex9CMS12A22U7	1311279
277	Ex9CMS12A40N7	1313456	Ex9CMS12A22N7	1313480
380	Ex9CMS12A40Q7	1313450	Ex9CMS12A22Q7	1313474
440	Ex9CMS12A40R7	1313452	Ex9CMS12A22R7	1313476
480	Ex9CMS12A40T7	1311259	Ex9CMS12A22T7	1311283

Ratings		6A	9A	12A	
UL/CSA (A)	General Purpose	20			
	Single-Phase (hp)	110/120V	0.3	0.5	0.75
Three-Phase (hp)	230/240V	0.75	1.5	2	
	200/208V	1.5	3		
	230/240V		3	5	7.5
	460/480V	10			
IEC (A)	575/600V	6	9	12	
	AC-3 le	20			
AC-3 (kw)	AC-1 le	220/230/240V	1.5	2.2	3
	380/400V	2.2	4	5.5	
					415V
	660/690V	3	4		

D



Ex9CD/CM IEC Contactors

Products

Ex9CDS 9~12A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60Hz



Coil Voltage (Vac)	9A				12A			
	3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact		3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact	
	Catalog number	Item number						
24	Ex9CDS09A30B7A	1310069	Ex9CDS09A30B7B	1310009	Ex9CDS12A30B7A	1310153	Ex9CDS12A30B7B	1310093
48	Ex9CDS09A30E7A	1312266	Ex9CDS09A30E7B	1312206	Ex9CDS12A30E7A	1312350	Ex9CDS12A30E7B	1312290
110	Ex9CDS09A30F7A	1310061	Ex9CDS09A30F7B	1310001	Ex9CDS12A30F7A	1310145	Ex9CDS12A30F7B	1310085
120	Ex9CDS09A30G7A	1310063	Ex9CDS09A30G7B	1310003	Ex9CDS12A30G7A	1310147	Ex9CDS12A30G7B	1310087
220	Ex9CDS09A30M7A	1312260	Ex9CDS09A30M7B	1312200	Ex9CDS12A30M7A	1312344	Ex9CDS12A30M7B	1312284
230	Ex9CDS09A30P7A	1310065	Ex9CDS09A30P7B	1310005	Ex9CDS12A30P7A	1310149	Ex9CDS12A30P7B	1310089
240	Ex9CDS09A30U7A	1310067	Ex9CDS09A30U7B	1310007	Ex9CDS12A30U7A	1310151	Ex9CDS12A30U7B	1310091
277	Ex9CDS09A30N7A	1312268	Ex9CDS09A30N7B	1312208	Ex9CDS12A30N7A	1312352	Ex9CDS12A30N7B	1312292
380	Ex9CDS09A30Q7A	1312262	Ex9CDS09A30Q7B	1312202	Ex9CDS12A30Q7A	1312346	Ex9CDS12A30Q7B	1312286
440	Ex9CDS09A30R7A	1312264	Ex9CDS09A30R7B	1312204	Ex9CDS12A30R7A	1312348	Ex9CDS12A30R7B	1312288
480	Ex9CDS09A30T7A	1310071	Ex9CDS09A30T7B	1310011	Ex9CDS12A30T7A	1310155	Ex9CDS12A30T7B	1310095
Coil Voltage (Vac)	4-pole (4NO)		4-pole (2NO+2NC)		4-pole (4NO)		4-pole (2NO+2NC)	
	Catalog number	Item number						
24	Ex9CDS09A40B7	1310033	Ex9CDS09A22B7	1310057	Ex9CDS12A40B7	1310117	Ex9CDS12A22B7	1310141
48	Ex9CDS09A40E7	1312230	Ex9CDS09A22E7	1312254	Ex9CDS12A40E7	1312314	Ex9CDS12A22E7	1312338
110	Ex9CDS09A40F7	1310025	Ex9CDS09A22F7	1310049	Ex9CDS12A40F7	1310109	Ex9CDS12A22F7	1310133
120	Ex9CDS09A40G7	1310027	Ex9CDS09A22G7	1310051	Ex9CDS12A40G7	1310111	Ex9CDS12A22G7	1310135
220	Ex9CDS09A40M7	1312224	Ex9CDS09A22M7	1312248	Ex9CDS12A40M7	1312308	Ex9CDS12A22M7	1312332
230	Ex9CDS09A40P7	1310029	Ex9CDS09A22P7	1310053	Ex9CDS12A40P7	1310113	Ex9CDS12A22P7	1310137
240	Ex9CDS09A40U7	1310031	Ex9CDS09A22U7	1310055	Ex9CDS12A40U7	1310115	Ex9CDS12A22U7	1310139
277	Ex9CDS09A40N7	1312232	Ex9CDS09A22N7	1312256	Ex9CDS12A40N7	1312316	Ex9CDS12A22N7	1312340
380	Ex9CDS09A40Q7	1312226	Ex9CDS09A22Q7	1312250	Ex9CDS12A40Q7	1312310	Ex9CDS12A22Q7	1312334
440	Ex9CDS09A40R7	1312228	Ex9CDS09A22R7	1312252	Ex9CDS12A40R7	1312312	Ex9CDS12A22R7	1312336
480	Ex9CDS09A40T7	1310035	Ex9CDS09A22T7	1310059	Ex9CDS12A40T7	1310119	Ex9CDS12A22T7	1310143



Ex9CD/CM IEC Contactors

Products

Ex9CDS 18A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60Hz



Coil Voltage (Vac)	18A			
	3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CDS18A30B7A	1310201	Ex9CDS18A30B7B	1310177
48	Ex9CDS18A30E7A	1312398	Ex9CDS18A30E7B	1312374
110	Ex9CDS18A30F7A	1310193	Ex9CDS18A30F7B	1310169
120	Ex9CDS18A30G7A	1310195	Ex9CDS18A30G7B	1310171
220	Ex9CDS18A30M7A	1312392	Ex9CDS18A30M7B	1312368
230	Ex9CDS18A30P7A	1310197	Ex9CDS18A30P7B	1310173
240	Ex9CDS18A30U7A	1310199	Ex9CDS18A30U7B	1310175
277	Ex9CDS18A30N7A	1312400	Ex9CDS18A30N7B	1312376
380	Ex9CDS18A30Q7A	1312394	Ex9CDS18A30Q7B	1312370
440	Ex9CDS18A30R7A	1312396	Ex9CDS18A30R7B	1312372
480	Ex9CDS18A30T7A	1310203	Ex9CDS18A30T7B	1310179

Ratings		9A	12A	18A	
UL/CSA (A)	General Purpose	20		32	
	Single-Phase (hp)	120V	0.5	0.75	1
		208V 240V	1	2	3
Three-Phase (hp)	200V	3	5	7.5	
	240V	5	7.5	10	
	460V 600V				
IEC (A)	AC-3 Ie	9	12	18	
	AC-1 Ie	20		32	
AC-3 (kw)	220/230V	2.2	3	4	
	380/400V	4	5.5	7.5	
	660/690V	5.5	7.5	10	

D



Ex9CD/CM IEC Contactors

Products

Ex9CDS 25~32A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60Hz



Coil Voltage (Vac)	25A				32A			
	3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact		3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact	
	Catalog number	Item number						
24	Ex9CDS25A30B7A	1310285	Ex9CDS25A30B7B	1310225	Ex9CDS32A30B7A	1310333	Ex9CDS32A30B7B	1310309
48	Ex9CDS25A30E7A	1312482	Ex9CDS25A30E7B	1312422	Ex9CDS32A30E7A	1312530	Ex9CDS32A30E7B	1312506
110	Ex9CDS25A30F7A	1310277	Ex9CDS25A30F7B	1310217	Ex9CDS32A30F7A	1310325	Ex9CDS32A30F7B	1310301
120	Ex9CDS25A30G7A	1310279	Ex9CDS25A30G7B	1310219	Ex9CDS32A30G7A	1310327	Ex9CDS32A30G7B	1310303
220	Ex9CDS25A30M7A	1312476	Ex9CDS25A30M7B	1312416	Ex9CDS32A30M7A	1312524	Ex9CDS32A30M7B	1312500
230	Ex9CDS25A30P7A	1310281	Ex9CDS25A30P7B	1310221	Ex9CDS32A30P7A	1310329	Ex9CDS32A30P7B	1310305
240	Ex9CDS25A30U7A	1310283	Ex9CDS25A30U7B	1310223	Ex9CDS32A30U7A	1310331	Ex9CDS32A30U7B	1310307
277	Ex9CDS25A30N7A	1312484	Ex9CDS25A30N7B	1312424	Ex9CDS32A30N7A	1312532	Ex9CDS32A30N7B	1312508
380	Ex9CDS25A30Q7A	1312478	Ex9CDS25A30Q7B	1312418	Ex9CDS32A30Q7A	1312526	Ex9CDS32A30Q7B	1312502
440	Ex9CDS25A30R7A	1312480	Ex9CDS25A30R7B	1312420	Ex9CDS32A30R7A	1312528	Ex9CDS32A30R7B	1312504
480	Ex9CDS25A30T7A	1310287	Ex9CDS25A30T7B	1310227	Ex9CDS32A30T7A	1310335	Ex9CDS32A30T7B	1310311
Coil Voltage (Vac)	4-pole (4NO)		4-pole (2NO+2NC)					
	Catalog number	Item number	Catalog number	Item number				
24	Ex9CDS25A40B7	1310249	Ex9CDS25A22B7	1310273				
48	Ex9CDS25A40E7	1312446	Ex9CDS25A22E7	1312470				
110	Ex9CDS25A40F7	1310241	Ex9CDS25A22F7	1310265				
120	Ex9CDS25A40G7	1310243	Ex9CDS25A22G7	1310267				
220	Ex9CDS25A40M7	1312440	Ex9CDS25A22M7	1312464				
230	Ex9CDS25A40P7	1310245	Ex9CDS25A22P7	1310269				
240	Ex9CDS25A40U7	1310247	Ex9CDS25A22U7	1310271				
277	Ex9CDS25A40N7	1312448	Ex9CDS25A22N7	1312472				
380	Ex9CDS25A40Q7	1312442	Ex9CDS25A22Q7	1312466				
440	Ex9CDS25A40R7	1312444	Ex9CDS25A22R7	1312468				
480	Ex9CDS25A40T7	1310251	Ex9CDS25A22T7	1310275				



Ex9CD/CM IEC Contactors

Products

Ex9CDS 40A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60Hz



Coil Voltage (Vac)	40A			
	3-pole 3NO+1NO/1NC • Auxiliary Contact			
	Catalog number		Item number	
24	Ex9CDS40A30B7C		1310393	
48	Ex9CDS40A30E7C		1312590	
110	Ex9CDS40A30F7C		1310385	
120	Ex9CDS40A30G7C		1310387	
220	Ex9CDS40A30M7C		1312584	
230	Ex9CDS40A30P7C		1310389	
240	Ex9CDS40A30U7C		1310391	
277	Ex9CDS40A30N7C		1312592	
380	Ex9CDS40A30Q7C		1312586	
440	Ex9CDS40A30R7C		1312588	
480	Ex9CDS40A30T7C		1310395	
Coil Voltage (Vac)	4-pole (4NO)		4-pole (2NO+2NC)	
	Catalog number		Catalog number	
	Item number		Item number	
24	Ex9CDS40A40B7	1310357	Ex9CDS40A22B7	1310381
48	Ex9CDS40A40E7	1312554	Ex9CDS40A22E7	1312578
110	Ex9CDS40A40F7	1310349	Ex9CDS40A22F7	1310373
120	Ex9CDS40A40G7	1310351	Ex9CDS40A22G7	1310375
220	Ex9CDS40A40M7	1312548	Ex9CDS40A22M7	1312572
230	Ex9CDS40A40P7	1310353	Ex9CDS40A22P7	1310377
240	Ex9CDS40A40U7	1310355	Ex9CDS40A22U7	1310379
277	Ex9CDS40A40N7	1312556	Ex9CDS40A22N7	1312580
380	Ex9CDS40A40Q7	1312550	Ex9CDS40A22Q7	1312574
440	Ex9CDS40A40R7	1312552	Ex9CDS40A22R7	1312576
480	Ex9CDS40A40T7	1310359	Ex9CDS40A22T7	1310383

Ratings		25A	32A	40A	
UL/CSA (A)	General Purpose	40	50	60	
	Single-Phase (hp)	120V	2	3	
		208V 240V		5	7.5
Three-Phase (hp)	200V	7.5	10	15	
	240V	10	15	20	
	460V	15	20	25	
	600V				
IEC (A)	AC-3 le	25	32	40	
	AC-1 le	40	50	60	
AC-3 (kw)	220/230V	5.5	7.5	11	
	380/400V	11	15	18.5	
	660/690V	15	18.5	30	

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Ex9CD/CM IEC Contactors

Products

Ex9CDS 50~65A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60Hz



Coil Voltage (Vac)	50A				65A			
	3-pole 3NO+1NO/1NC • Auxiliary Contact				3-pole 3NO+1NO/1NC • Auxiliary Contact			
	Catalog number		Item number		Catalog number		Item number	
24	Ex9CDS50A30B7C		1310453		Ex9CDS65A30B7C		1310513	
48	Ex9CDS50A30E7C		1312650		Ex9CDS65A30E7C		1312710	
110	Ex9CDS50A30F7C		1310445		Ex9CDS65A30F7C		1310505	
120	Ex9CDS50A30G7C		1310447		Ex9CDS65A30G7C		1310507	
220	Ex9CDS50A30M7C		1312644		Ex9CDS65A30M7C		1312704	
230	Ex9CDS50A30P7C		1310449		Ex9CDS65A30P7C		1310509	
240	Ex9CDS50A30U7C		1310451		Ex9CDS65A30U7C		1310511	
277	Ex9CDS50A30N7C		1312652		Ex9CDS65A30N7C		1312712	
380	Ex9CDS50A30Q7C		1312646		Ex9CDS65A30Q7C		1312706	
440	Ex9CDS50A30R7C		1312648		Ex9CDS65A30R7C		1312708	
480	Ex9CDS50A30T7C		1310455		Ex9CDS65A30T7C		1310515	
Coil Voltage (Vac)	4-pole (4NO)		4-pole (2NO+2NC)		4-pole (4NO)		4-pole (2NO+2NC)	
	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number
24	Ex9CDS50A40B7	1310417	Ex9CDS50A22B7	1310441	Ex9CDS65A40B7	1310477	Ex9CDS65A22B7	1310501
48	Ex9CDS50A40E7	1312614	Ex9CDS50A22E7	1312638	Ex9CDS65A40E7	1312674	Ex9CDS65A22E7	1312698
110	Ex9CDS50A40F7	1310409	Ex9CDS50A22F7	1310433	Ex9CDS65A40F7	1310469	Ex9CDS65A22F7	1310493
120	Ex9CDS50A40G7	1310411	Ex9CDS50A22G7	1310435	Ex9CDS65A40G7	1310471	Ex9CDS65A22G7	1310495
220	Ex9CDS50A40M7	1312608	Ex9CDS50A22M7	1312632	Ex9CDS65A40M7	1312668	Ex9CDS65A22M7	1312692
230	Ex9CDS50A40P7	1310413	Ex9CDS50A22P7	1310437	Ex9CDS65A40P7	1310473	Ex9CDS65A22P7	1310497
240	Ex9CDS50A40U7	1310415	Ex9CDS50A22U7	1310439	Ex9CDS65A40U7	1310475	Ex9CDS65A22U7	1310499
277	Ex9CDS50A40N7	1312616	Ex9CDS50A22N7	1312640	Ex9CDS65A40N7	1312676	Ex9CDS65A22N7	1312700
380	Ex9CDS50A40Q7	1312610	Ex9CDS50A22Q7	1312634	Ex9CDS65A40Q7	1312670	Ex9CDS65A22Q7	1312694
440	Ex9CDS50A40R7	1312612	Ex9CDS50A22R7	1312636	Ex9CDS65A40R7	1312672	Ex9CDS65A22R7	1312696
480	Ex9CDS50A40T7	1310419	Ex9CDS50A22T7	1310443	Ex9CDS65A40T7	1310479	Ex9CDS65A22T7	1310503



Ex9CD/CM IEC Contactors

Products

Ex9CDS 80A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60Hz



Coil Voltage (Vac)	80A			
	3-pole 3NO+1NO/1NC • Auxiliary Contact			
	Catalog number		Item number	
24	Ex9CDS80A30B7C	1310573		
48	Ex9CDS80A30E7C	1312770		
110	Ex9CDS80A30F7C	1310565		
120	Ex9CDS80A30G7C	1310567		
220	Ex9CDS80A30M7C	1312764		
230	Ex9CDS80A30P7C	1310569		
240	Ex9CDS80A30U7C	1310571		
277	Ex9CDS80A30N7C	1312772		
380	Ex9CDS80A30Q7C	1312766		
440	Ex9CDS80A30R7C	1312768		
480	Ex9CDS80A30T7C	1310575		
Coil Voltage (Vac)	4-pole (4NO)		4-pole (2NO+2NC)	
	Catalog number	Item number	Catalog number	Item number
	24	Ex9CDS80A40B7	1310537	Ex9CDS80A22B7
48	Ex9CDS80A40E7	1312734	Ex9CDS80A22E7	1312758
110	Ex9CDS80A40F7	1310529	Ex9CDS80A22F7	1310553
120	Ex9CDS80A40G7	1310531	Ex9CDS80A22G7	1310555
220	Ex9CDS80A40M7	1312728	Ex9CDS80A22M7	1312752
230	Ex9CDS80A40P7	1310533	Ex9CDS80A22P7	1310557
240	Ex9CDS80A40U7	1310535	Ex9CDS80A22U7	1310559
277	Ex9CDS80A40N7	1312736	Ex9CDS80A22N7	1312760
380	Ex9CDS80A40Q7	1312730	Ex9CDS80A22Q7	1312754
440	Ex9CDS80A40R7	1312732	Ex9CDS80A22R7	1312756
480	Ex9CDS80A40T7	1310539	Ex9CDS80A22T7	1310563

Ratings		50A	65A	80A
UL/CSA (A)	General Purpose	80		95
	Single-Phase (hp)	120V	5	
		208V	7.5	
Three-Phase (hp)	240V	10	-	20
	200V	15	20	25
	240V	20	25	30
	460V	30	40	
	600V			
IEC (A)	AC-3 le	50	65	80
	AC-1 le	80		95
AC-3 (kw)	220/230V	15	18.5	22
	380/400V	22	30	37

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Ex9CD/CM IEC Contactors

Products

Ex9CDS 95A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60Hz



Coil Voltage (Vac)	95A			
	3-pole 3NO+1NO/1NC • Auxiliary Contact			
	Catalog number		Item number	
24	Ex9CDS95A30B7C		1310633	
48	Ex9CDS95A30E7C		1312830	
110	Ex9CDS95A30F7C		1310625	
120	Ex9CDS95A30G7C		1310627	
220	Ex9CDS95A30M7C		1312824	
230	Ex9CDS95A30P7C		1310629	
240	Ex9CDS95A30U7C		1310631	
277	Ex9CDS95A30N7C		1312832	
380	Ex9CDS95A30Q7C		1312826	
440	Ex9CDS95A30R7C		1312828	
480	Ex9CDS95A30T7C		1310635	
Coil Voltage (Vac)	4-pole (4NO)		4-pole (2NO+2NC)	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CDS95A40B7	1310597	Ex9CDS95A22B7	1310621
48	Ex9CDS95A40E7	1312794	Ex9CDS95A22E7	1312818
110	Ex9CDS95A40F7	1310589	Ex9CDS95A22F7	1310613
120	Ex9CDS95A40G7	1310591	Ex9CDS95A22G7	1310615
220	Ex9CDS95A40M7	1312788	Ex9CDS95A22M7	1312812
230	Ex9CDS95A40P7	1310593	Ex9CDS95A22P7	1310617
240	Ex9CDS95A40U7	1310595	Ex9CDS95A22U7	1310619
277	Ex9CDS95A40N7	1312796	Ex9CDS95A22N7	1312820
380	Ex9CDS95A40Q7	1312790	Ex9CDS95A22Q7	1312814
440	Ex9CDS95A40R7	1312792	Ex9CDS95A22R7	1312816
480	Ex9CDS95A40T7	1310599	Ex9CDS95A22T7	1310623

Ratings		95A
UL/CSA (A)	General Purpose	95
Single-Phase (hp)	120V	7.5
	208V	-
	240V	20
Three-Phase (hp)	200V	30
	240V	
	460V	50
600V		
IEC (A)	AC-3 le	95
	AC-1 le	
AC-3 (kw)	220/230V	25
	380/400V	45



Ex9CD/CM IEC Contactors

Products

Ex9CDS 115~150A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60Hz



Coil Voltage (Vac)	115A		150A	
	3-pole (3NO)		3-pole (3NO)	
	Catalog number	Item number	Catalog number	Item number
110	Ex9CDS115A30F7	1310649	Ex9CDS150A30F7	1310697
120	Ex9CDS115A30G7	1310651	Ex9CDS150A30G7	1310699
220	Ex9CDS115A30M7	1312848	Ex9CDS150A30M7	1312896
230	Ex9CDS115A30P7	1310653	Ex9CDS150A30P7	1310701
240	Ex9CDS115A30U7	1310655	Ex9CDS150A30U7	1310703
277	Ex9CDS115A30N7	1312856	Ex9CDS150A30N7	1312904
380	Ex9CDS115A30Q7	1312850	Ex9CDS150A30Q7	1312898
440	Ex9CDS115A30R7	1312852	Ex9CDS150A30R7	1312900
480	Ex9CDS115A30T7	1310659	Ex9CDS150A30T7	1310707
Coil Voltage (Vac)	4-pole (4NO)		4-pole (4NO)	
	Catalog number	Item number	Catalog number	Item number
	Catalog number	Item number	Catalog number	Item number
110	Ex9CDS115A40F7	1310661	Ex9CDS150A40F7	1310709
120	Ex9CDS115A40G7	1310663	Ex9CDS150A40G7	1310711
220	Ex9CDS115A40M7	1312860	Ex9CDS150A40M7	1312908
230	Ex9CDS115A40P7	1310665	Ex9CDS150A40P7	1310713
240	Ex9CDS115A40U7	1310667	Ex9CDS150A40U7	1310715
277	Ex9CDS115A40N7	1312868	Ex9CDS150A40N7	1312916
380	Ex9CDS115A40Q7	1312862	Ex9CDS150A40Q7	1312910
440	Ex9CDS115A40R7	1312864	Ex9CDS150A40R7	1312912
480	Ex9CDS115A40T7	1310671	Ex9CDS150A40T7	1310719

Ratings		115A	150A	
UL/CSA (A)	General Purpose	200		
	Three-Phase (hp)	240V	40	50
		415V	60	75
		480V 600V	75	100
IEC (A)	AC-3 Ie	115	150	
	AC-1 Ie	200		
AC-3 (kw)	220/230V	33	45	
	380/400V	55	75	
	660/690V	80	100	

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Ex9CD/CM IEC Contactors

Products

Ex9CDS 185~225A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60Hz



Coil Voltage (Vac)	185A		225A	
	3-pole (3NO)		3-pole (3NO)	
	Catalog number	Item number	Catalog number	Item number
110	Ex9CDS185A30F7	1310745	Ex9CDS225A30F7	1310793
120	Ex9CDS185A30G7	1310747	Ex9CDS225A30G7	1310795
220	Ex9CDS185A30M7	1312944	Ex9CDS225A30M7	1312992
230	Ex9CDS185A30P7	1310749	Ex9CDS225A30P7	1310797
240	Ex9CDS185A30U7	1310751	Ex9CDS225A30U7	1310799
277	Ex9CDS185A30N7	1312952	Ex9CDS225A30N7	1313000
380	Ex9CDS185A30Q7	1312946	Ex9CDS225A30Q7	1312994
440	Ex9CDS185A30R7	1312948	Ex9CDS225A30R7	1312996
480	Ex9CDS185A30T7	1310755	Ex9CDS225A30T7	1310803
Coil Voltage (Vac)	4-pole (4NO)		4-pole (4NO)	
	Catalog number	Item number	Catalog number	Item number
	110	Ex9CDS185A40F7	1310757	Ex9CDS225A40F7
120	Ex9CDS185A40G7	1310759	Ex9CDS225A40G7	1310807
220	Ex9CDS185A40M7	1312956	Ex9CDS225A40M7	1313004
230	Ex9CDS185A40P7	1310761	Ex9CDS225A40P7	1310809
240	Ex9CDS185A40U7	1310763	Ex9CDS225A40U7	1310811
277	Ex9CDS185A40N7	1312964	Ex9CDS225A40N7	1313012
380	Ex9CDS185A40Q7	1312958	Ex9CDS225A40Q7	1313006
440	Ex9CDS185A40R7	1312960	Ex9CDS225A40R7	1313008
480	Ex9CDS185A40T7	1310767	Ex9CDS225A40T7	1310815

Ratings		185A	225A
UL/CSA (A)	General Purpose	275	
Three-Phase (hp)	240V	60	75
	415V	100	125
	480V		
IEC (A)	600V	185	225
	AC-3 le		
AC-3 (kw)	AC-1 le	275	
	220/230V	55	63
	380/400V	90	110
	660/690V	100	129



Ex9CD/CM IEC Contactors

Products

Ex9CDS 265~330A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60Hz



Coil Voltage (Vac)	265A		330A	
	3-pole (3NO)		3-pole (3NO)	
	Catalog number	Item number	Catalog number	Item number
110	Ex9CDS265A30F7	1310841	Ex9CDS330A30F7	1310889
120	Ex9CDS265A30G7	1310843	Ex9CDS330A30G7	1310891
220	Ex9CDS265A30M7	1313040	Ex9CDS330A30M7	1313088
230	Ex9CDS265A30P7	1310845	Ex9CDS330A30P7	1310893
240	Ex9CDS265A30U7	1310847	Ex9CDS330A30U7	1310895
277	Ex9CDS265A30N7	1313048	Ex9CDS330A30N7	1313096
380	Ex9CDS265A30Q7	1313042	Ex9CDS330A30Q7	1313090
440	Ex9CDS265A30R7	1313044	-	-
480	Ex9CDS265A30T7	1310851	-	-
Coil Voltage (Vac)	4-pole (4NO)		4-pole (4NO)	
	Catalog number	Item number	Catalog number	Item number
	110	Ex9CDS265A40F7	1310853	Ex9CDS330A40F7
120	Ex9CDS265A40G7	1310855	Ex9CDS330A40G7	1310903
220	Ex9CDS265A40M7	1313052	Ex9CDS330A40M7	1313100
230	Ex9CDS265A40P7	1310857	Ex9CDS330A40P7	1310905
240	Ex9CDS265A40U7	1310859	Ex9CDS330A40U7	1310907
277	Ex9CDS265A40N7	1313060	Ex9CDS330A40N7	1313108
380	Ex9CDS265A40Q7	1313054	Ex9CDS330A40Q7	1313102
440	Ex9CDS265A40R7	1313056	-	-
480	Ex9CDS265A40T7	1310863	-	-

Ratings		265A	330A	
UL/CSA (A)	General Purpose	315	380	
	Three-Phase (hp)	240V	100	125
		415V	150	150
		480V		200
IEC (A)	600V			
	AC-3 le	265	330	
AC-3 (kw)	AC-1 le	315	380	
	220/230V	80	100	
	380/400V	132	160	
	660/690V	160	220	

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Ex9CD/CM IEC Contactors

Products

Ex9CDS 400~500A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60Hz



Coil Voltage (Vac)	400A		500A	
	3-pole (3NO)		3-pole (3NO)	
	Catalog number	Item number	Catalog number	Item number
110	Ex9CDS400A30F7	1310937	Ex9CDS500A30F7	1310985
120	Ex9CDS400A30G7	1310939	Ex9CDS500A30G7	1310987
220	Ex9CDS400A30M7	1313136	Ex9CDS500A30M7	1313184
230	Ex9CDS400A30P7	1310941	Ex9CDS500A30P7	1310989
240	Ex9CDS400A30U7	1310943	Ex9CDS500A30U7	1310991
277	Ex9CDS400A30N7	1313144	Ex9CDS500A30N7	1313192
380	Ex9CDS400A30Q7	1313138	Ex9CDS500A30Q7	1313186
Coil Voltage (Vac)	4-pole (4NO)			
	Catalog number	Item number		
110	Ex9CDS400A40F7	1310949		
120	Ex9CDS400A40G7	1310951		
220	Ex9CDS400A40M7	1313148		
230	Ex9CDS400A40P7	1310953		
240	Ex9CDS400A40U7	1310955		
277	Ex9CDS400A40N7	1313156		
380	Ex9CDS400A40Q7	1313150		

Ratings		400A	500A	
UL/CSA (A)	General Purpose	450	630	
	Three-Phase (hp)	240V	150	200
		415V	200	250
		480V 600V	250 300	350
IEC (A)	AC-3 le	400	500	
	AC-1 le	450	630	
AC-3 (kw)	220/230V	110	150	
	380/400V 660/690V	200 280	250 335	



Ex9CD/CM IEC Contactors

Products

Ex9CDS 630A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60Hz



Coil Voltage (Vac)	630A		Ratings		630A
	3-pole (3NO)		UL/CSA (A)	General Purpose	
	Catalog number	Item number	Three-Phase (hp)		
110	Ex9CDS630A30F7	1311009		240V	800
120	Ex9CDS630A30G7	1311011		415V	250
220	Ex9CDS630A30M7	1313208		480V	350
230	Ex9CDS630A30P7	1311013		600V	400
240	Ex9CDS630A30U7	1311015			500
277	Ex9CDS630A30N7	1313216		AC-3 Ie	630
380	Ex9CDS630A30Q7	1313210		AC-1 Ie	800
Coil Voltage (Vac)	4-pole (4NO)		AC-3 (kw)		
	Catalog number	Item number	220/230V		
			380/400V		
110	Ex9CDS630A40F7	1311021		660/690V	200
120	Ex9CDS630A40G7	1311023			335
220	Ex9CDS630A40M7	1313220			450
230	Ex9CDS630A40P7	1311025			
240	Ex9CDS630A40U7	1311027			
277	Ex9CDS630A40N7	1313228			
380	Ex9CDS630A40Q7	1313222			

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Ex9CD/CM IEC Contactors

Products

Ex9CMR 6~9A Miniature

- Auxiliary contacts are front mounted
- FVR, 50/60Hz



Coil Voltage (Vac)	6A				9A			
	3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact		3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact	
	Catalog number	Item number						
24	Ex9CMR06A30B7A	1311149	Ex9CMR06A30B7B	1311125	Ex9CMR09A30B7A	1311245	Ex9CMR09A30B7B	1311221
48	Ex9CMR06A30E7A	1313346	Ex9CMR06A30E7B	1313322	Ex9CMR09A30E7A	1313442	Ex9CMR09A30E7B	1313418
110	Ex9CMR06A30F7A	1311141	Ex9CMR06A30F7B	1311117	Ex9CMR09A30F7A	1311237	Ex9CMR09A30F7B	1311213
120	Ex9CMR06A30G7A	1311143	Ex9CMR06A30G7B	1311119	Ex9CMR09A30G7A	1311239	Ex9CMR09A30G7B	1311215
220	Ex9CMR06A30M7A	1313340	Ex9CMR06A30M7B	1313316	Ex9CMR09A30M7A	1313436	Ex9CMR09A30M7B	1313412
230	Ex9CMR06A30P7A	1311145	Ex9CMR06A30P7B	1311121	Ex9CMR09A30P7A	1311241	Ex9CMR09A30P7B	1311217
240	Ex9CMR06A30U7A	1311147	Ex9CMR06A30U7B	1311123	Ex9CMR09A30U7A	1311243	Ex9CMR09A30U7B	1311219
277	Ex9CMR06A30N7A	1313348	Ex9CMR06A30N7B	1313324	Ex9CMR09A30N7A	1313444	Ex9CMR09A30N7B	1313420
380	Ex9CMR06A30Q7A	1313342	Ex9CMR06A30Q7B	1313318	Ex9CMR09A30Q7A	1313438	Ex9CMR09A30Q7B	1313414
440	Ex9CMR06A30R7A	1313344	Ex9CMR06A30R7B	1313320	Ex9CMR09A30R7A	1313440	Ex9CMR09A30R7B	1313416
480	Ex9CMR06A30T7A	1311151	Ex9CMR06A30T7B	1311127	Ex9CMR09A30T7A	1311247	Ex9CMR09A30T7B	1311223
600	Ex9CMR06A30Y7A	1313338	Ex9CMR06A30Y7B	1313314	Ex9CMR09A30Y7A	1313434	Ex9CMR09A30Y7B	1313410
Coil Voltage (Vac)	4-pole (4NO)		4-pole (2NO+2NC)		4-pole (4NO)		4-pole (2NO+2NC)	
	Catalog number	Item number						
24	Ex9CMR06A40B7	1311077	Ex9CMR06A22B7	1311101	Ex9CMR09A40B7	1311173	Ex9CMR09A22B7	1311197
48	Ex9CMR06A40E7	1313274	Ex9CMR06A22E7	1313298	Ex9CMR09A40E7	1313370	Ex9CMR09A22E7	1313394
110	Ex9CMR06A40F7	1311069	Ex9CMR06A22F7	1311093	Ex9CMR09A40F7	1311165	Ex9CMR09A22F7	1311189
120	Ex9CMR06A40G7	1311071	Ex9CMR06A22G7	1311095	Ex9CMR09A40G7	1311167	Ex9CMR09A22G7	1311191
220	Ex9CMR06A40M7	1313268	Ex9CMR06A22M7	1313292	Ex9CMR09A40M7	1313364	Ex9CMR09A22M7	1313388
230	Ex9CMR06A40P7	1311073	Ex9CMR06A22P7	1311097	Ex9CMR09A40P7	1311169	Ex9CMR09A22P7	1311193
240	Ex9CMR06A40U7	1311075	Ex9CMR06A22U7	1311099	Ex9CMR09A40U7	1311171	Ex9CMR09A22U7	1311195
277	Ex9CMR06A40N7	1313276	Ex9CMR06A22N7	1313300	Ex9CMR09A40N7	1313372	Ex9CMR09A22N7	1313396
380	Ex9CMR06A40Q7	1313270	Ex9CMR06A22Q7	1313294	Ex9CMR09A40Q7	1313366	Ex9CMR09A22Q7	1313390
440	Ex9CMR06A40R7	1313272	Ex9CMR06A22R7	1313296	Ex9CMR09A40R7	1313368	Ex9CMR09A22R7	1313392
480	Ex9CMR06A40T7	1311079	Ex9CMR06A22T7	1311103	Ex9CMR09A40T7	1311175	Ex9CMR09A22T7	1311199
600	Ex9CMR06A40Y7	1313266	Ex9CMR06A22Y7	1313290	Ex9CMR09A40Y7	1313362	Ex9CMR09A22Y7	1313386



Ex9CD/CM IEC Contactors

Products

Ex9CMR 12A Miniature

- Auxiliary contacts are front mounted
- FVR, 50/60Hz



Coil Voltage (Vac)	12A			
	3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CMR12A30B7A	1311341	Ex9CMR12A30B7B	1311317
48	Ex9CMR12A30E7A	1313538	Ex9CMR12A30E7B	1313514
110	Ex9CMR12A30F7A	1311333	Ex9CMR12A30F7B	1311309
120	Ex9CMR12A30G7A	1311335	Ex9CMR12A30G7B	1311311
220	Ex9CMR12A30M7A	1313532	Ex9CMR12A30M7B	1313508
230	Ex9CMR12A30P7A	1311337	Ex9CMR12A30P7B	1311313
240	Ex9CMR12A30U7A	1311339	Ex9CMR12A30U7B	1311315
277	Ex9CMR12A30N7A	1313540	Ex9CMR12A30N7B	1313516
380	Ex9CMR12A30Q7A	1313534	Ex9CMR12A30Q7B	1313510
440	Ex9CMR12A30R7A	1313536	Ex9CMR12A30R7B	1313512
480	Ex9CMR12A30T7A	1311343	Ex9CMR12A30T7B	1311319
600	Ex9CMR12A30Y7A	1313530	Ex9CMR12A30Y7B	1313506

Coil Voltage (Vac)	4-pole (4NO)		4-pole (2NO+2NC)	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CMR12A40B7	1311269	Ex9CMR12A22B7	1311293
48	Ex9CMR12A40E7	1313466	Ex9CMR12A22E7	1313490
110	Ex9CMR12A40F7	1311261	Ex9CMR12A22F7	1311285
120	Ex9CMR12A40G7	1311263	Ex9CMR12A22G7	1311287
220	Ex9CMR12A40M7	1313460	Ex9CMR12A22M7	1313484
230	Ex9CMR12A40P7	1311265	Ex9CMR12A22P7	1311289
240	Ex9CMR12A40U7	1311267	Ex9CMR12A22U7	1311291
277	Ex9CMR12A40N7	1313468	Ex9CMR12A22N7	1313492
380	Ex9CMR12A40Q7	1313462	Ex9CMR12A22Q7	1313486
440	Ex9CMR12A40R7	1313464	Ex9CMR12A22R7	1313488
480	Ex9CMR12A40T7	1311271	Ex9CMR12A22T7	1311295
600	Ex9CMR12A40Y7	1313458	Ex9CMR12A22Y7	1313482

Ratings		6A	9A	12A
UL/CSA (A)	General Purpose	20		
Single-Phase (hp)	110/120V	0.3	0.5	0.75
	230/240V	0.75	1.5	2
Three-Phase (hp)	200/208V	1.5	3	
	230/240V			
	460/480V 575/600V	3	5	7.5 10
IEC (A)	AC-3 le	6	9	12
	AC-1 le	20		
AC-3 (kw)	220/230/240V	1.5	2.2	3
	380/400V	2.2	4	5.5
	415V			
	660/690V	3		4

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Ex9CD/CM IEC Contactors

Products

Ex9CDR 9~12A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60Hz



Coil Voltage (Vac)	9A				12A			
	3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact		3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact	
	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number
24	Ex9CDR09A30B7A	1310081	Ex9CDR09A30B7B	1310021	Ex9CDR12A30B7A	1310165	Ex9CDR12A30B7B	1310105
48	Ex9CDR09A30E7A	1312278	Ex9CDR09A30E7B	1312218	Ex9CDR12A30E7A	1312362	Ex9CDR12A30E7B	1312302
110	Ex9CDR09A30F7A	1310073	Ex9CDR09A30F7B	1310013	Ex9CDR12A30F7A	1310157	Ex9CDR12A30F7B	1310097
120	Ex9CDR09A30G7A	1310075	Ex9CDR09A30G7B	1310015	Ex9CDR12A30G7A	1310159	Ex9CDR12A30G7B	1310099
220	Ex9CDR09A30M7A	1312272	Ex9CDR09A30M7B	1312212	Ex9CDR12A30M7A	1312356	Ex9CDR12A30M7B	1312296
230	Ex9CDR09A30P7A	1310077	Ex9CDR09A30P7B	1310017	Ex9CDR12A30P7A	1310161	Ex9CDR12A30P7B	1310101
240	Ex9CDR09A30U7A	1310079	Ex9CDR09A30U7B	1310019	Ex9CDR12A30U7A	1310163	Ex9CDR12A30U7B	1310103
277	Ex9CDR09A30N7A	1312280	Ex9CDR09A30N7B	1312220	Ex9CDR12A30N7A	1312364	Ex9CDR12A30N7B	1312304
380	Ex9CDR09A30Q7A	1312274	Ex9CDR09A30Q7B	1312214	Ex9CDR12A30Q7A	1312358	Ex9CDR12A30Q7B	1312298
440	Ex9CDR09A30R7A	1312276	Ex9CDR09A30R7B	1312216	Ex9CDR12A30R7A	1312360	Ex9CDR12A30R7B	1312300
480	Ex9CDR09A30T7A	1310083	Ex9CDR09A30T7B	1310023	Ex9CDR12A30T7A	1310167	Ex9CDR12A30T7B	1310107
600	Ex9CDR09A30Y7A	1312270	Ex9CDR09A30Y7B	1312210	Ex9CDR12A30Y7A	1312354	Ex9CDR12A30Y7B	1312294
Coil Voltage (Vac)	4-pole (4NO)			4-pole (4NO)				
	Catalog number	Item number		Catalog number	Item number			
24	Ex9CDR09A40B7	1310045		Ex9CDR12A40B7	1310129			
48	Ex9CDR09A40E7	1312242		Ex9CDR12A40E7	1312326			
110	Ex9CDR09A40F7	1310037		Ex9CDR12A40F7	1310121			
120	Ex9CDR09A40G7	1310039		Ex9CDR12A40G7	1310123			
220	Ex9CDR09A40M7	1312236		Ex9CDR12A40M7	1312320			
230	Ex9CDR09A40P7	1310041		Ex9CDR12A40P7	1310125			
240	Ex9CDR09A40U7	1310043		Ex9CDR12A40U7	1310127			
277	Ex9CDR09A40N7	1312244		Ex9CDR12A40N7	1312328			
380	Ex9CDR09A40Q7	1312238		Ex9CDR12A40Q7	1312322			
440	Ex9CDR09A40R7	1312240		Ex9CDR12A40R7	1312324			
480	Ex9CDR09A40T7	1310047		Ex9CDR12A40T7	1310131			
600	Ex9CDR09A40Y7	1312234		Ex9CDR12A40Y7	1312318			



Ex9CD/CM IEC Contactors

Products

Ex9CDR 18A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60Hz



Coil Voltage (Vac)	18A			
	3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CDR18A30B7A	1310213	Ex9CDR18A30B7B	1310189
48	Ex9CDR18A30E7A	1312410	Ex9CDR18A30E7B	1312386
110	Ex9CDR18A30F7A	1310205	Ex9CDR18A30F7B	1310181
120	Ex9CDR18A30G7A	1310207	Ex9CDR18A30G7B	1310183
220	Ex9CDR18A30M7A	1312404	Ex9CDR18A30M7B	1312380
230	Ex9CDR18A30P7A	1310209	Ex9CDR18A30P7B	1310185
240	Ex9CDR18A30U7A	1310211	Ex9CDR18A30U7B	1310187
277	Ex9CDR18A30N7A	1312412	Ex9CDR18A30N7B	1312388
380	Ex9CDR18A30Q7A	1312406	Ex9CDR18A30Q7B	1312382
440	Ex9CDR18A30R7A	1312408	Ex9CDR18A30R7B	1312384
480	Ex9CDR18A30T7A	1310215	Ex9CDR18A30T7B	1310191
600	Ex9CDR18A30Y7A	1312402	Ex9CDR18A30Y7B	1312378

Ratings		9A	12A	18A	
UL/CSA (A)	General Purpose	20		32	
	Single-Phase (hp)	120V	0.5	0.75	1
		208V 240V	1	2	3
Three-Phase (hp)	200V	3	5	7.5	
	240V	5	7.5	10	
	460V 600V				
IEC (A)	AC-3 Ie	9	12	18	
	AC-1 Ie	20		32	
AC-3 (kw)	220/230V	2.2	3	4	
	380/400V	4	5.5	7.5	
	660/690V	5.5	7.5	10	

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Ex9CD/CM IEC Contactors

Products

Ex9CDR 25~32A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60Hz



Coil Voltage (Vac)	25A				32A			
	3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact		3-pole 3NO+1NO • Auxiliary Contact		3-pole 3NO+1NC • Auxiliary Contact	
	Catalog number	Item number						
24	Ex9CDR25A30B7A	1310297	Ex9CDR25A30B7B	1310237	Ex9CDR32A30B7A	1310345	Ex9CDR32A30B7B	1310321
48	Ex9CDR25A30E7A	1312494	Ex9CDR25A30E7B	1312434	Ex9CDR32A30E7A	1312542	Ex9CDR32A30E7B	1312518
110	Ex9CDR25A30F7A	1310289	Ex9CDR25A30F7B	1310229	Ex9CDR32A30F7A	1310337	Ex9CDR32A30F7B	1310313
120	Ex9CDR25A30G7A	1310291	Ex9CDR25A30G7B	1310231	Ex9CDR32A30G7A	1310339	Ex9CDR32A30G7B	1310315
220	Ex9CDR25A30M7A	1312488	Ex9CDR25A30M7B	1312428	Ex9CDR32A30M7A	1312536	Ex9CDR32A30M7B	1312512
230	Ex9CDR25A30P7A	1310293	Ex9CDR25A30P7B	1310233	Ex9CDR32A30P7A	1310341	Ex9CDR32A30P7B	1310317
240	Ex9CDR25A30U7A	1310295	Ex9CDR25A30U7B	1310235	Ex9CDR32A30U7A	1310343	Ex9CDR32A30U7B	1310319
277	Ex9CDR25A30N7A	1312496	Ex9CDR25A30N7B	1312436	Ex9CDR32A30N7A	1312544	Ex9CDR32A30N7B	1312520
380	Ex9CDR25A30Q7A	1312490	Ex9CDR25A30Q7B	1312430	Ex9CDR32A30Q7A	1312538	Ex9CDR32A30Q7B	1312514
440	Ex9CDR25A30R7A	1312492	Ex9CDR25A30R7B	1312432	Ex9CDR32A30R7A	1312540	Ex9CDR32A30R7B	1312516
480	Ex9CDR25A30T7A	1310299	Ex9CDR25A30T7B	1310239	Ex9CDR32A30T7A	1310347	Ex9CDR32A30T7B	1310323
600	Ex9CDR25A30Y7A	1312486	Ex9CDR25A30Y7B	1312426	Ex9CDR32A30Y7A	1312534	Ex9CDR32A30Y7B	1312510
Coil Voltage (Vac)	4-pole (4NO)							
	Catalog number	Item number						
24	Ex9CDR25A40B7	1310261						
48	Ex9CDR25A40E7	1312458						
110	Ex9CDR25A40F7	1310253						
120	Ex9CDR25A40G7	1310255						
220	Ex9CDR25A40M7	1312452						
230	Ex9CDR25A40P7	1310257						
240	Ex9CDR25A40U7	1310259						
277	Ex9CDR25A40N7	1312460						
380	Ex9CDR25A40Q7	1312454						
440	Ex9CDR25A40R7	1312456						
480	Ex9CDR25A40T7	1310263						
600	Ex9CDR25A40Y7	1312450						



Ex9CD/CM IEC Contactors

Products

Ex9CDR 40A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60Hz



Coil Voltage (Vac)	40A	
	3-pole 3NO+1NO/1NC • Auxiliary Contact	
	Catalog number	Item number
24	Ex9CDR40A30B7C	1310405
48	Ex9CDR40A30E7C	1312602
110	Ex9CDR40A30F7C	1310397
120	Ex9CDR40A30G7C	1310399
220	Ex9CDR40A30M7C	1312596
230	Ex9CDR40A30P7C	1310401
240	Ex9CDR40A30U7C	1310403
277	Ex9CDR40A30N7C	1312604
380	Ex9CDR40A30Q7C	1312598
440	Ex9CDR40A30R7C	1312600
480	Ex9CDR40A30T7C	1310407
600	Ex9CDR40A30Y7C	1312594
Coil Voltage (Vac)	4-pole (4NO)	
	Catalog number	Item number
	Catalog number	Item number
24	Ex9CDR40A40B7	1310369
48	Ex9CDR40A40E7	1312566
110	Ex9CDR40A40F7	1310361
120	Ex9CDR40A40G7	1310363
220	Ex9CDR40A40M7	1312560
230	Ex9CDR40A40P7	1310365
240	Ex9CDR40A40U7	1310367
277	Ex9CDR40A40N7	1312568
380	Ex9CDR40A40Q7	1312562
440	Ex9CDR40A40R7	1312564
480	Ex9CDR40A40T7	1310371
600	Ex9CDR40A40Y7	1312558

Ratings		25A	32A	40A
UL/CSA (A)	General Purpose	40	50	60
	120V	2	3	
Single-Phase (hp)	208V	5		7.5
	240V	5		7.5
Three-Phase (hp)	200V	7.5	10	15
	240V	10	15	20
	460V	15	20	25
	600V	15	20	25
IEC (A)	AC-3 le	25	32	40
	AC-1 le	40	50	60
AC-3 (kw)	220/230V	5.5	7.5	11
	380/400V	11	15	18.5
	660/690V	15	18.5	30

Note: 40~95A are not pre-wired in the factory.



Ex9CD/CM IEC Contactors

Products

Ex9CDR 50~65A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60Hz



Coil Voltage (Vac)	50A		65A	
	3-pole 3NO+1NO/1NC • Auxiliary Contact		3-pole 3NO+1NO/1NC • Auxiliary Contact	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CDR50A30B7C	1310465	Ex9CDR65A30B7C	1310525
48	Ex9CDR50A30E7C	1312662	Ex9CDR65A30E7C	1312722
110	Ex9CDR50A30F7C	1310457	Ex9CDR65A30F7C	1310517
120	Ex9CDR50A30G7C	1310459	Ex9CDR65A30G7C	1310519
220	Ex9CDR50A30M7C	1312656	Ex9CDR65A30M7C	1312716
230	Ex9CDR50A30P7C	1310461	Ex9CDR65A30P7C	1310521
240	Ex9CDR50A30U7C	1310463	Ex9CDR65A30U7C	1310523
277	Ex9CDR50A30N7C	1312664	Ex9CDR65A30N7C	1312724
380	Ex9CDR50A30Q7C	1312658	Ex9CDR65A30Q7C	1312718
440	Ex9CDR50A30R7C	1312660	Ex9CDR65A30R7C	1312720
480	Ex9CDR50A30T7C	1310467	Ex9CDR65A30T7C	1310527
600	Ex9CDR50A30Y7C	1312654	Ex9CDR65A30Y7C	1312714
Coil Voltage (Vac)	4-pole (4NO)		4-pole (4NO)	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CDR50A40B7	1310429	Ex9CDR65A40B7	1310489
48	Ex9CDR50A40E7	1312626	Ex9CDR65A40E7	1312686
110	Ex9CDR50A40F7	1310421	Ex9CDR65A40F7	1310481
120	Ex9CDR50A40G7	1310423	Ex9CDR65A40G7	1310483
220	Ex9CDR50A40M7	1312620	Ex9CDR65A40M7	1312680
230	Ex9CDR50A40P7	1310425	Ex9CDR65A40P7	1310485
240	Ex9CDR50A40U7	1310427	Ex9CDR65A40U7	1310487
277	Ex9CDR50A40N7	1312628	Ex9CDR65A40N7	1312688
380	Ex9CDR50A40Q7	1312622	Ex9CDR65A40Q7	1312682
440	Ex9CDR50A40R7	1312624	Ex9CDR65A40R7	1312684
480	Ex9CDR50A40T7	1310431	Ex9CDR65A40T7	1310491
600	Ex9CDR50A40Y7	1312618	Ex9CDR65A40Y7	1312678



Ex9CD/CM IEC Contactors

Products

Ex9CDR 80A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60Hz



Coil Voltage (Vac)	80A	
	3-pole 3NO+1NO/1NC • Auxiliary Contact	
	Catalog number	Item number
24	Ex9CDR80A30B7C	1310585
48	Ex9CDR80A30E7C	1312782
110	Ex9CDR80A30F7C	1310577
120	Ex9CDR80A30G7C	1310579
220	Ex9CDR80A30M7C	1312776
230	Ex9CDR80A30P7C	1310581
240	Ex9CDR80A30U7C	1310583
277	Ex9CDR80A30N7C	1312784
380	Ex9CDR80A30Q7C	1312778
440	Ex9CDR80A30R7C	1312780
480	Ex9CDR80A30T7C	1310587
600	Ex9CDR80A30Y7C	1312774
Coil Voltage (Vac)	4-pole (4NO)	
	Catalog number	Item number
24	Ex9CDR80A40B7	1310549
48	Ex9CDR80A40E7	1312746
110	Ex9CDR80A40F7	1310541
120	Ex9CDR80A40G7	1310543
220	Ex9CDR80A40M7	1312740
230	Ex9CDR80A40P7	1310545
240	Ex9CDR80A40U7	1310547
277	Ex9CDR80A40N7	1312748
380	Ex9CDR80A40Q7	1312742
440	Ex9CDR80A40R7	1312744
480	Ex9CDR80A40T7	1310551
600	Ex9CDR80A40Y7	1312738

Ratings		50A	65A	80A
UL/CSA (A)	General Purpose	80		95
	120V	5		7.5
	208V	10	-	
240V	15		20	
Single-Phase (hp)	200V	15	20	25
	240V	20	25	30
	460V	30	40	
	600V			
Three-Phase (hp)	AC-3 le	50	65	80
	AC-1 le	80		95
IEC (A)	220/230V	15	18.5	22
	380/400V	22	30	37
	660/690V	37		45

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Note: 40~95A are not pre-wired in the factory.



Ex9CD/CM IEC Contactors

Products

Ex9CDR 95A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60Hz



Coil Voltage (Vac)	95A	
	3-pole 3NO+1NO/1NC • Auxiliary Contact	
	Catalog number	Item number
24	Ex9CDR95A30B7C	1310645
48	Ex9CDR95A30E7C	1312842
110	Ex9CDR95A30F7C	1310637
120	Ex9CDR95A30G7C	1310639
220	Ex9CDR95A30M7C	1312836
230	Ex9CDR95A30P7C	1310641
240	Ex9CDR95A30U7C	1310643
277	Ex9CDR95A30N7C	1312844
380	Ex9CDR95A30Q7C	1312838
440	Ex9CDR95A30R7C	1312840
480	Ex9CDR95A30T7C	1310647
600	Ex9CDR95A30Y7C	1312834
Coil Voltage Vac	4-pole (4NO)	
	Catalog number	Item number
	Catalog number	Item number
24	Ex9CDR95A40B7	1310609
48	Ex9CDR95A40E7	1312806
110	Ex9CDR95A40F7	1310601
120	Ex9CDR95A40G7	1310603
220	Ex9CDR95A40M7	1312800
230	Ex9CDR95A40P7	1310605
240	Ex9CDR95A40U7	1310607
277	Ex9CDR95A40N7	1312808
380	Ex9CDR95A40Q7	1312802
440	Ex9CDR95A40R7	1312804
480	Ex9CDR95A40T7	1310611
600	Ex9CDR95A40Y7	1312798

Ratings		95A
UL/CSA (A)	General Purpose	95
Single-Phase (hp)	120V	7.5
	240V	20
Three-Phase (hp)	200V	30
	240V	
	460V	50
	600V	
IEC (A)	AC-3 Ie	95
	AC-1 Ie	
AC-3 (kw)	220/230V	25
	380/400V	45
	660/690V	

Note: 40~95A are not pre-wired in the factory.



Ex9CD/CM IEC Contactors Specifications

Ex9CMS/CMR		06	09	12
Operating Frequency (Operations/h)	AC-3	1,200 operations/h		
	AC-4	300 operations/h		
Electrical Life (x10 ³ Operations)	AC-3	1,000		
	AC-4	200		
Ambient Temperature	23 to 104°F (-5 to 40°C)			
Mechanical Life (x10 ⁶ Operations)	10			
Matched Overload Relay Type	Ex9RD11.5			
Terminal Connection				
Flexible Cable (with Cold-Press Terminal) AWG (mm ²)	Single Cable	16~14 (1~2.50)		
	Dual Cable	16 (1~1.50)		
Stiff Cable AWG (mm ²)	Single Cable	16~14 (1~2.50)		
	Dual Cable			
Screw Size	M3			
Tightening Torque in-lb (N.m)	7 (0.80)			



Ex9CD/CM IEC Contactors

Specifications

Ex9CDS/CDR			09	12	18	25	32	40	50	65	80	95		
Frame			Frame 1			Frame 2		Frame 3			Frame 4			
Poles			3 & 4		3	3 & 4		3	3 & 4					
Rated Insulation Voltage (Vac)			690											
Operating Frequency (Operations/h)	Electrical	AC-3	1,200				600							
		AC-4	300											
	Mechanical	3,600												
Electrical Life (x10 ³ Operations)	AC-3	1,000				800		600						
	AC-4	200				150			100					
Ambient Temperature			23 to 104°F (-5 to 40°C)											
Mechanical Life (x10 ⁶ Operations)			10				8				6			
Matched Overload Relay Type			Ex9RD25				Ex9RD36		Ex9RD93					
Rated Conventional Heating Current (A) AC-1			20		32	40	50	60	80		95			
AC-3	I _e (A)	220/230V	9	12	18	25	32	40	50	65	80	95		
		380/400V	6.6	8.9	12	18	21	34	39	42	49			
		660/690V	2.2	3	4	5.5	7.5	11	15	18.5	22	25		
	P _e (kW)	220/230V	4	5.5	7.5	11	15	18.5	22	30	37	45		
380/400V		5.5	7.5	10	15	18.5	30	37		45	45			
Power of Controlled Three-Phase Cage Motor AC-3 (hp)	200V	3	5	7.5	7.5	10	15		20	25	30	30		
	240V	5	7.5	10	15	20	25		30	30	30	30		
	460V	5	7.5	10	15	20	25	30	40		45	50		
	600V	5	7.5	10	15	20	25	30	40		45	50		
Terminal Connection		Number of Pieces												
Flexible Cable with Cold-Pressed Socket AWG (mm ²)	1	16~14 (1~2.5)		16~12 (1.5~4)		14~10 (2.5~6)		10~4 (6~25)			8~2 (10~35)			
	2	16~14 (1~2.5)		16~12 (1.5~4)		14~10 (2.5~6)		12~8 (4~10)			10~6 (6~16)			
Flexible Cable without Cold-Pressed Socket AWG (mm ²)	1	16~12 (1~4)		16~10 (1.5~6)	1.5~10 (16~8)	14~8 (2.5~10)		10~4 (6~25)			8~2 (10~35)			
	2	1~2.5 (16~14)		16~12 (1.5~4)	1.5~6 (16~10)	14~10 (2.5~6)		4~10 (12~8)			10~6 (6~16)			
Inflexible Cable AWG (mm ²)	1	16~12 (1~4)		16~10 (1.5~6)		14~8 (2.5~10)		6~25 (10~4)			8~2 (10~35)			
	2	16~12 (1~4)		16~10 (1.5~6)		14~8 (2.5~10)		12~8 (4~10)			10~6 (6~16)			
Screw Size			M3.5			M4		M8			M10			
Tightening Torque in-lb (N.m)			7 (0.80)			10 (1.20)		45 (3.50)			89 (10)			



Ex9CD/CM IEC Contactors

Specifications

Ex9CDS/CDR			115	150	185	225	265	330	400	500	630	
Frame			Frame 5		Frame 6		Frame 7	Frame 8	Frame 9	Frame 10	Frame 11	
Poles			3 & 4							3	3 & 4	
Rated Insulation Voltage (Vac)			1,000									
Operating Frequency (Operations/h)	Electrical	AC-3	1,200				600					
		AC-4	300									
	Mechanical	1,200										
Electrical Life (x10 ³ Operations)		AC-3	1,200		1,000		800					
Ambient Temperature			23 to 104°F (-5 to 40°C)									
Mechanical Life (x10 ⁶ Operations)			10				6					
Matched Overload Relay Type			Ex9RD200				EX9RD630					
Rated Conventional Heating Current (A) AC-1			200		275		315	380	450	630	800	
AC-3	I _e (A)	220/230V	115	150	185	225	265	330	400	500	630	
		380/400V	86	108	118	137	170	235	303	353	462	
		660/690V	33	45	55	63	80	100	110	150	200	
	P _e (kW)	220/230V	55	75	90	110	132	160	200	250	335	
		380/400V	80	100	110	129	160	220	280	335	450	
		660/690V	40	50	60	75	100	125	150	200	250	
Power of Controlled Three-Phase Cage Motor AC-3 (hp)		240V	60	75	100	125	150	150	200	250	350	
		415V	75	100				200	250	350	400	
		480V							250	350	400	
		600V							300	350	500	
Terminal Connection		Number of Pieces										
Cable Cross Section AWG (mm ²)		1	00~000 (70~95)		0000~300 MCM (95~150)		250~350 MCM (120~185)	350~500 MCM (185~240)	-			
		1 (2)								500 MCM [300 MCM] (240 [150])	-	
		2								300~350 MCM (150~185)	350~500 MCM (185~240)	
Cu Bus Bar Cross Section in (mm ²)		1 (2)								1x0.25 (30x5)	-	
		2								1.25x0.25 (40x5)	1.5x0.25 (50x5)	
Screw Size			M6	M8		M10					M12	
Tightening Torque in-lb (N.m)			27 (3)	54 (6)		89 (10)					124 (14)	

D

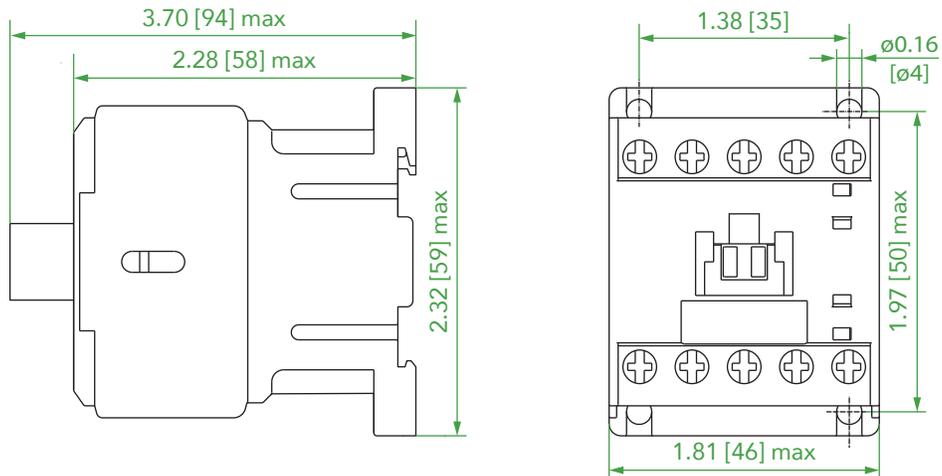


Ex9CD/CM IEC Contactors

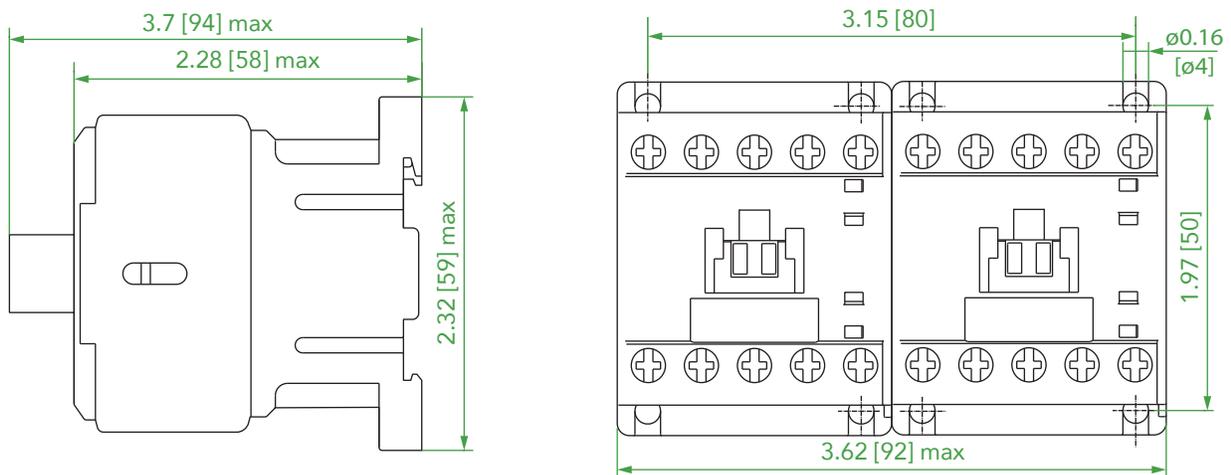
Dimensions

Ex9CMS06~12

in [mm]



Ex9CMR06~12



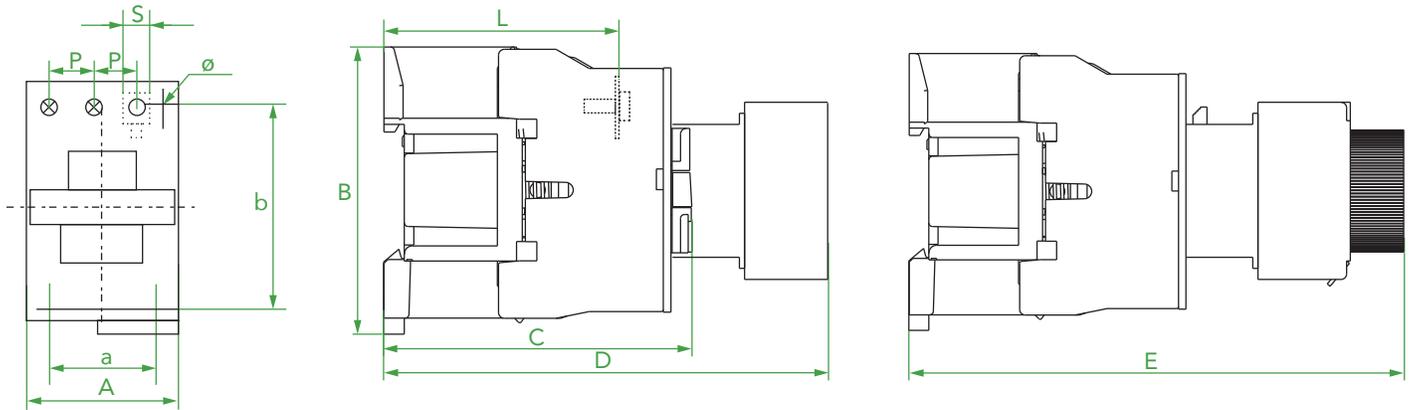


Ex9CD/CM IEC Contactors

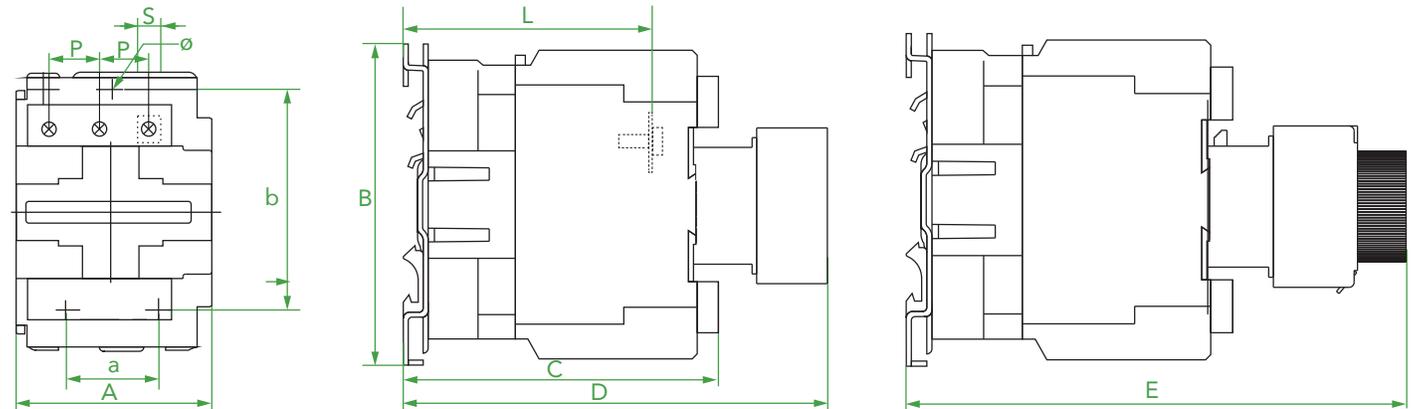
Dimensions

Ex9CDS09~32

in [mm]



Ex9CDS40~95



Ex9CDS	A max	B max	C max	D max	E max	a	b	ø	L	P	S
09	1.85	2.99	3.38	4.74	5.53	1.34/1.38	1.97/2.36	0.18 [4.5]	2.36	0.41	0.34 [8.6]
12	[47]	[76]	[86]	[120.5]	[140.5]	[34/35]	[50/60]		2.40 [61]	0.44 [11.3]	0.41 [10.4]
18									2.76 [70]	0.52 [13.2]	0.46 [11.7]
25	2.25	3.38	3.74 [95]	5.25 [133.5]	6.04 [153.5]	1.57 [40]	1.89 [48]	0.26 [6.5]	3.07 [78]	0.79 [20]	0.34 [8.6]
32	[57]	[86]	3.94 [100]	5.45 [138.5]	6.24 [158.5]						
40~65 11	3.03 [77]	5.08 [129]	4.56 [116]	6.08 [154.5]	6.87 [174.5]						
40~65 40	3.30 [84]		5.00 [128]	6.51 [165.5]	7.3 [185.5]						
40~65 22			4.80 [122]	6.31 [160.5]	7.10 [180.5]						
80~95 11	3.42 [87]		5.31 [135]								
80~95 40	3.78 [96]							3.27 [83]	0.93 [23.5]	0.47 [12]	
80~95 22											

- Note:
- 1) L is the distance between terminals and plate in main circuit.
 - 2) P is the distance between two phase in main circuit.
 - 3) S is the width of contacting plate: in main circuit.
 - 4) Ex9CDS40~95: 11 = 3NO+1NO & 1NC, 40 = 4NO, 22 = 2NO & 2NC

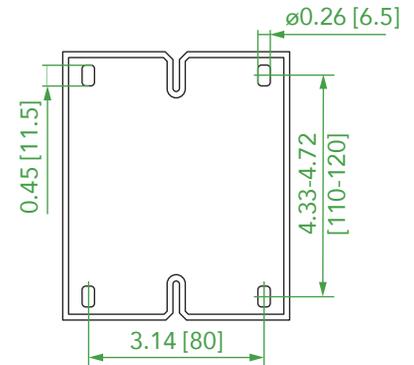
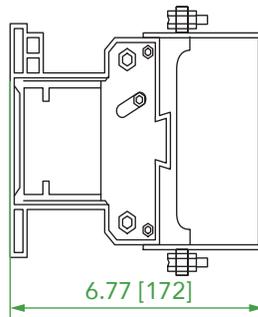
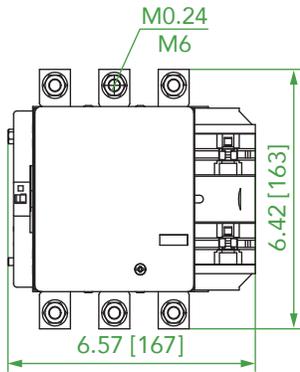


Ex9CD/CM IEC Contactors

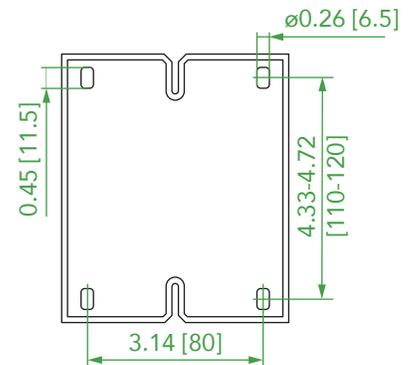
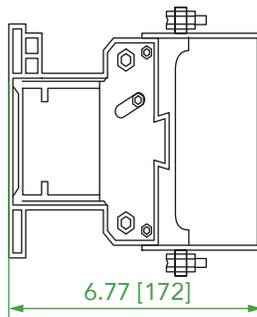
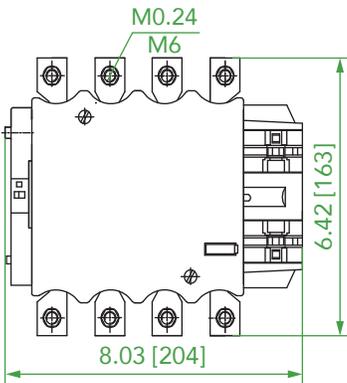
Dimensions

in [mm]

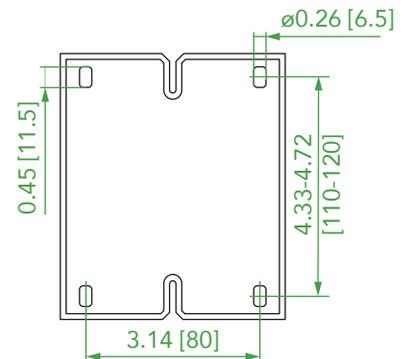
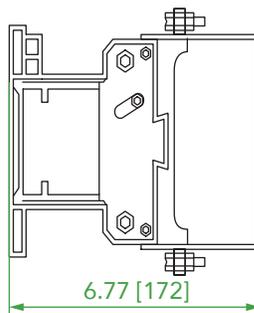
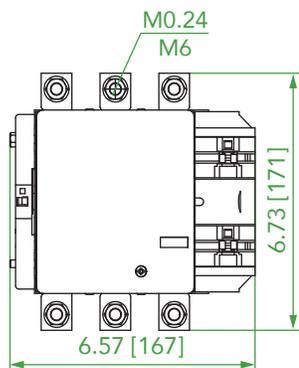
Ex9CDS115
3-pole



Ex9CDS115
4-pole



Ex9CDS150
3-pole



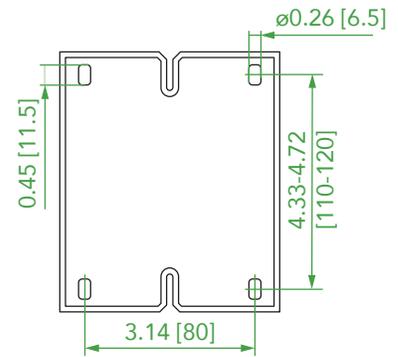
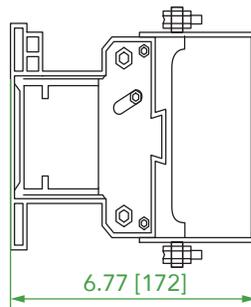
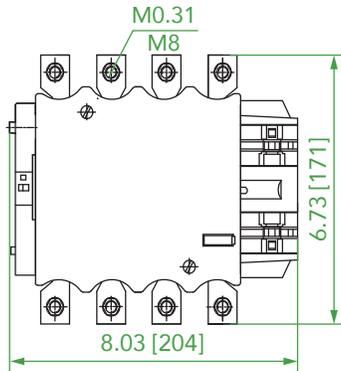


Ex9CD/CM IEC Contactors

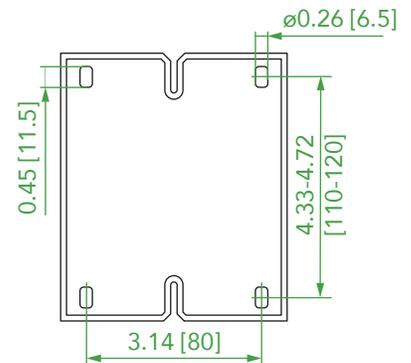
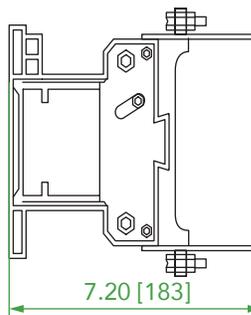
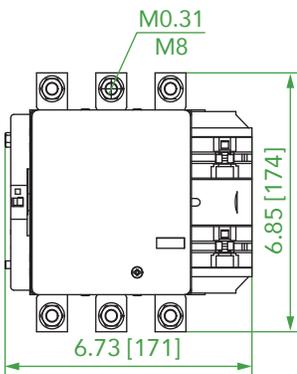
Dimensions

Ex9CDS150
4-pole

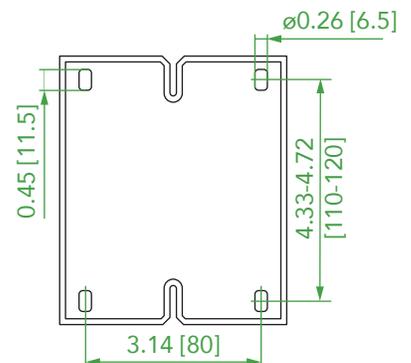
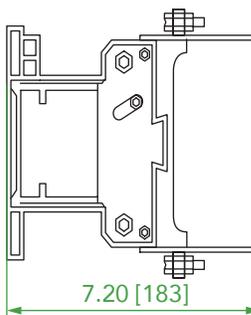
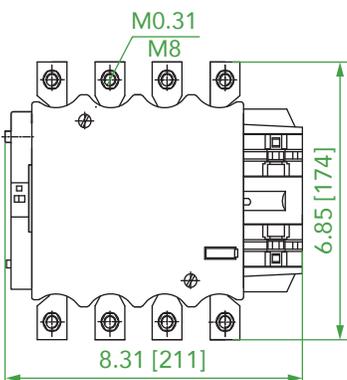
in [mm]



Ex9CDS185
3-pole



Ex9CDS185
4-pole



D

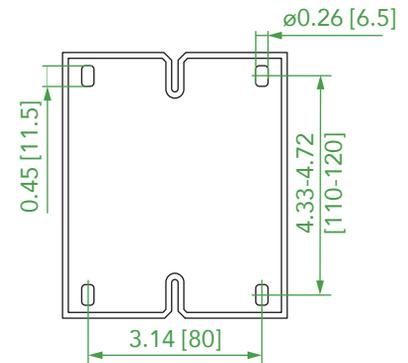
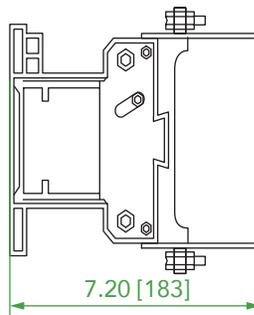
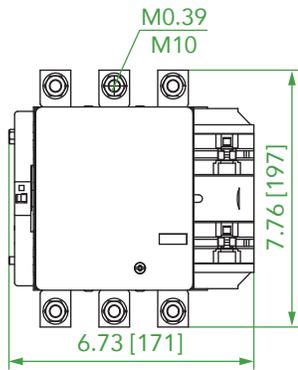


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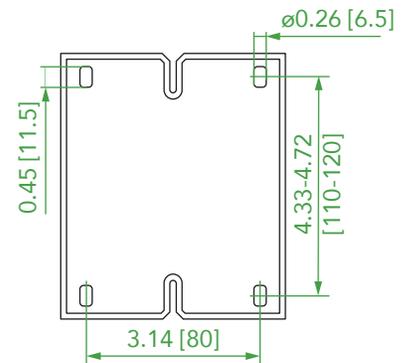
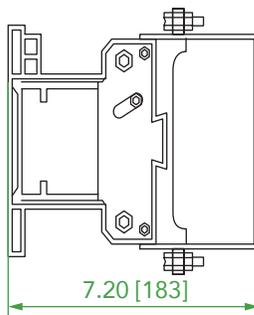
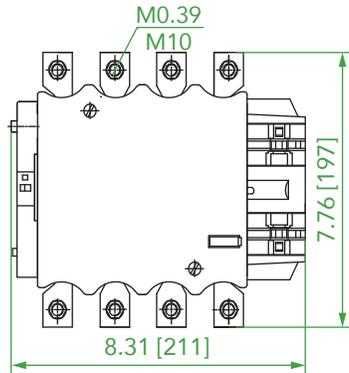
Dimensions

in [mm]

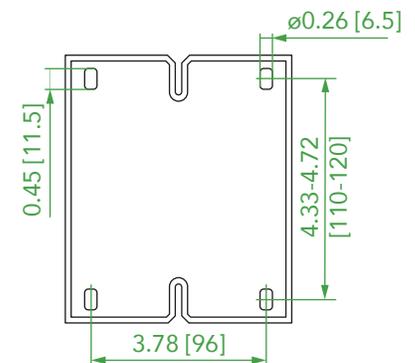
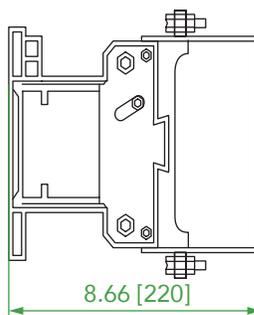
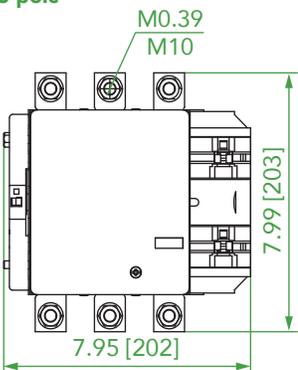
Ex9CDS225
3-pole



Ex9CDS225
4-pole



Ex9CDS265
3-pole





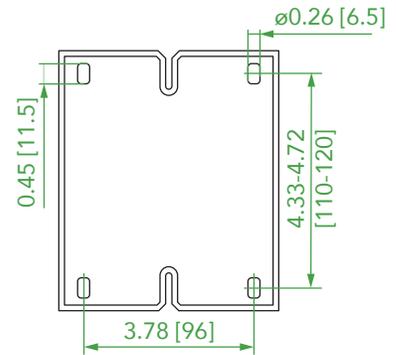
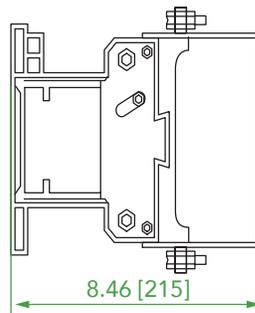
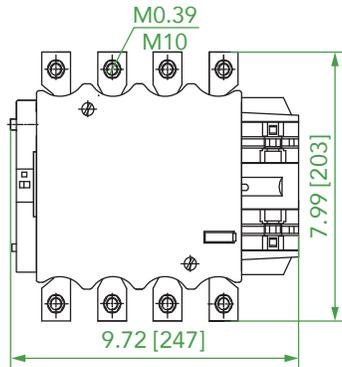
Ex9CD/CM IEC Contactors

Dimensions

Ex9CDS265

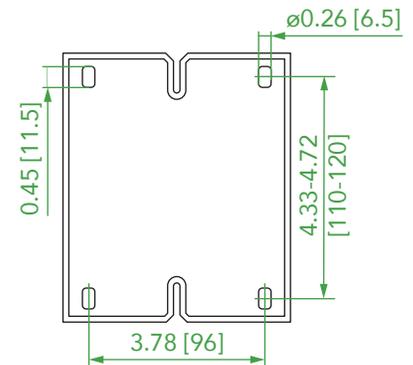
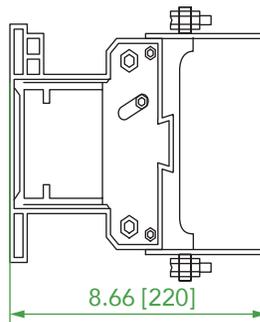
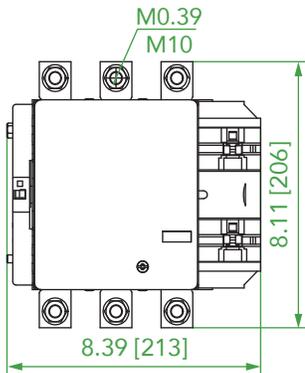
4-pole

in [mm]



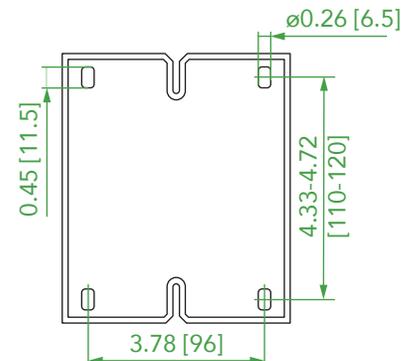
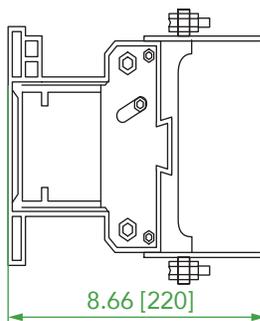
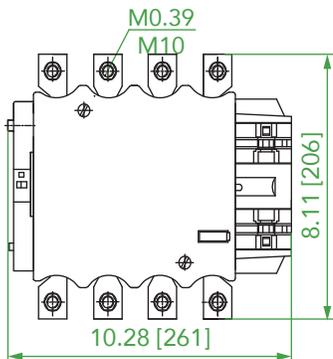
Ex9CDS330

3-pole



Ex9CDS330

4-pole



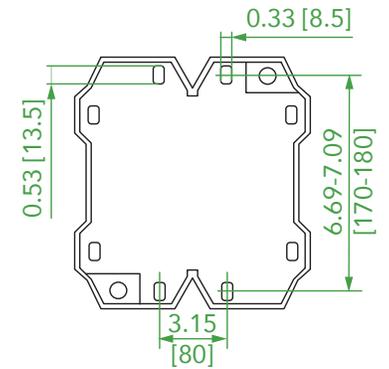
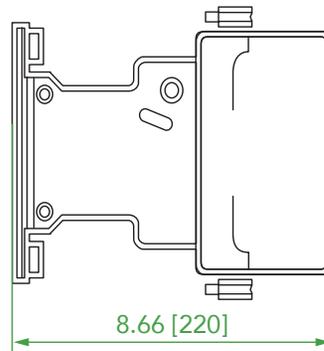
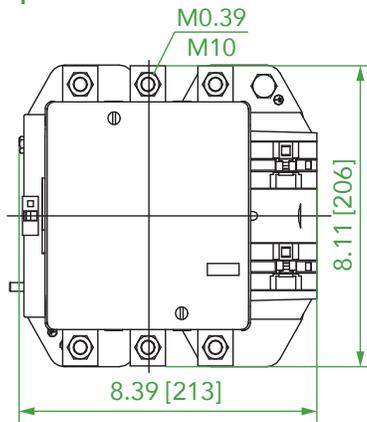


Ex9CD/CM IEC Contactors

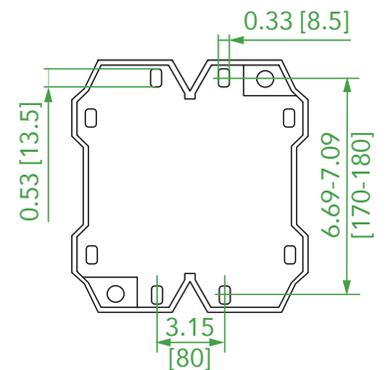
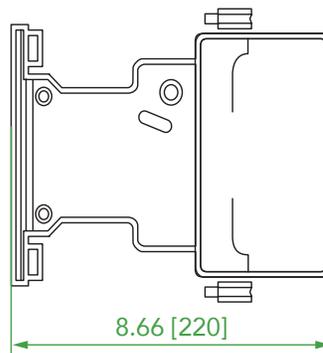
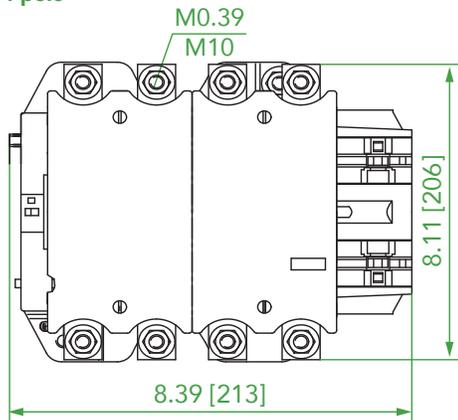
Dimensions

in [mm]

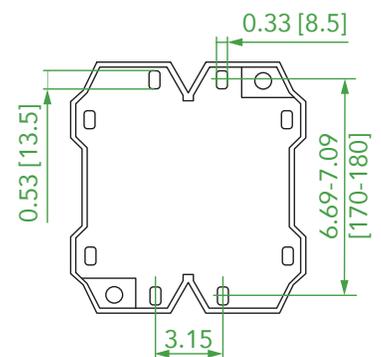
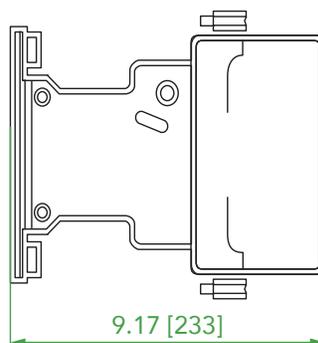
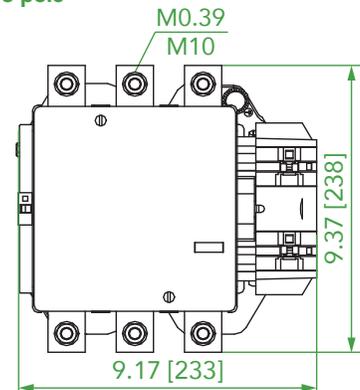
Ex9CDS400
3-pole



Ex9CDS400
4-pole



Ex9CDS500
3-pole



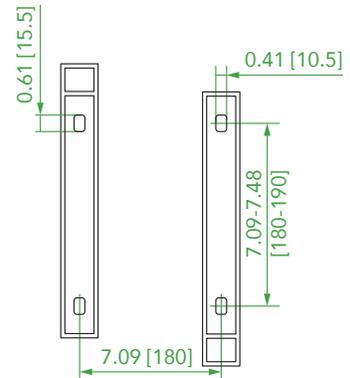
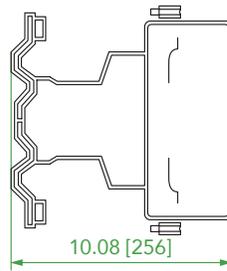
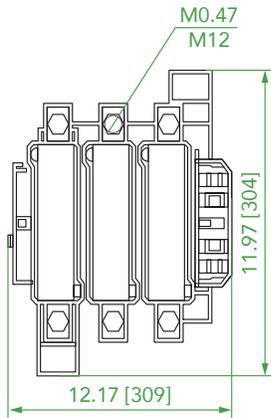


Ex9CD/CM IEC Contactors

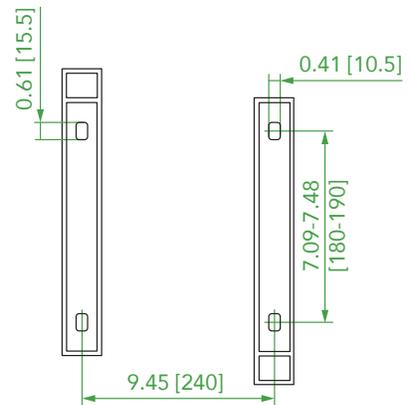
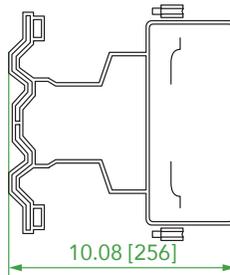
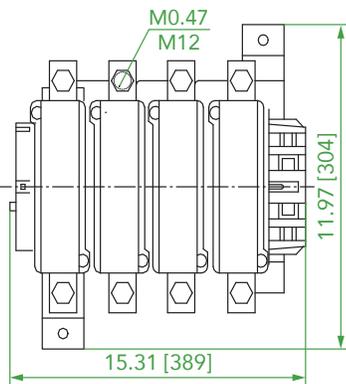
Dimensions

Ex9CDS630 3-pole

in [mm]



Ex9CDS630 4-pole



D

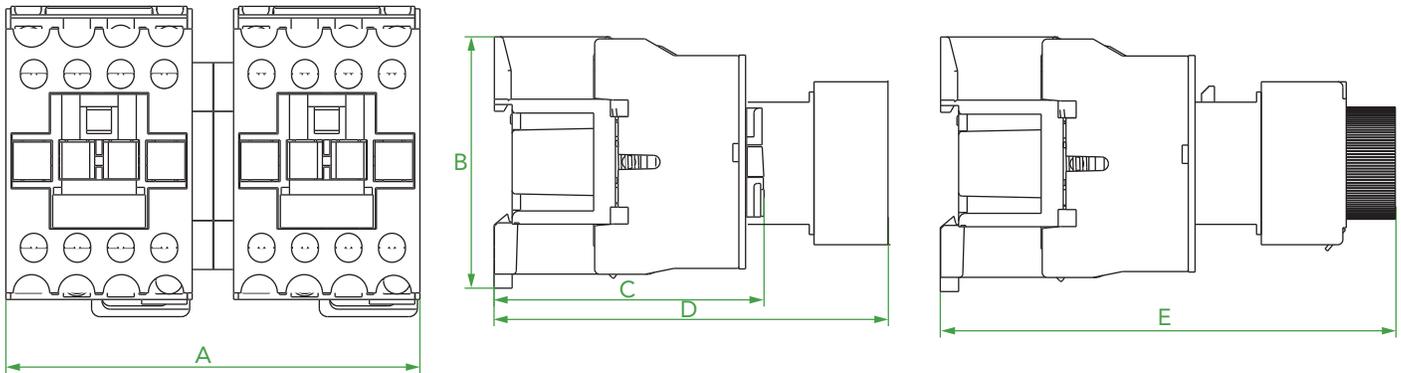


Ex9CD/CM IEC Contactors

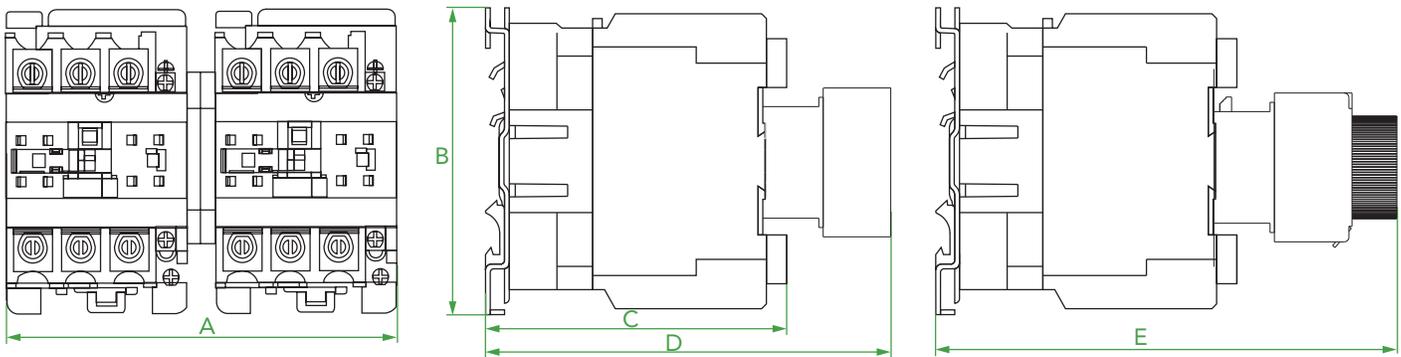
Dimensions

Ex9CDR09~32

in [mm]



Ex9CDR40~95



Ex9CDR	A	B	C	D	E
09					
12	4.13 [105]	3.07 [78]	3.23 [82]	4.74 [120.5]	5.53 [140.5]
18					
25			3.74 [95]	5.25 [133.5]	6.04 [153.5]
32	4.92 [125]	3.54 [90]	3.93 [100]	5.45 [138.5]	6.24 [158.5]
40~65 11	6.50 [165]		4.56 [116]	6.08 [154.5]	6.87 [174.5]
40~65 40	7.08 [180]	5.08 [129]			
80~95 11	7.36 [187]		5 [127]	6.51 [165.5]	7.30 [185.5]
80~95 40	8.07 [205]			6.31 [160.5]	7.10 [180.5]

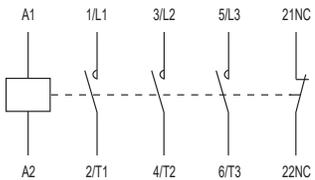
Note: 1) Ex9CDS40~80: 11=3NO+1NO/1NC, 40=4NO



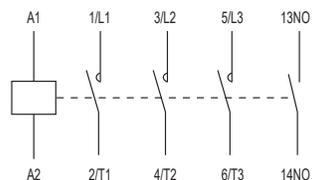
Ex9CD/CM IEC Contactors

Wiring Diagrams

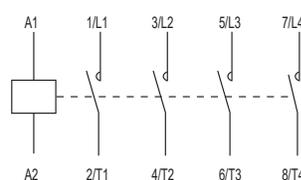
Ex9CMS06~12



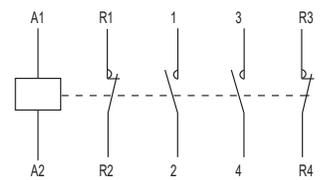
Ex9CMS... 3P 3NO+1NC



Ex9CMS... 3P 3NO+1NO

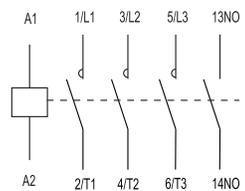


Ex9CMS... 4P 4NO

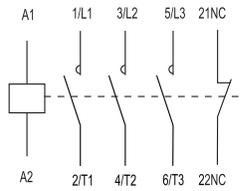


Ex9CMS... 4P 2NO+2NC

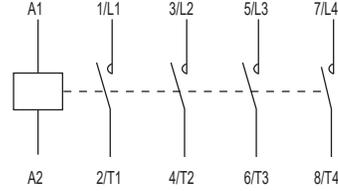
Ex9CDS09~32



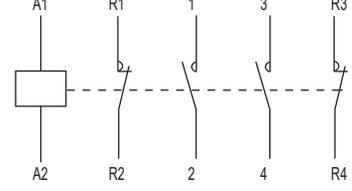
Ex9CDS... 3P 3NO+1NO



Ex9CDS... 3P 3NO+1NC

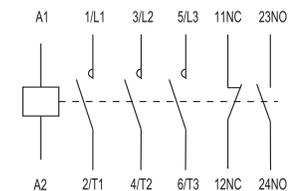


Ex9CDS... 4P 4NO

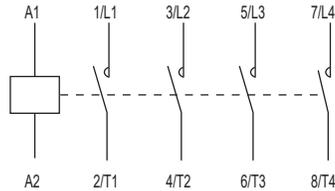


Ex9CDS... 4P 2NO+2NC

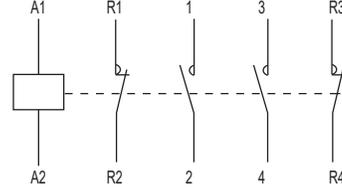
Ex9CDS40~95



Ex9CDS... 3P 3NO+1NO/1NC

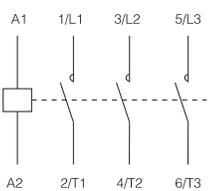


Ex9CDS... 4P 4NO

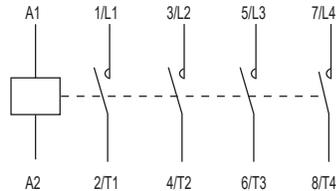


Ex9CDS... 4P 2NO+2NC

Ex9CDS115~630



Ex9CDS... 3P 3NO



Ex9CDS... 4P 4NO





Ex9CD/CM IEC Contactors

Accessories: Auxiliary Contact



AX	A	11
Description	Contactor Type and Rated Current	Auxiliary Contact
Auxiliary Contact	<p>A: Ex9CD Standard Front Mount 09~630A</p> <p>B: Ex9CM Mini Front Mount 0~12A</p> <p>FA: Ex9CDS Standard Side Mount 09~95A (Not UL Approved)</p>	<p>02: 2NC</p> <p>04: 4NC</p> <p>11: 1NO+1NC</p> <p>13: 1NO+3NC</p> <p>20: 2NO</p> <p>22: 2NO+2NC</p> <p>31: 3NO+1NC</p> <p>40: 4NO</p>

Front Mount

- For contactors Ex9CD, Ex9CDR, Ex9CM and Ex9CMR
- For subsequent mounting
- One unit used with a contactor
- Do not limit a possibility to install overload relays Ex9RD38 and Ex9RD100



Side Mount

- For contactors Ex9CDS

NOT UL Approved

- For subsequent mounting
- One unit used with a contactor on the left and one unit on the right

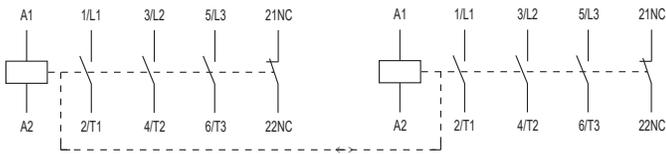
Accessory Description	Matched Contactor	Catalog number	Item number
Auxiliary Contact Mechanically Linked Contacts (in accordance with IEC 60947-5-1 Annex L) and Mirror Contacts (in accordance with IEC 60947-4-1 Annex F)	Ex9CDS09~630 Ex9CDR09~630	AXA02	1311709
		AXA04	1311715
		AXA11	1311711
		AXA13	1311713
		AXA20	1311710
		AXA22	1311712
		AXA31	1311714
		AXA40	1311716
	Ex9CMS06~12 Ex9CMR06~12	AXB02	1311717
		AXB04	1311723
		AXB11	1311719
		AXB13	1311721
		AXB20	1311718
		AXB22	1311720
		AXB31	1311722
		AXB40	1311724
	Ex9CDS09~95	AXFA11	1313990



Ex9CD/CM IEC Contactors

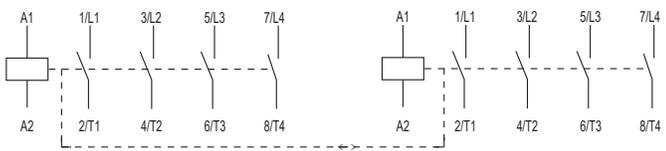
Ex9CMR/CDR Wiring Diagrams

Ex9CMR06~12



Ex9CMR... 3P 3NO+1NC

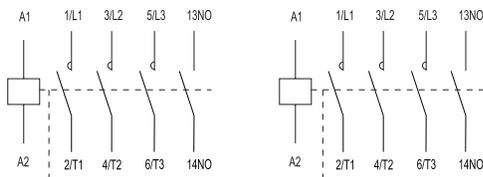
Ex9CMR... 3P 3NO+1NO



Ex9CMR... 4P 4NO

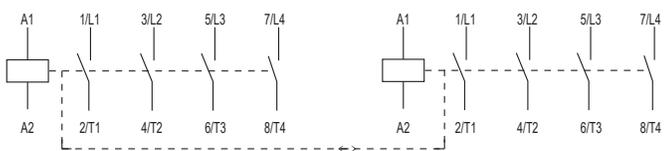
Ex9CMR... 4P 2NO+2NC

Ex9CDR09~32



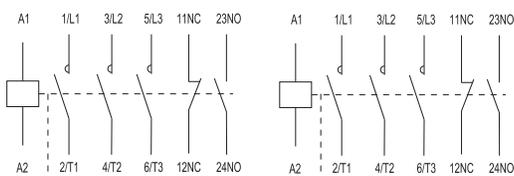
Ex9CDR... 3P 3NO+1NO

Ex9CDR... 3P 3NO+1NC

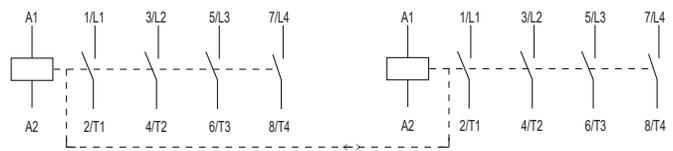


Ex9CDR... 4P 4NO

Ex9CDR40~95



Ex9CDR... 3P 3NO+1NO/1NC



Ex9CDR... 4P 4NO

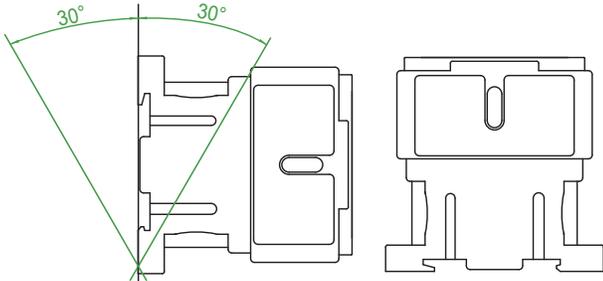
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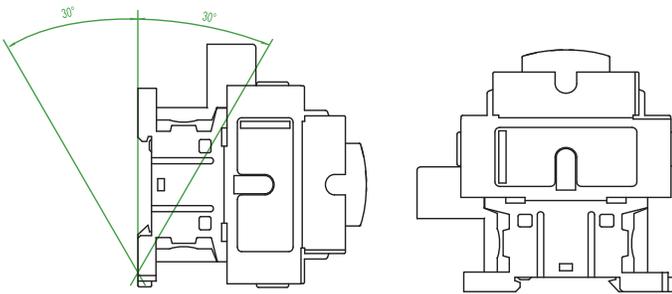
Ex9CD/CM IEC Contactors

Ex9CM/CD Mounting Positions

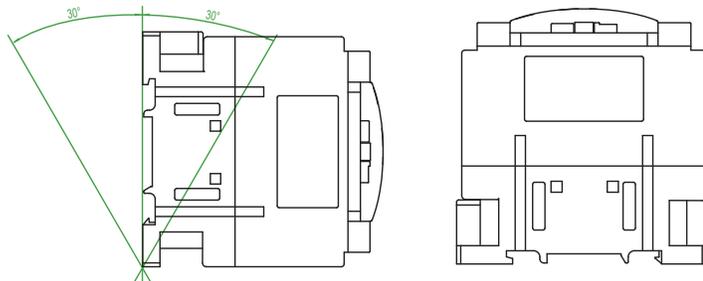
Ex9CMS/CMR06~12



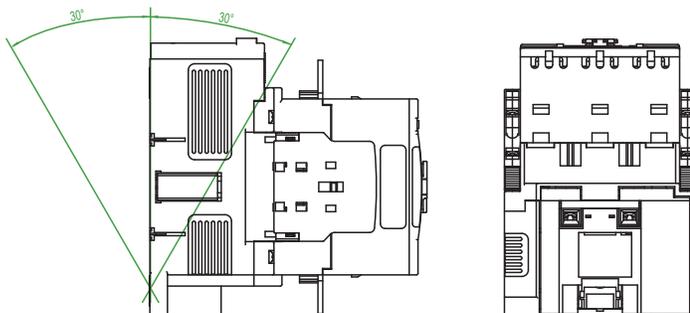
Ex9CDS/CDR09~32



Ex9CDS/CDR40~95



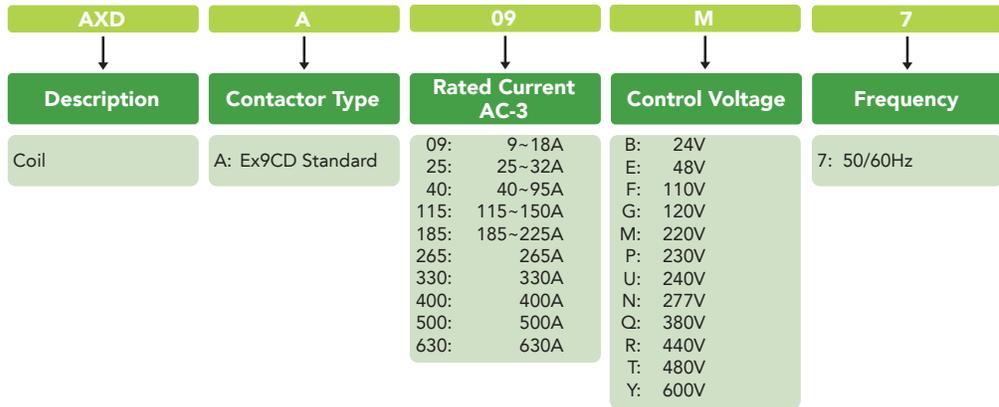
Ex9CDS115~630





Ex9CD/CM IEC Contactors

Ex9CD/CM Accessories: Coil



Note:
 115-265A: 110-440Vac Coil available
 330-630A: 110-380Vac Coil available

		Ex9CMS/ CMR - Mini	Ex9CDS/CDR - Standard													
		06~12*	09~12	18	25	32	40~60	80~95	115~150	185~225	265	330	400	500	630	
Coil Power	In-Rush (VA)	25~40	70		110		200		660	966	840	1,500				1,700
	Sealed (VA)	2~7	8	8	11		20		85.5	91.2	150	34.2				
	Power (W)	1~4	1.8~2.7	3~4		6~10		-	-	-	-	-	-	-	-	
Operation Range	Operation Voltage (Us)	85~110%														
	Drop-Out Voltage (Us)	20~75%														
Coil Voltage (50/60 Hz)		24~600														

Note: Ex9CMS/CMR coil is not field changeable.

D



Ex9CD/CM IEC Contactors

Ex9CD/CM Accessory Specifications

		Auxiliary Contact																	
		CMS/CMR								CDS/CDR									
		Front Mount								Front Mount								Side Mount	
		AXB								AXA								AXFA	
		02	04	13	20	22	31	40		02	04	11	13	20	22	31	40	11	
UL Standard File Number		E353866																	
IEC Standard File Number		IEC/EN 60947-5-1																	
Certifications		UL Listed, CSA, CCC, RoHS																	
Electrical Parameters																			
Contacts		2NC	4NC	1NO+3NC	2NO	2NO+2NC	3NO+1NC	4NO	2NC	4NC	1NO+1NC	1NO+3NC	2NO	2NO+2NC	3NO+1NC	4NO	1NO+1NC		
Rated Frequency (Hz)		50/60																	
Rated Working Voltage U _e	AC-15 (V)	380/400/415														24/230/400/690			
	DC-13 (V)	220/250														125/250			
Rated Working Current I _e	AC-15 (A)	0.19														6.00 (24V) 3.13 (230V) 1.80 (400V) 1.04 (690V)			
	DC-13 (A)	0.31														0.55 (125V) 0.27 (250V)			
Rated Capacity	AC-15 (VA)	720																	
	DC-13 (W)	69																	
Rated Thermal Current I _{th} (A)		10																	
Rated Impulse Withstand Voltage U _{imp} (kV)		6 (1.2/50 μs)																	
Rated Insulation Voltage U _i (V)		690																	
Mechanical Parameters																			
Device Width in (mm)		1.30 (33)						1.89 (48)						0.39 (10)					
Device Height in (mm)		1.54 (39)						1.46 (37)						2.52 (64)					
Device Depth in (mm)		1.46 (37)						1.02 (26)				1.77 (45)				2.68 (68)			
Degree of Protection		IP 20																	
Terminal Capacity AWG (mm ²)		17-9 (1-6)																	
Torque of Terminals in-lb (N.m)		8.85 (1)																	



Ex9CD/CM IEC Contactors

Ex9CD/CM Accessories: Coil

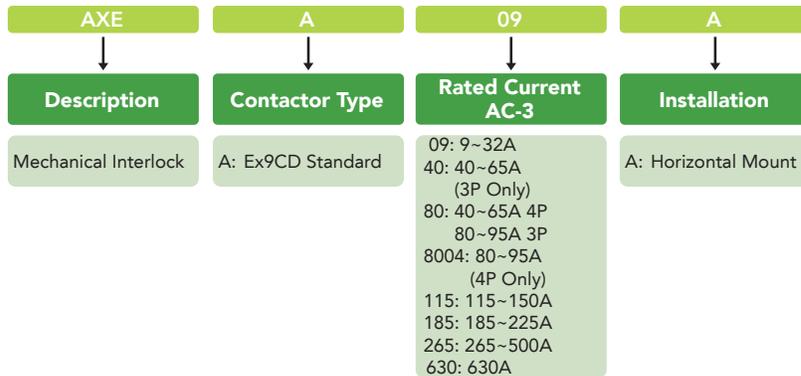
Accessory Description	Coil Voltage (Vac)	09~18A		25~32A		40~95A				
		Catalog number	Item number	Catalog number	Item number	Catalog number	Item number			
Coil	24	AXDA09B7	1311750	AXDA25B7	1311786	AXDA40B7	1311810			
	48	AXDA09E7	1311978	AXDA25E7	1312014	AXDA40E7	1312038			
	110	AXDA09F7	1311742	AXDA25F7	1311778	AXDA40F7	1311802			
	120	AXDA09G7	1311744	AXDA25G7	1311780	AXDA40G7	1311804			
	220	AXDA09M7	1311972	AXDA25M7	1312008	AXDA40M7	1312032			
	230	AXDA09P7	1311746	AXDA25P7	1311782	AXDA40P7	1311806			
	240	AXDA09U7	1311748	AXDA25U7	1311784	AXDA40U7	1311808			
	277	AXDA09N7	1311980	AXDA25N7	1312016	AXDA40N7	1312040			
	380	AXDA09Q7	1311974	AXDA25Q7	1312010	AXDA40Q7	1312034			
	440	AXDA09R7	1311976	AXDA25R7	1312012	AXDA40R7	1312036			
	480	AXDA09T7	1311752	AXDA25T7	1311788	AXDA40T7	1311812			
	600	AXDA09Y7	1311970	AXDA25Y7	1312006	AXDA40Y7	1312030			
			115~150A		185~225A		265A		330A	
			Catalog number	Item number	Catalog number	Item number	Catalog number	Item number	Catalog number	Item number
		110	AXDA115F7	1311862	AXDA185F7	1311886	AXDA265F7	1311910	AXDA330F7	1311922
		120	AXDA115G7	1311864	AXDA185G7	1311888	AXDA265G7	1311912	AXDA330G7	1311924
		220	AXDA115M7	1312092	AXDA185M7	1312116	AXDA265M7	1312140	AXDA330M7	1312152
		230	AXDA115P7	1311866	AXDA185P7	1311890	AXDA265P7	1311914	AXDA330P7	1311926
		240	AXDA115U7	1311868	AXDA185U7	1311892	AXDA265U7	1311916	AXDA330U7	1311928
		277	AXDA115N7	1312100	AXDA185N7	1312124	AXDA265N7	1312148	AXDA330N7	1312160
		380	AXDA115Q7	1312094	AXDA185Q7	1312118	AXDA265Q7	1312142	AXDA330Q7	1312154
			400A		500A		630A			
			Catalog number	Item number	Catalog number	Item number	Catalog number	Item number		
		110	AXDA400F7	1311934	AXDA500F7	1311946	AXDA630F7	1311958		
		120	AXDA400G7	1311936	AXDA500G7	1311948	AXDA630G7	1311960		
		220	AXDA400M7	1312164	AXDA500M7	1312176	AXDA630M7	1312188		
		230	AXDA400P7	1311938	AXDA500P7	1311950	AXDA630P7	1311962		
		240	AXDA400U7	1311940	AXDA500U7	1311952	AXDA630U7	1311964		
		277	AXDA400N7	1312172	AXDA500N7	1312184	AXDA630N7	1312196		
		380	AXDA400Q7	1312166	AXDA500Q7	1312178	AXDA630Q7	1312190		

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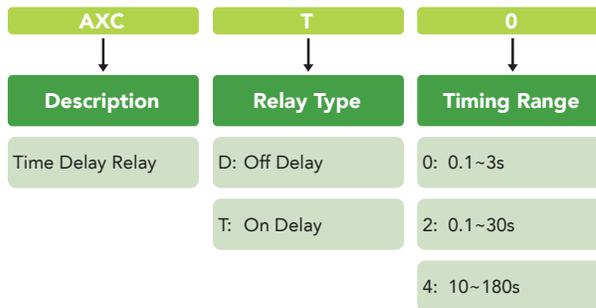


Ex9CD/CM IEC Contactors

Ex9CD/CM Accessories: Mechanical Interlock and Time Delay Relay



Accessory Description	Catalog number	Item number
Mechanical Interlock	AXEA09A	1311732
	AXEA40A	1311737
	AXEA80A	1311740
	AXEA8004A	1600135
	AXEA115A	1313230
	AXEA185A	1313232
	AXEA265A	1313234
	AXEA630A	1313238



Accessory Description	Matched Contactor	Catalog number	Item number
Time Delay Relay (Pneumatic Timer)	Ex9CDS09~630	AXCT0	1311726
		AXCT2	1311727
		AXCT4	1311728
		AXCD0	1311730
		AXCD2	1311729
		AXCD4	1311731

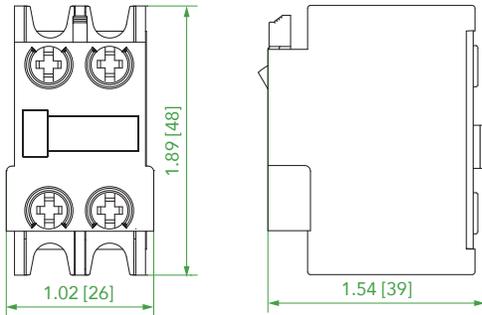


Ex9CD/CM IEC Contactors

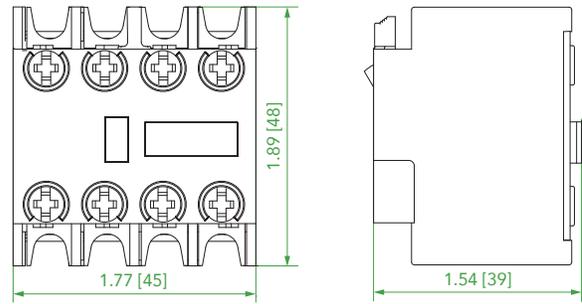
Ex9CD/CM Accessory Dimensions

AXA Front Mount Auxiliary Contact for Standard Contactor

in [mm]

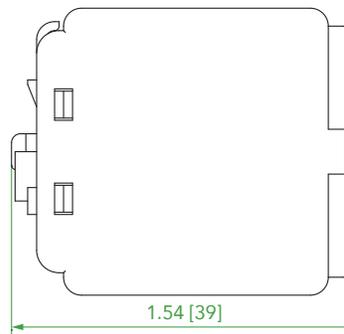
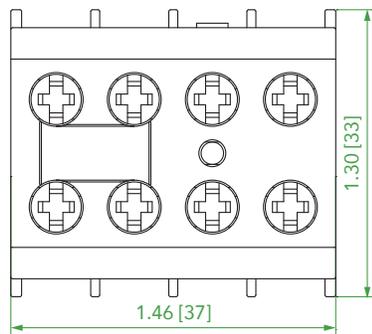


AXA 2-pole

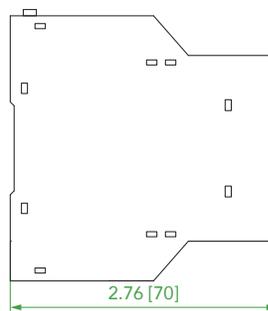
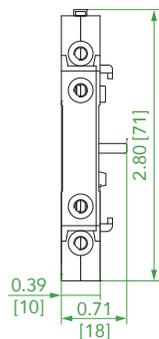


AXA 4-pole

AXB Front Mount Auxiliary Contact for Mini Contactor



AXFA Side Mount Auxiliary Contact for Standard Contactor



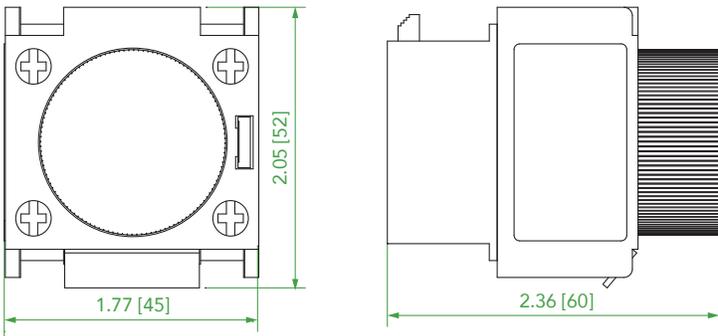


Ex9CD/CM IEC Contactors

Ex9CD/CM Accessory Dimensions

AXC Time Delay Relay

in [mm]

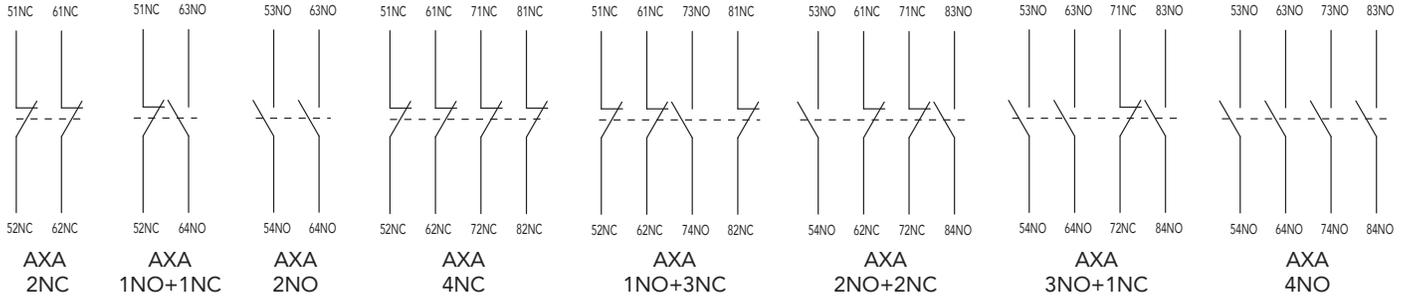




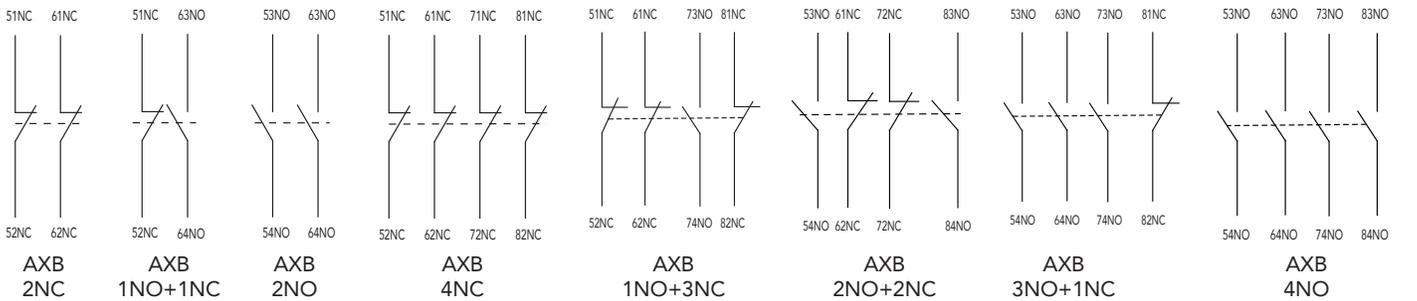
Ex9CD/CM IEC Contactors

Ex9CD/CM Accessory Wiring Diagrams

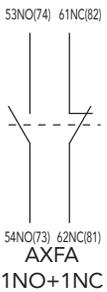
AXA Front Mount Auxiliary Contact



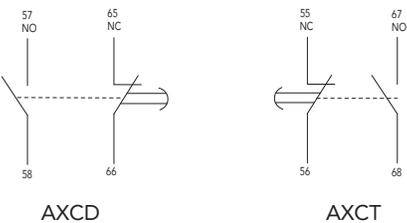
AXB Front Mount Auxiliary Contact



AXFA Side Mount Auxiliary Contact



AXC Time Delay Relay



D



Ex9RD Thermal Overload Relays

Product Overview

Design Features

- Rated current up to 630A @ 600Vac, 50/60Hz
- Overload protection trip Class 10A
- Phase loss sensitivity
- Temperature compensation from -13 to 131°F (-25 to +55°C)
- Adjustable current setting for overload protection
- Automatic or manual reset selectable
- Trip-free mechanism
- Status indication
- STOP and TEST function
- Direct mount to contactors or 35mm DIN rail mounting base option

Certifications

- UL Listed, File Number E353865
- Certified for Canada according to CSA standards
- IEC/EN 60947-4-1
- CE Compliant

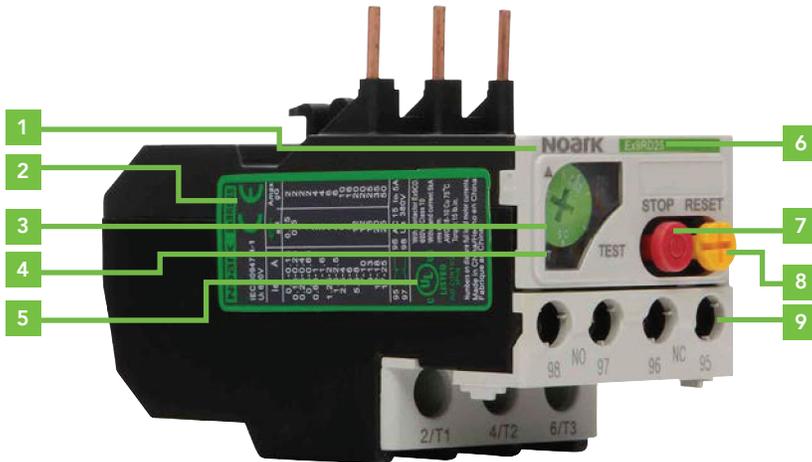




Ex9RD Thermal Overload Relays

Product Label/Product Selection Guide

Ex9RD Product Label



- 1 Brand
- 2 CE Mark
- 3 Adjustable Current Range
- 4 Push to Test
- 5 UL Listed Mark
- 6 Product Series/Frame Amperage
- 7 Manual Stop
- 8 Manual/Auto Reset
- 9 Auxiliary Contacts

Ex9RD Product Selection Guide

Ex9RD	25	A	13
NOARK Ex9RD Series	Frame Size	Trip Class*	Setting Amperage
	11.5: 11.5A 25: 25A 36: 36A 93: 93A 200: 200A 630: 630A	A: Class 10A	0.16: 0.1~0.16A 0.25: 0.16~25A 0.4: 0.25~0.4A 0.63: 0.4~0.63A 1: 0.63~1A 1.6: 1~1.6A 2: 1.25~2A 2.5: 1.6~2.5A 4: 2.5~4A 6: 4~6A 8: 5.5~8A 10: 7~10A 13: 9~13A 18: 12~18A 25: 17~25A 32: 23~32A 36: 28~36A 40: 30~40A 50: 37~50A 65: 48~65A 70: 55~70A 80: 63~80A 93: 80~93A 125: 80~125A 160: 100~160A 200: 125~200A 250: 160~250A 315: 200~315A 400: 250~400A 500: 315~500A 630: 400~630A



Ex9RD Thermal Overload Relays

Products

Ex9RD 11.5~36A



Current Range Amp (Min-Max)	11.5A				25A				36A			
	Use with Contactors: Ex9CM06~12				Use with Contactors: Ex9CD09~32				Use with Contactors: Ex9CD32			
	Matched Fuse		Catalog number	Item number	Matched Fuse		Catalog number	Item number	Matched Fuse		Catalog number	Item number
	aM	gG			aM	gG			aM	gG		
0.1-0.16	0.25	2	Ex9RD11.5A0.16	1410001	0.25	2	Ex9RD25A0.16	1410014	-	-	-	-
0.16-0.25	0.5	2	Ex9RD11.5A0.25	1410002	0.5	2	Ex9RD25A0.25	1410015	-	-	-	-
0.25-0.4	1	2	Ex9RD11.5A0.4	1410003	1	2	Ex9RD25A0.4	1410016	-	-	-	-
0.4-0.63	1	2	Ex9RD11.5A0.63	1410004	1	2	Ex9RD25A0.63	1410017	-	-	-	-
0.63-1	2	4	Ex9RD11.5A1	1410005	2	4	Ex9RD25A1	1410018	-	-	-	-
1-1.6	2	4	Ex9RD11.5A1.6	1410008	2	4	Ex9RD25A1.6	1410019	-	-	-	-
1.25-2	4	6	Ex9RD11.5A2	1410006	4	6	Ex9RD25A2	1410020	-	-	-	-
1.6-2.5	4	6	Ex9RD11.5A2.5	1410007	4	6	Ex9RD25A2.5	1410021	-	-	-	-
2.5-4	6	10	Ex9RD11.5A4	1410009	6	10	Ex9RD25A4	1410022	-	-	-	-
4-6	8	16	Ex9RD11.5A6	1410010	8	16	Ex9RD25A6	1410023	-	-	-	-
5.5-8	12	20	Ex9RD11.5A8	1410011	12	20	Ex9RD25A8	1410024	-	-	-	-
7-10	12	20	Ex9RD11.5A10	1410012	12	20	Ex9RD25A10	1410025	-	-	-	-
9-13	16	25	Ex9RD11.5A13	1410013	16	25	Ex9RD25A13	1410026	-	-	-	-
12-18	-	-	-	-	20	35	Ex9RD25A18	1410027	-	-	-	-
17-25	-	-	-	-	25	50	Ex9RD25A25	1410028	-	-	-	-
23-32	-	-	-	-	-	-	-	-	40	63	Ex9RD36A32	1410030
28-36	-	-	-	-	-	-	-	-	40	80	Ex9RD36A36	1410031



Ex9RD Thermal Overload Relays

Products

Ex9RD 93~630A



Current Range Amp (Min-Max)	93A				200A				630A			
	Use with Contactors: Ex9CD40~95				Use with Contactors: Ex9CD115~225				Use with Contactors: Ex9CD185~630			
	Matched Fuse		Catalog number	Item number	Matched Fuse		Catalog number	Item number	Matched Fuse		Catalog number	Item number
	aM	gG			aM	gG			aM	gG		
23-32	40	63	Ex9RD93A32	1410032	-	-	-	-	-	-	-	-
30-40	40	100	Ex9RD93A40	1410033	-	-	-	-	-	-	-	-
37-50	63	100	Ex9RD93A50	1410034	-	-	-	-	-	-	-	-
48-65	63	100	Ex9RD93A65	1410035	-	-	-	-	-	-	-	-
55-70	80	125	Ex9RD93A70	1410036	-	-	-	-	-	-	-	-
63-80	80	125	Ex9RD93A80	1410037	-	-	-	-	-	-	-	-
80-93	100	160	Ex9RD93A93	1410038	-	-	-	-	-	-	-	-
80-125	-	-	-	-	125	200	Ex9RD200A125	1410039	-	-	-	-
100-160	-	-	-	-	160	250	Ex9RD200A160	1410040	-	-	-	-
125-200	-	-	-	-	200	315	Ex9RD200A200	1410041	-	-	-	-
160-250	-	-	-	-	-	-	-	-	250	400	Ex9RD630A250	1410042
200-315	-	-	-	-	-	-	-	-	315	500	Ex9RD630A315	1410043
250-400	-	-	-	-	-	-	-	-	400	630	Ex9RD630A400	1410044
315-500	-	-	-	-	-	-	-	-	500	800	Ex9RD630A500	1410045
400-630	-	-	-	-	-	-	-	-	630	800	Ex9RD630A630	1410046

E



Ex9RD Thermal Overload Relays

Specifications

Ex9RD		11.5A														
Current Class (A)		13														
Phase Failure Protection Function																
Automatic and Manual Reset																
Temperature Compensation																
Tripping Indicator		Yes														
Test and Stop Pushbutton																
Mounting Mode	Plug-In															
	Independent															
Auxiliary Contacts	Number of Contacts		1NO+1NC													
	Rated Current (A)	AC-15 220V	2.73													
		AC-15 380V	1.58													
		DC-13 220V	0.2													
Current Setting Range (A)		0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.25~2	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~13		
Matched Fuse	aM (A)	0.25	0.5	1		2		4		6	8	12	16			
	gG (A)	2			4		6		10	16	20	25				
Ex9RD		25A														
Current Class (A)		25														
Phase Failure Protection Function																
Automatic and Manual Reset																
Temperature Compensation																
Tripping Indicator		Yes														
Test and Stop Pushbutton																
Mounting Mode	Plug-In															
	Independent															
Auxiliary Contacts	Number of Contacts		1NO+1NC													
	Rated Current (A)	AC-15 220V	2.73													
		AC-15 380V	1.58													
		DC-13 220V	0.2													
Current Setting Range (A)		0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.25~2	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~13	12~18	17~25
Matched Fuse	aM (A)	0.25	0.5	1		2		4		6	8	12	16	20	25	
	gG (A)	2			4		6		10	16	20	25	35	50		
Ex9RD		36A														
Current Class (A)		36														
Phase Failure Protection Function																
Automatic and Manual Reset																
Temperature Compensation																
Tripping Indicator		Yes														
Test and Stop Pushbutton																
Mounting Mode	Plug-In															
	Independent															
Auxiliary Contacts	Number of Contacts		1NO+1NC													
	Rated Current (A)	AC-15 220V	2.73													
		AC-15 380V	1.58													
		DC-13 220V	0.2													
Current Setting Range (A)		23~32							28~36							
Matched Fuse	aM (A)	40							40							
	gG (A)	63							80							



Ex9RD Thermal Overload Relays

Specifications

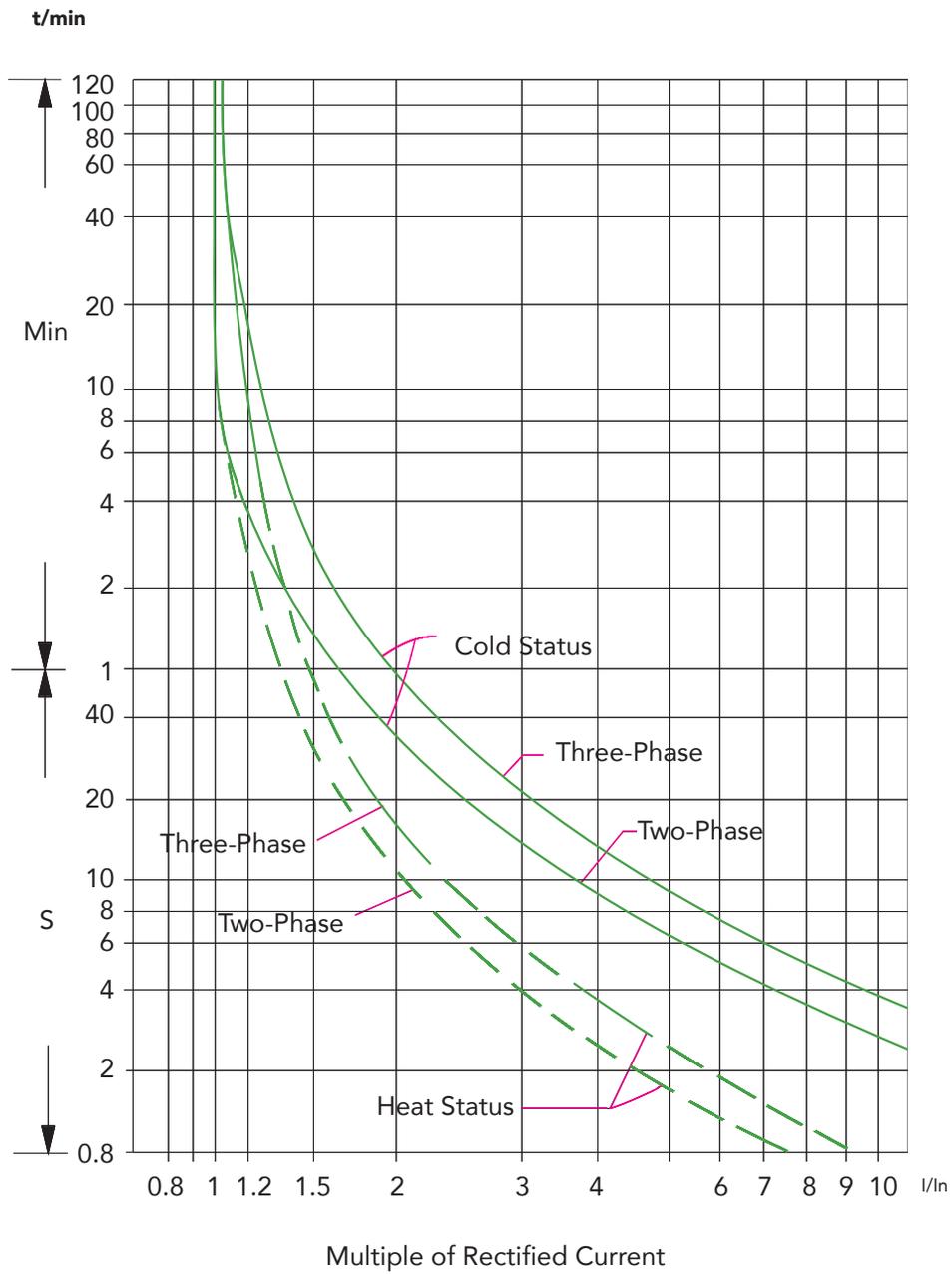
Ex9RD		93A							
Current Class (A)		93							
Phase Failure Protection Function									
Automatic and Manual Reset									
Temperature Compensation									
Tripping Indicator		Yes							
Test and Stop Pushbutton									
Mounting Mode	Plug-In								
	Independent								
Auxiliary Contacts	Number of Contacts		1NO+1NC						
	Rated Current (A)	AC-15 220V	2.73						
		AC-15 380V	1.58						
		DC-13 220V	0.2						
Current Setting Range (A)		23~32	30~40	37~50	48~65	55~70	63~80	80~93	
Matched Fuse	aM (A)	40		63		80		100	
	gG (A)	63	100		125		160		
Ex9RD		200A							
Current Class (A)		200							
Phase Failure Protection Function									
Automatic and Manual Reset									
Temperature Compensation		Yes							
Tripping Indicator									
Test and Stop Pushbutton									
Mounting Mode	Plug-In	No							
	Independent	Yes							
Auxiliary Contacts	Number of Contacts		1NO+1NC						
	Rated Current (A)	AC-15 220V	2.73						
		AC-15 380V	1.58						
		DC-13 220V	0.2						
Current Setting Range (A)		80~125		100~160		125~200			
Matched Fuse	aM (A)	125		160		200			
	gG (A)	200		250		315			
Ex9RD		630A							
Current Class (A)		630							
Phase Failure Protection Function									
Automatic and Manual Reset									
Temperature Compensation		Yes							
Tripping Indicator									
Test and Stop Pushbutton									
Mounting Mode	Plug-In	No							
	Independent	Yes							
Auxiliary Contacts	Number of Contacts		1NO+1NC						
	Rated Current (A)	AC-15 220V	2.73						
		AC-15 380V	1.58						
		DC-13 220V	0.2						
Current Setting Range (A)		160~250	200~315	250~400	315~500	400~630			
Matched Fuse	aM (A)	250	315	400	500	630			
	gG (A)	400	500	630	800				

E



Ex9RD Thermal Overload Relays

Trip Curves



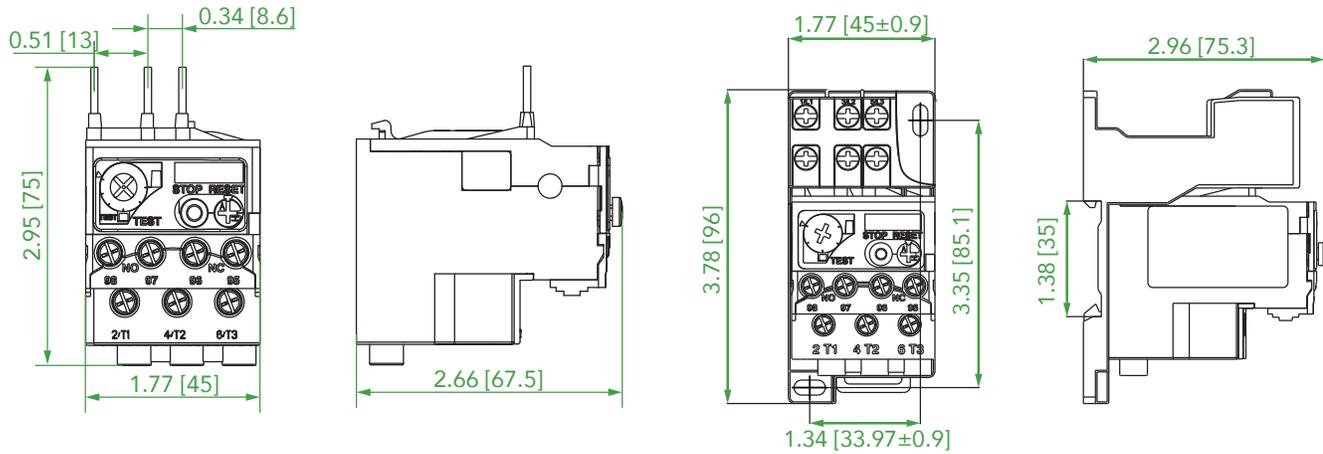


Ex9RD Thermal Overload Relays

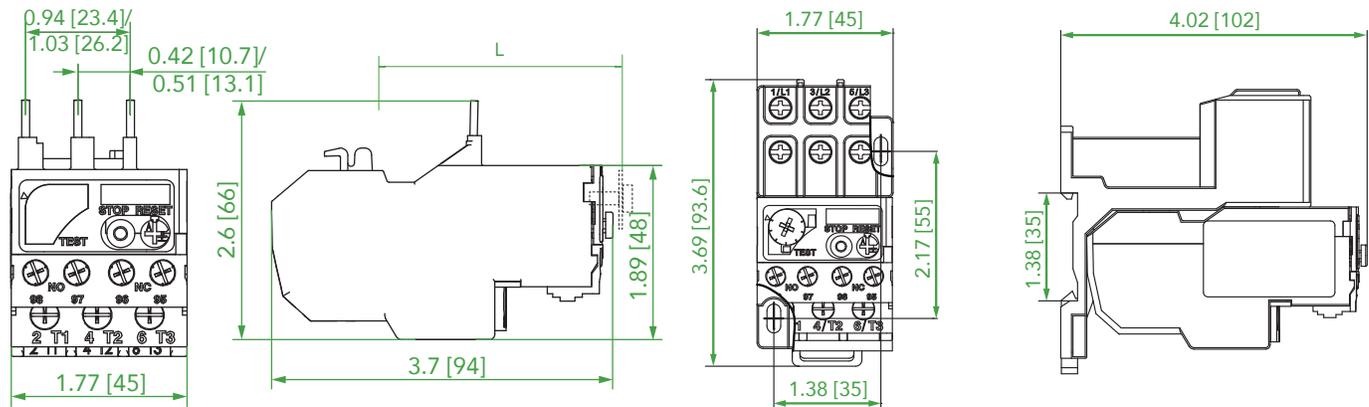
Dimensions

Ex9RD11.5

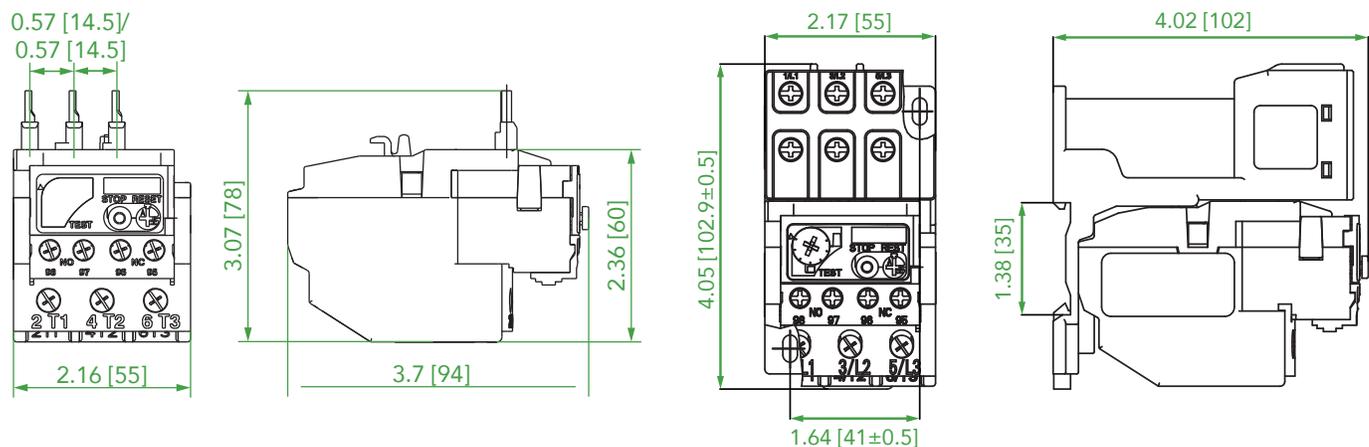
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Ex9RD25



Ex9RD36

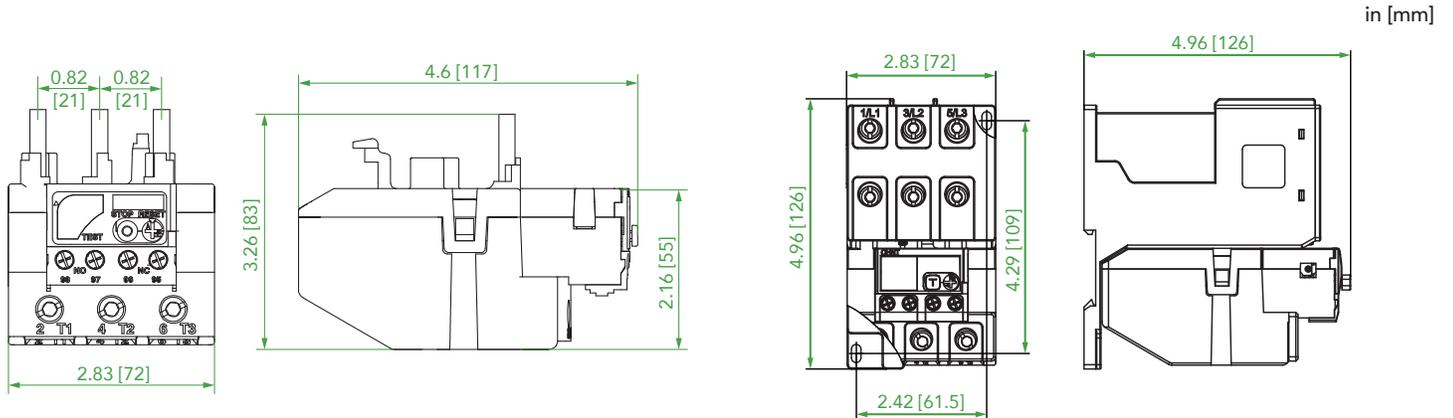




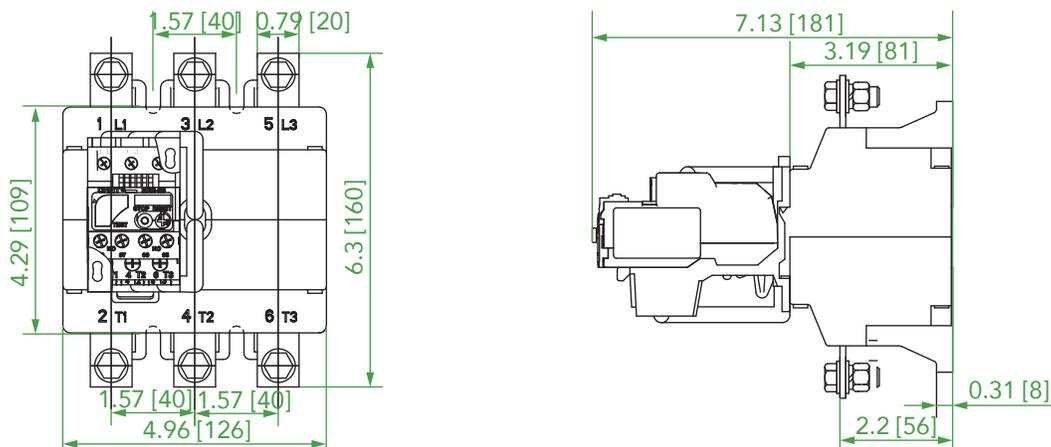
Ex9RD Thermal Overload Relays

Dimensions

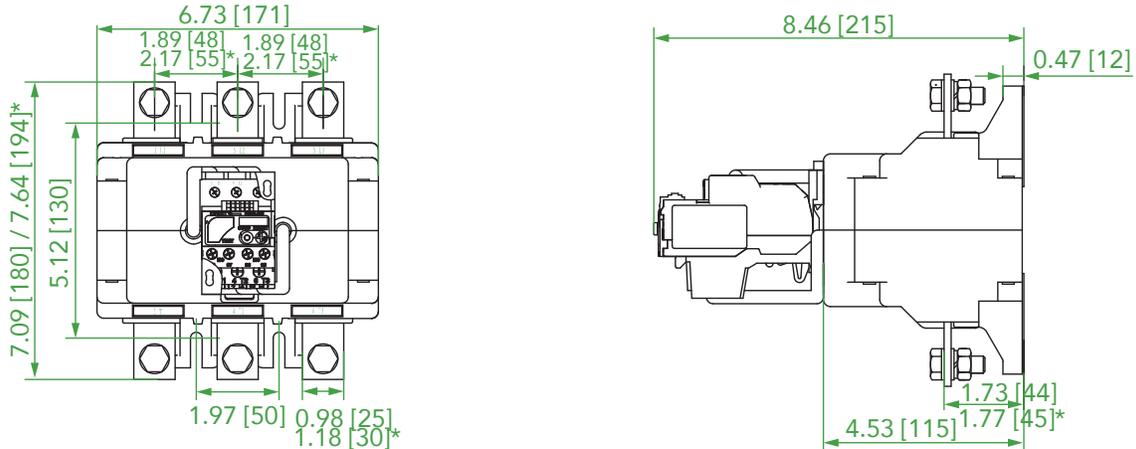
Ex9RD93



Ex9RD200



Ex9RD630

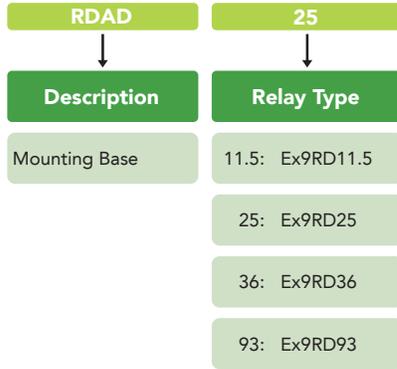
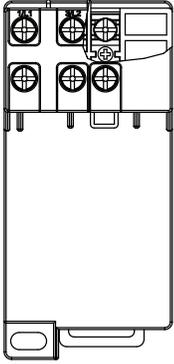


Note: Dimensions with "*" for the product over 400A.



Ex9RD Thermal Overload Relays

Ex9RD Accessories: Mounting Base



Accessory Description	Catalog number	Item number
Mounting Base	RDAD11.5	1410052
	RDAD25	1410049
	RDAD36	1410050
	RDAD93	1410051

Mounting Base	RDAD11.5	RDAD25	RDAD36	RDAD93
Current Rating (A)	11.5	25	36	93
Voltage (Vac)	600			
Terminal Wire Range	#18-12 AWG	#18-10 AWG #8 AWG Str		#12-10 AWG #8-1 AWG, Str
Terminal Torque in-lb (N.m)	7 (0.80)	22 (2.50)		80 (9)
Wire Strip Length in (mm)	0.39 (10)	0.51 (13)		0.71 (18)
Matched Contactor Type	Ex9CMS6~12	Ex9CDS09~32	Ex9CDS32	Ex9CDS40~95

E



Ex9CA Safety Contactors

Product Overview

The NOARK Ex9CA Safety Contactor is designed for use in safety function applications. It offers special features that allow the design of safe control circuits with current ratings up to 38 Amps. The Normally Closed (NC) Auxiliary contact is a mirror contact to the main contacts and is mechanically linked to the Normally Open (NO) Auxiliary contacts. This allows for optimal design selections in SRP/CS*.

*SRP/CS is the term given by ISO short for safety-related part of a control system, meaning part of a control system that responds to safety-related input signals and generates safety-related output signals

Design Features

- Positively guided mirror contacts/mechanically linked contacts according to IEC/UL60947-4-1 Annex F, IEC/UL60947-5-1 Annex L
- Mirror contacts/mechanically linked symbol on the side of Aux block
- Fixed transparent anti-dust cover for easy identification of the device action and prevents the manual operation
- AC or DC operating coils
- Integrated body with built in auxiliary contacts up to 2NC and 2NO
- Integrated surge suppression on DC coil models
- 5-Year limited warranty

Certifications

- UL Listed, File Number E353865, UL 60947-1
- Certified for Canada according to CSA standards
- IEC/EN 60947-4-1
- CE Approved
- CCC Certified
- RoHS Compliant

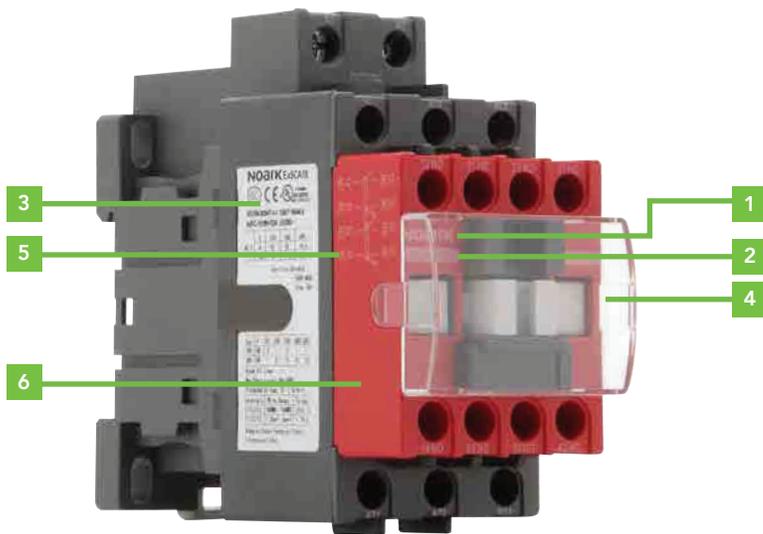




Ex9CA Safety Contactors

Product Label/Product Selection Guide

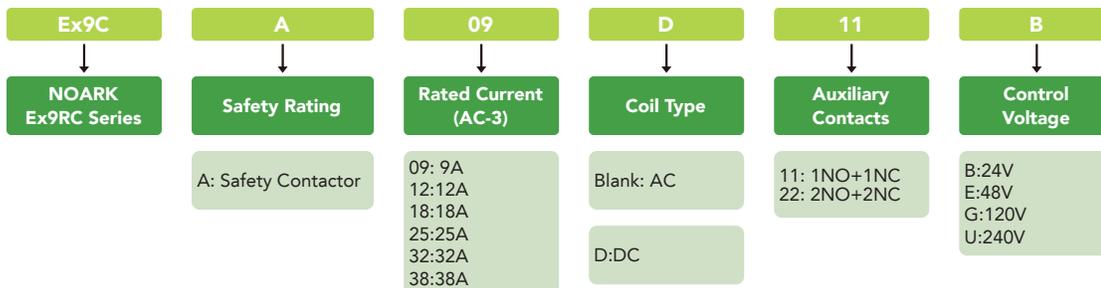
Ex9CA Product Label



- 1 Brand
- 2 Product Selection
- 3 Label with UL logo, CE logo and data
- 4 Fixed clear anti-dust front cover
- 5 Mirror contact /mechanically linked contact symbol
- 6 Auxilliary contact block

F

Ex9CA Product Selection Guide





Ex9CA Safety Contactors

Products

Ex9CA 9~18A



Coil Voltage	09A				12A				
	Catalog number	Item number							
	1NO+1NC		2NO+2NC		1NO+1NC		2NO+2NC		
AC	24	Ex9CA0911B7	1321951	Ex9CA0922B7	1321975	Ex9CA1211B7	1321955	Ex9CA1222B7	1321979
	48	Ex9CA0911E7	1321952	Ex9CA0922E7	1321976	Ex9CA1211E7	1321956	Ex9CA1222E7	1321980
	120	Ex9CA0911G7	1321953	Ex9CA0922G7	1321977	Ex9CA1211G7	1321957	Ex9CA1222G7	1321981
	240	Ex9CA0911U7	1321954	Ex9CA0922U7	1321978	Ex9CA1211U7	1321958	Ex9CA1222U7	1321982
DC	24	Ex9CA09D11B	1321999	Ex9CA09D22B	1322023	Ex9CA12D11B	1322003	Ex9CA12D22B	1322027
	48	Ex9CA09D11E	1322000	Ex9CA09D22E	1322024	Ex9CA12D11E	1322004	Ex9CA12D22E	1322028
	120	Ex9CA09D11G	1322001	Ex9CA09D22G	1322025	Ex9CA12D11G	1322005	Ex9CA12D22G	1322029
	240	Ex9CA09D11U	1322002	Ex9CA09D22U	1322026	Ex9CA12D11U	1322006	Ex9CA12D22U	1322030

Coil Voltage	18A				
	Catalog number	Item number	Catalog number	Item number	
	1NO+1NC		2NO+2NC		
AC	24	Ex9CA1811B7	1321959	Ex9CA1822B7	1321983
	48	Ex9CA1811E7	1321960	Ex9CA1822E7	1321984
	120	Ex9CA1811G7	1321961	Ex9CA1822G7	1321985
	240	Ex9CA1811U7	1321962	Ex9CA1822U7	1321986
DC	24	Ex9CA18D11B	1322007	Ex9CA18D22B	1322031
	48	Ex9CA18D11E	1322008	Ex9CA18D22E	1322032
	120	Ex9CA18D11G	1322009	Ex9CA18D22G	1322033
	240	Ex9CA18D11U	1322010	Ex9CA18D22U	1322034



Ex9CA Safety Contactors

Dimensions

Ex9CA 25~38A



Coil Voltage	25A				32A				
	Catalog number	Item number							
	1NO+1NC		2NO, 2NC		1NO+1NC		2NO, 2NC		
AC	24	Ex9CA2511B7	1321963	Ex9CA2522B7	1321987	Ex9CA3211B7	1321967	Ex9CA3222B7	1321991
	48	Ex9CA2511E7	1321964	Ex9CA2522E7	1321988	Ex9CA3211E7	1321968	Ex9CA3222E7	1321992
	120	Ex9CA2511G7	1321965	Ex9CA2522G7	1321989	Ex9CA3211G7	1321969	Ex9CA3222G7	1321993
	240	Ex9CA2511U7	1321966	Ex9CA2522U7	1321990	Ex9CA3211U7	1321970	Ex9CA3222U7	1321994
DC	24	Ex9CA25D11B	1322011	Ex9CA25D22B	1322035	Ex9CA32D11B	1322015	Ex9CA32D22B	1322039
	48	Ex9CA25D11E	1322012	Ex9CA25D22E	1322036	Ex9CA32D11E	1322016	Ex9CA32D22E	1322040
	120	Ex9CA25D11G	1322013	Ex9CA25D22G	1322037	Ex9CA32D11G	1322017	Ex9CA32D22G	1322041
	240	Ex9CA25D11U	1322014	Ex9CA25D22U	1322038	Ex9CA32D11U	1322018	Ex9CA32D22U	1322042

F

Coil Voltage	38A				
	Catalog number	Item number	Catalog number	Item number	
	1NO+1NC		2NO, 2NC		
AC	24	Ex9CA3811B7	1321971	Ex9CA3822B7	1321995
	48	Ex9CA3811E7	1321972	Ex9CA3822E7	1321996
	120	Ex9CA3811G7	1321973	Ex9CA3822G7	1321997
	240	Ex9CA3811U7	1321974	Ex9CA3822U7	1321998
DC	24	Ex9CA38D11B	1322019	Ex9CA38D22B	1322043
	48	Ex9CA38D11E	1322020	Ex9CA38D22E	1322044
	120	Ex9CA38D11G	1322021	Ex9CA38D22G	1322045
	240	Ex9CA38D11U	1322022	Ex9CA38D22U	1322046



Ex9CA Safety Contactors

Specifications

			Ex9CA							
			9	12	18	25	32	38		
General Information										
Pole			3							
Production Standard			IEC 60947-1, IEC 60947-4-1, UL 60947-1, UL 60947-4-1, GB/T14048.4							
Environmental Testing According to			IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-11, IEC 60068-2-30							
Rated Frequency (Hz)			50/60							
Conventional Free Air Thermal Current Ith (A)	0≤104°F (0≤40°C)		25		32		40		50	
	0≤140°F (0≤60°C)									
	0≤158°F (0≤70°C)		17		22		28		35	
Rated Insulating Voltage Ui (V)			690							
Rated Impulse Withstand Voltage Uimp (kV)			6							
Electrical Life (x10 ⁴ cycles)	AC-3	380/400V	120							
	AC-4		5	4		5	4			
Mechanical Life (x10 ⁴ cycles)			1,000							
Operating Cycles Per Hour (cycles/h)	AC-3		1,200			1,000				
	AC-4		300			150				
Environmental Temperature	Transportation or Storage		-76 to 176°F (-60 to +80°C)							
	Working At		-4 to 140°F (-20 to +60°C)							
	Maximum		-40 to 158°F (-40 to +70°C)							
Altitude ft (m)			6,562 (2,000)							
Pollution Degree			Class III							
Rated Operating Voltage (Ue)	AC 50/60Hz		24, 48, 120, 240							
	DC									
Rated Operational Current Ie (A)										
At -82 to 131°F (-25 to 40°C)	AC-1	690V	25		32		40		50	
	AC-3	380/400V	9	12	18	25	32	38		
	AC-3	660/690V	6.7	9	10.6	17.3	21.9			
	AC-4	380/400V	9	12	18	25	32			
	AC-4	660/690V	6.7		8.9		14		17.3	
Rated Power of 3-phase Motor										
For IEC (kW)	AC-3	230Vac	-							
	AC-4									
	AC-3	380/400Vac	4	5.5	7.5	11	15	18.5		
	AC-4		15		15					
	AC-3	660/690Vac	5.5	7.5	9	15	18.5			
	AC-4		5.5		7.5		11			
	AC-3	1,000Vac	-							
AC-4										
UL Rating										
Ith (A)			25		32		40		50	
Single-Phase (HP)	110-120Vac		0.5	1	1.5	2	3			
	220-240Vac		1.5	2	3			5		
Three-Phase (HP)	200-208Vac		3		5	7.5	10			
	220-240Vac									
	440-480Vac		5	7.5	10	15	20			
	550-600Vac		7.5	10	15	20	25			



Ex9CA Safety Contactors

Specifications

		Ex9CA					
		9	12	18	25	32	38
AC-12 Rated Thermal Current I_{th}							
Ambient temperature 40°C	24...240V (A)	10					
	230...500V (A)	10					
	230...690V (A)	10					
Ambient temperature 60°C I _{th}	24...240V (A)	10					
	230...500V (A)	10					
	230...690V (A)	10					
AC-15/A600							
I _e	24V (A)	—					
	48 (A)	—					
	120V (A)	6					
	230V (A)	3					
	240V (A)	3					
	400V (A)	1.9					
	480V (A)	1.5					
	500V (A)	1.4					
	600V (A)	1.2					
690V (A)	—						
DC-13							
I _e	24V (A)	2.8					
	48V (A)	1.2					
	110V (A)	0.55					
	220V (A)	0.27					
	440V (A)	0.15					
Load Carrying Capacity per UL							
Rated voltage AC (V)		Max.600					
Continuous rating 40°C (A)		10					
Switching capacity AC (A)		A600					
Rated voltage DC (V)		Max.600					
Switching capacity DC (A)		Q600					
Tolerance of Control Voltage							
AC control (50/60Hz)	pick-up (x U _s)	0.85...1.1					
	dropout (x U _s)	0.2...0.75					
DC control	pick-up (x U _s)	0.8...1.1					
	dropout (x U _s)	0.1...0.75					
Coil Power Consumption							
AC control (50/60Hz)	pick-up (VA)	120VA (9CA09-18)/140VA (9CA25-38)					
	hold-in (VA)	12VA (9CA09-18)/14VA (9CA25-38)					
DC control	pick-up (W)	≤70					
	hold-in (W)	≤3.5					
Operating Time							
AC	closing delay (ms)	15...30					
	opening delay (ms)	15...25					
DC	closing delay (ms)	100...170					
	opening delay (ms)	30-100					
Typical Lifetime							
B _{10D} Value (Electrical)	DC Coil	1.08x10 ⁶			1.13x10 ⁶		
	AC Coil	1.28x10 ⁶			1.25x10 ⁶		

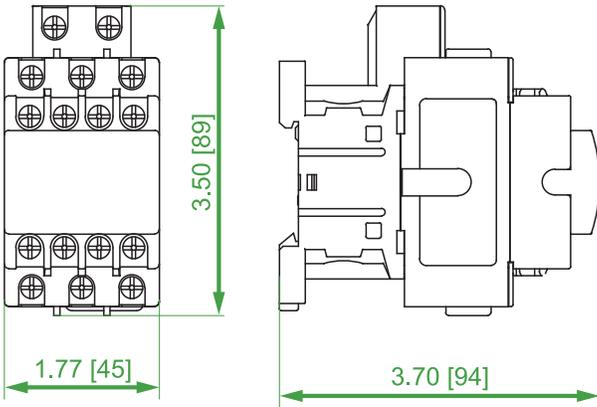
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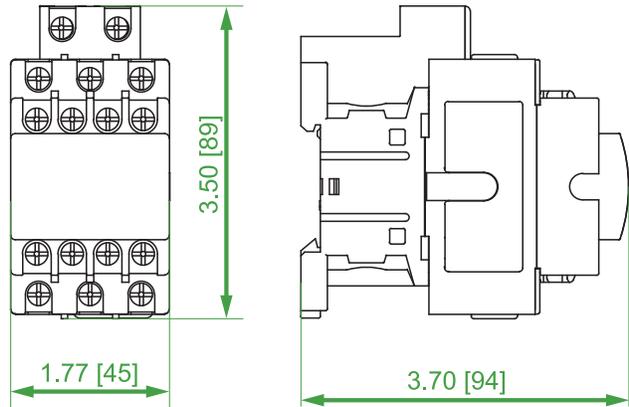
Ex9CA Safety Contactors

Dimensions

Ex9CA09-18

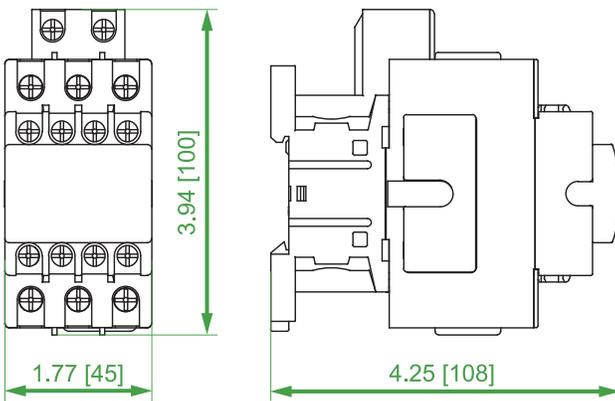


Ex9CA09D-18D

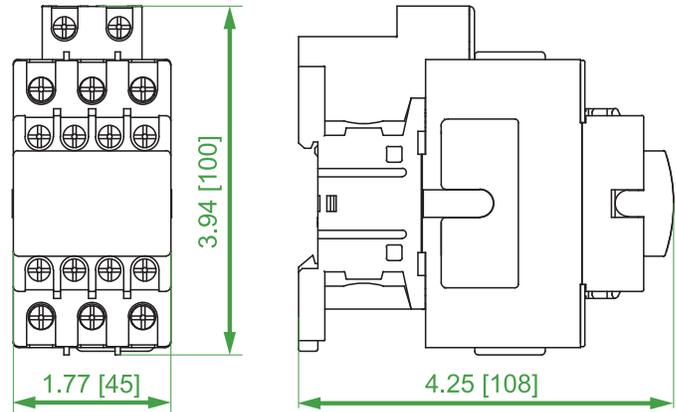


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Ex9CA25-38



Ex9CA25D-38D





Ex9CA Safety Contactors

Contact Configuration

Poles	Configuration	Main Pole	NO Aux	NC Aux	SKU*	Mirror contacts	Mechanically Linked Contacts
3		3	1	1	Ex9CA*11*	Yes	Yes
3		3	2	2	Ex9CA*22*	Yes	Yes

F



Ex9RCA Safety Control Relay

Product Overview

The new NOARK Electric Ex9RCA Safety Control Relay is designed to provide fail-safe performance for safety function applications. It features mechanically linked contacts for use on safety feedback circuits with up to 6 NCs in contact configuration. When installed the normally closed contact is force guided with the normally open contacts making the Ex9RCA ideal for SRP/CS*.

*SRP/CS is the term given by ISO short for safety-related part of a control system, meaning part of a control system that responds to safety-related input signals and generates safety-related output signals.

Design Features

- Force guided/mechanically linked contacts as per IEC/UL60947-5-1 Annex L
- Mechanically linked contacts symbol prominently displayed on red front cover
- Fixed transparent anti-dust cover allows easy identification of device action and prevents manual operation
- AC or DC operating coils 4-pole models
- Extended contacts configuration up to 8-pole with permanent front block
- Easily mounts on DIN 35mm or panel
- 5 year limited warranty

Certifications

- UL Listed, File Number E353865, UL 60947-1
- Certified for Canada according to CSA standards
- IEC/EN 60947-5-1
- CE Approved
- CCC Certified
- RoHS Compliant





Ex9RCA Safety Control Relay

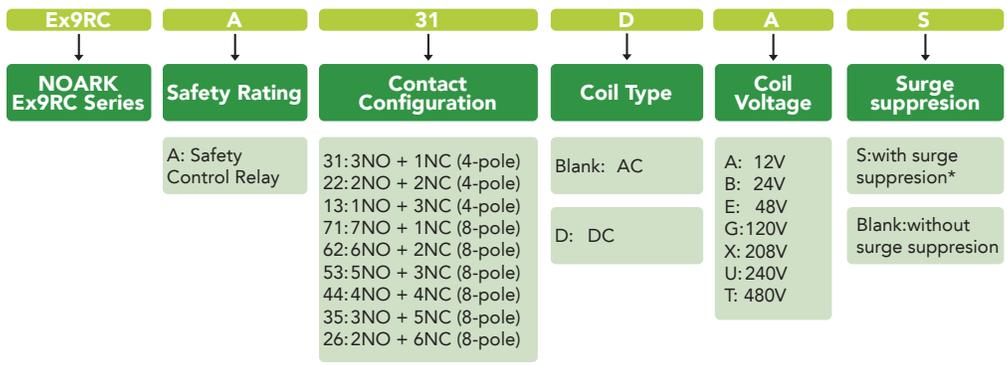
Product Label/Product Selection Guide

Ex9RCA Product Label



- 1 Brand
- 2 Product Selection
- 3 Label with UL logo, CE logo and data
- 4 Mechanically linked contact symbol
- 5 Fixed clear anti-dust front cover

Ex9RCA Product Selection Guide



*: only For DC coil type

G



Ex9RCA Safety Control Relay

Products



Coil Voltage		4-pole					
		Catalog number	Item number	Catalog number	Item number	Catalog number	Item number
		1NO,3NC		2NO,2NC		3NO,1NC	
Vac	24	Ex9RCA13B	1321920	Ex9RCA22B	1321919	Ex9RCA31B	1321918
	48	Ex9RCA13E	1321923	Ex9RCA22E	1321922	Ex9RCA31E	1321921
	120	Ex9RCA13G	1321926	Ex9RCA22G	1321925	Ex9RCA31G	1321924
	208	Ex9RCA13X	1321929	Ex9RCA22X	1321928	Ex9RCA31X	1321927
	240	Ex9RCA13U	1321932	Ex9RCA22U	1321931	Ex9RCA31U	1321930
	480	Ex9RCA13T	1321935	Ex9RCA22T	1321934	Ex9RCA31T	13219233
Vdc	12	Ex9RCA13DAS	1321884	Ex9RCA22DAS	1321883	Ex9RCA31DAS	1321882
	24	Ex9RCA13DBS	1321887	Ex9RCA22DBS	1321886	Ex9RCA31DBS	1321855
	48	Ex9RCA13DES	1321890	Ex9RCA22DES	1321889	Ex9RCA31DES	1321888
	120	Ex9RCA13DGS	1321893	Ex9RCA22DGS	1321892	Ex9RCA31DGS	1321891



Ex9RCA Safety Control Relay

Specifications



Coil Voltage		8-pole					
		Catalog number	Item number	Catalog number	Item number	Catalog number	Item number
		2NO,6NC		3NO,5NC		4NO,4NC	
Vdc	12	Ex9RCA26DAS	1321899	Ex9RCA35DAS	1321898	Ex9RCA44DAS	1321897
	24	Ex9RCA26DBS	1321905	Ex9RCA35DBS	1321904	Ex9RCA44DBS	1321903
	48	Ex9RCA26DES	1321911	Ex9RCA35DES	1321910	Ex9RCA44DES	1321909
	120	Ex9RCA26DGS	1321917	Ex9RCA35DGS	1321916	Ex9RCA44DGS	1321915

Coil Voltage		8-pole					
		Catalog number	Item number	Catalog number	Item number	Catalog number	Item number
		5NO,3NC		6NO,2NC		7NO,1NC	
Vdc	12	Ex9RCA53DAS	1321896	Ex9RCA62DAS	1321895	Ex9RCA71DAS	1321894
	24	Ex9RCA53DBS	1321902	Ex9RCA62DBS	1321901	Ex9RCA71DBS	1321900
	48	Ex9RCA53DES	1321908	Ex9RCA62DES	1321907	Ex9RCA71DES	1321906
	120	Ex9RCA53DGS	1321914	Ex9RCA62DGS	1321913	Ex9RCA71DGS	1321912

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Ex9RCA Safety Control Relay

Specifications

		Ex9RCA	
General Information			
Poles		4, 8	
Production Standard		UL 60947-5-1, GB/T 14048.5, IEC/EN 60947-5-1	
Rated Operating Voltage (U _e)	AC 50/60 HZ	24, 48, 120, 208, 240, 480	
	DC	12, 24, 48, 120	
Rated Insulating Voltage U _i (V)	IEC	690	
	UL, CSA	600	
Rated Impulse Withstand Voltage U _{imp} (kV)		6	
Electrical Life AC-15 (240V/2A) (million cycles)		1	
Mechanical Life (million cycles)		10	
Protection Class		IP20	
Ambient Temperature	Transportation or Storage (°C)	-60...+80	
	Operation at rated voltage (°C)	-20...+60	
Max. Altitude of Installation Site (m)		2000	
Minimum operating current		8mA/24V	
AC-12 Rated Thermal Current I_{th}			
Ambient temperature 40°C	24...240V (A)	10	
	230...500V (A)	10	
	230...690V (A)	10	
Ambient temperature 60°C I _{th}	24...240V (A)	10	
	230...500V (A)	10	
	230...690V (A)	10	
AC-15/A600			
I _e	120V (A)	6	
	230V (A)	3	
	240V (A)	3	
	400V (A)	1.9	
	480V (A)	1.5	
	500V (A)	1.4	
	600V (A)	1.2	
DC-13 Rated Thermal Current I_{th}			
		Auxiliary Poles	Main Poles
I _e	24V (A)	2.8	5
	48V (A)	1.2	2.5
	110V (A)	0.55	1.1
	220V (A)	0.27	0.55
	440V (A)	0.15	0.3
	600V (A)	0.1	0.2
Load Carrying Capacity per UL			
Rated voltage AC (V)		Max. 600	
Continuous rating 40°C (A)		10	
Switching capacity AC (A)		A600	
Rated voltage DC (V)		Max. 600	
Switching capacity DC (A)		Auxiliary Poles: Q600	Main Poles: P600
Tolerance of Control Voltage			
AC control (50/60 Hz)	pick-up (x U _s)	0.85...1.1	
	dropout (x U _s)	0.2...0.75	
DC control	pick-up (x U _s)	0.8...1.1 (4-pole), 0.85...1.1 (8-pole)	
	dropout (x U _s)	0.1...0.75	
Coil Power Consumption			
AC control(50/60 Hz)	pick-up (VA)	40	
	hold-in (VA)	9	
DC control	pick-up (W)	3.2-4.0	
	hold-in (W)	3.2-4.0	
Operatin9g Time			
AC	closing delay (ms)	15...30	
	opening delay (ms)	15...25	
DC	closing delay (ms)	25...40	
	opening delay (ms)	10...15	

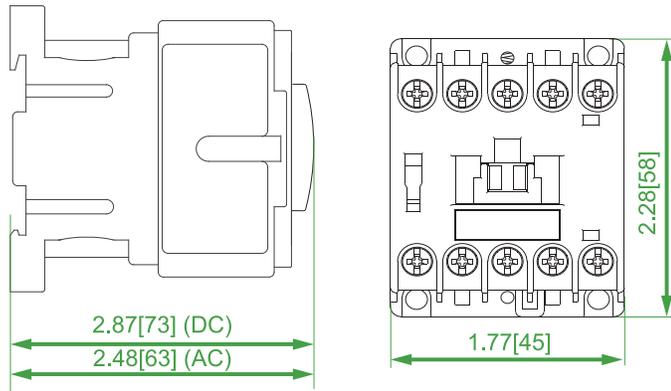


Ex9RCA Safety Control Relay

Accessory Dimensions

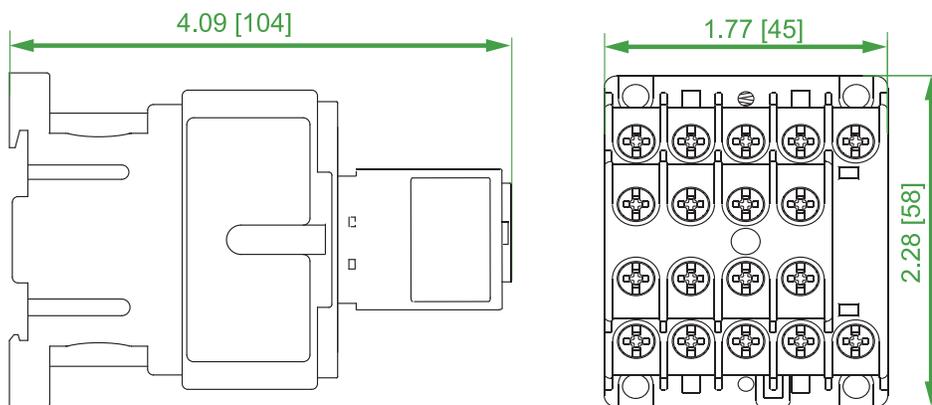
Ex9RCA 4-pole

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Ex9RCA 8-pole

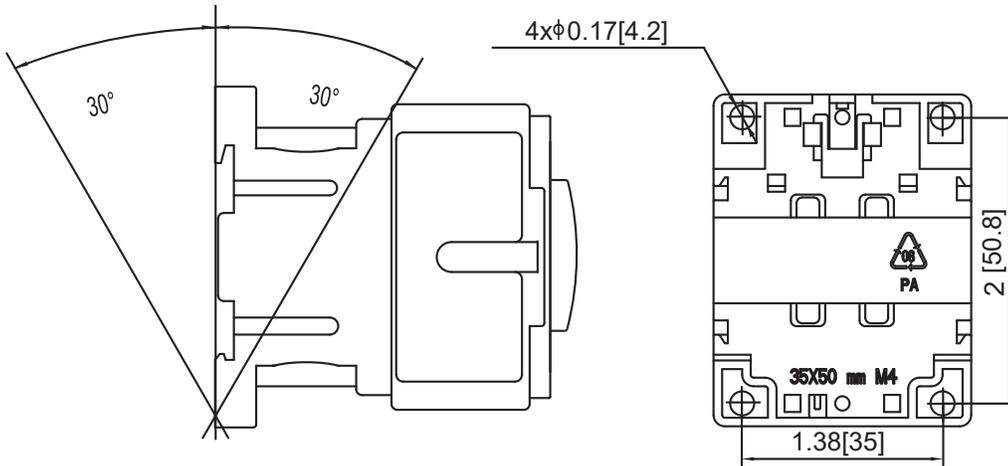
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Ex9RCA Safety Control Relay

Mounting Position





Ex9RCA Safety Control Relay

Mounting Position

Poles	Configuration	NO	NC	SKU*	Mechanically Linked Contacts
4	<p>Diagram showing 4 poles with terminals A1 and A2. The configuration includes 3 NO contacts (13NO, 23NO, 33NO) and 1 NC contact (41NC). Common terminals are 14NO, 24NO, 34NO, and 42NC.</p>	3	1	9RCA31	Yes
4	<p>Diagram showing 4 poles with terminals A1 and A2. The configuration includes 2 NO contacts (23NO, 33NO) and 2 NC contacts (11NC, 41NC). Common terminals are 12NC, 24NO, 34NO, and 42NC.</p>	2	2	9RCA22	Yes
4	<p>Diagram showing 4 poles with terminals A1 and A2. The configuration includes 1 NO contact (33NO) and 3 NC contacts (11NC, 21NC, 41NC). Common terminals are 12NC, 22NC, 34NO, and 42NC.</p>	1	3	9RCA13	Yes
8	<p>Diagram showing 8 poles with terminals A1 and A2. The configuration includes 7 NO contacts (53NO, 63NO, 73NO, 83NO, 54NO, 64NO, 74NO, 84NO) and 1 NC contact (41NC). Common terminals are 13NO, 23NO, 34NO, and 42NC.</p>	7	1	9RCA71	Yes
8	<p>Diagram showing 8 poles with terminals A1 and A2. The configuration includes 6 NO contacts (53NO, 63NO, 73NO, 83NO, 54NO, 64NO, 74NO, 84NO) and 2 NC contacts (11NC, 41NC). Common terminals are 12NC, 24NO, 34NO, and 42NC.</p>	6	2	9RCA62	Yes

*The SKU is incomplete



Ex9RCA Safety Control Relay

Mounting Position

Poles	Configuration	NO	NC	SKU*	Mechanically Linked Contacts
8		5	3	9RCA53	Yes
8		4	4	9RCA44	Yes
8		3	5	9RCA35	Yes
8		2	6	9RCA26	Yes

*The SKU is incomplete



Definite Purpose Contactors

Product Overview

Ex9CKT and Ex9CK Series DP Contactors provide high performance with both flexibility and reliability. They are designed to match numerous applications including:

- Air conditioning
- Resistive heating
- Refrigeration equipment
- Motors
- Welding
- Pumps
- Power supplies
- Food service equipment
- Compressors
- Business machines
- Lighting (25-50A)

Design Features

- 20~90A, 1 to 4-pole available now
- Enclosed coil standard for all 1 to 4-pole frame sizes
- Industry standard mounting plate provides easily accessible mounting holes
- Connection terminal options, including screw or lug connections each with quick connect spades
- Coil is Class B 266°F (130°C) insulation system with a wide range of voltages and 50/60Hz ratings
- Double E magnet assembly provides optimal performance with reduced power consumption
- Base assembly is made from high arc-resistant polyester
- 100,000 to 250,000 cycles by UL 508/UL60947-4-1 for air resistance heating application
- This contactor is A2L certified

Certifications

- UL 60947-1; UL 60947-4-1; UL 508; UL E353866
- CSA Certified, C22.2 No. 265900
- IEC/EN 60947-4-1 Compliant
- CE Approved
- Compliance to ARI-780 HVac standards

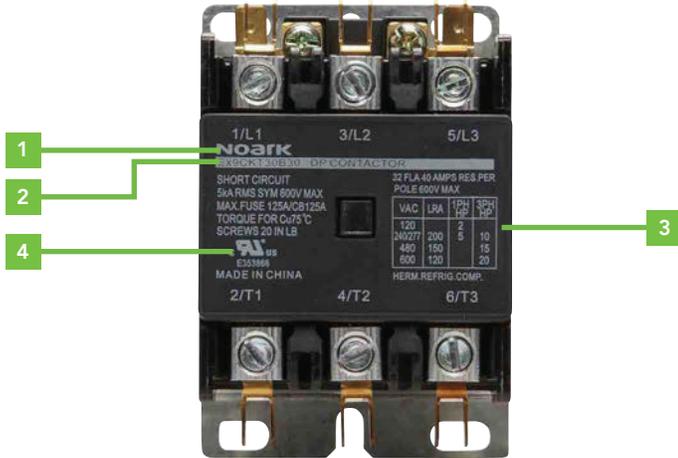




Definite Purpose Contactors

Product Label/Product Selection Guide

Ex9CKT Product Label



- 1 Brand
- 2 Product Selection
- 3 AC Coil Voltage
- 4 UL Recognized Component

Product Selection Guide

Ex9CKT	40	A	30	G	7	N	Q
NOARK Ex9CKT Series	Full Load Amperage (FLA)	Terminal	Poles	Coil Voltage	Frequency	Power Pole QCT Option	Coil QCT Option
	20:20A 25:25A 30:30A 32:32A 40:40A	A: Phillips screw with pressure plate B: Lug Terminal with slot screw	10: 1NO + 1 Shunt 20: 2NO 30: 3NO 40: 4NO	B: 24V G: 120V XU: 208/240V N: 277V R: 440V T: 480V Y: 600V	7: 50/60Hz	N: No QCT on power pole Blank: Dual QCT on each pole Q ^Δ : Quad QCT on each pole	Blank: Dual QCT Q: Quad QCT

Ex9CK	50	A	10	G	7	Q
NOARK Ex9CK Series	Full Load Amperage (FLA)	Terminal	Pole	Coil Voltage	Frequency	Quick Connection Terminal for 2P
	50:50A 60:60A 75:75A 90:90A	A: Screw B: Lug	10: 1NO + 1 Shunt 20: 2NO 30: 3NO	B: 24V N: 277V C: 36V Q ^Δ :380V D: 42V V: 400V E: 48V N: 415V F: 110V R: 440V G: 120V T: 480V M: 220V S:500V P: 230V Y: 600V	7: 50/60Hz	Blank: Open Coil (1 & 2 Pole) Enclosed Coil (3 Pole)

Δ 1 & 2-pole only

NOARK Standard: L means coil mounted on top side; T means coil mounted on bottom side
Contact NOARK Sales for more configuration



Definite Purpose Contactors

Ex9CKT Products

Ex9CKT 20A



Coil Voltage Vac	20A, Screw, 50/60Hz, Dual QCT		20A, Screw, 50/60Hz, Quad QCT	
	1-pole 1NO+1Shunt		1-pole 1NO+1Shunt	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT20A10B7	1314177	Ex9CKT20A10B7Q	1314115
120	Ex9CKT20A10G7	1314178	Ex9CKT20A10G7Q	1314116
208~240	Ex9CKT20A10XU7	1314179	Ex9CKT20A10XU7Q	1314117
277	Ex9CKT20A10N7	1314180	Ex9CKT20A10N7Q	1314118
440	Ex9CKT20A10R7	1314181	Ex9CKT20A10R7Q	1314119
480	Ex9CKT20A10T7	1314182	Ex9CKT20A10T7Q	1314120
600	Ex9CKT20A10Y7	1313992	Ex9CKT20A10Y7Q	1314083
Coil Voltage Vac	20A, Screw, 50/60Hz, Dual QCT		20A, Screw, 50/60Hz, Quad QCT	
	2-pole 2NO		2-pole 2NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT20A20B7	1314491	Ex9CKT20A20B7Q	1314431
120	Ex9CKT20A20G7	1314492	Ex9CKT20A20G7Q	1314432
208~240	Ex9CKT20A20XU7	1314493	Ex9CKT20A20XU7Q	1314433
277	Ex9CKT20A20N7	1314494	Ex9CKT20A20N7Q	1314434
440	Ex9CKT20A20R7	1314495	Ex9CKT20A20R7Q	1314435
480	Ex9CKT20A20T7	1314496	Ex9CKT20A20T7Q	1314436
600	Ex9CKT20A20Y7	1313997	Ex9CKT20A20Y7Q	1314623
Coil Voltage Vac	20A, Screw, 50/60Hz, Dual QCT		20A, Screw, 50/60Hz, Dual QCT	
	3-pole 3NO		4-pole 4NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT20A30B7	1314312	Ex9CKT20A40B7	1314372
120	Ex9CKT20A30G7	1314313	Ex9CKT20A40G7	1314373
208~240	Ex9CKT20A30XU7	1314314	Ex9CKT20A40XU7	1314374
277	Ex9CKT20A30N7	1314315	Ex9CKT20A40N7	1314375
440	Ex9CKT20A30R7	1314316	Ex9CKT20A40R7	1314376
480	Ex9CKT20A30T7	1314317	Ex9CKT20A40T7	1314377
600	Ex9CKT20A30Y7	1314002	Ex9CKT20A40Y7	1314030

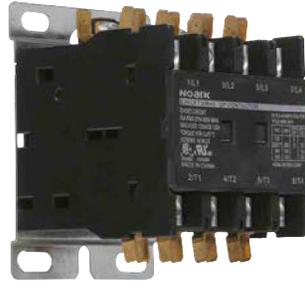
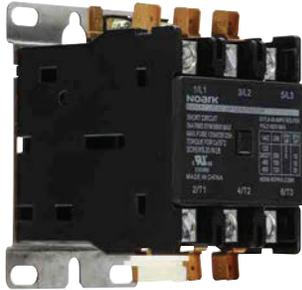
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Definite Purpose Contactors

Ex9CKT Products

Ex9CKT 20A



Coil Voltage Vac	20A, Lug, 50/60Hz, Dual QCT		20A, Lug, 50/60Hz, Quad QCT	
	1-pole 1NO+1Shunt		1-pole 1NO+1Shunt	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT20B10B7	1314146	Ex9CKT20B10B7Q	1314085
120	Ex9CKT20B10G7	1314147	Ex9CKT20B10G7Q	1314086
208~240	Ex9CKT20B10XU7	1314148	Ex9CKT20B10XU7Q	1314087
277	Ex9CKT20B10N7	1314149	Ex9CKT20B10N7Q	1314088
440	Ex9CKT20B10R7	1314150	Ex9CKT20B10R7Q	1314089
480	Ex9CKT20B10T7	1314151	Ex9CKT20B10T7Q	1314090
600	Ex9CKT20B10Y7	1314012	Ex9CKT20B10Y7Q	1314629
Coil Voltage Vac	20A, Lug, 50/60Hz, Dual QCT		20A, Lug, 50/60Hz, Quad QCT	
	2-pole 2NO		2-pole 2NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT20B20B7	1314461	Ex9CKT20B20B7Q	1314201
120	Ex9CKT20B20G7	1314462	Ex9CKT20B20G7Q	1314402
208~240	Ex9CKT20B20XU7	1314463	Ex9CKT20B20XU7Q	1314403
277	Ex9CKT20B20N7	1314464	Ex9CKT20B20N7Q	1314404
440	Ex9CKT20B20R7	1314465	Ex9CKT20B20R7Q	1314405
480	Ex9CKT20B20T7	1314466	Ex9CKT20B20T7Q	1314406
600	Ex9CKT20B20Y7	1314017	Ex9CKT20B20Y7Q	1314634
Coil Voltage Vac	20A, Lug, 50/60Hz, Dual QCT		20A, Lug, 50/60Hz, Dual QCT	
	3-pole 3NO		4-pole 4NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT20B30B7	1314282	Ex9CKT20B40B7	1314342
120	Ex9CKT20B30G7	1314283	Ex9CKT20B40G7	1314343
208~240	Ex9CKT20B30XU7	1314284	Ex9CKT20B40XU7	1314344
277	Ex9CKT20B30N7	1314285	Ex9CKT20B40N7	1314345
440	Ex9CKT20B30R7	1314286	Ex9CKT20B40R7	1314346
480	Ex9CKT20B30T7	1314287	Ex9CKT20B40T7	1314347
600	Ex9CKT20B30Y7	1314073	Ex9CKT20B40Y7	1314078



Definite Purpose Contactors

Ex9CKT Products

Ex9CKT 25A



Coil Voltage Vac	25A, Screw, 50/60Hz, Dual QCT		25A, Screw, 50/60Hz, Quad QCT	
	1-pole 1NO+1Shunt		1-pole 1NO+1Shunt	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT25A10B7	1314183	Ex9CKT25A10B7Q	1314121
120	Ex9CKT25A10G7	1314184	Ex9CKT25A10G7Q	1314122
208~240	Ex9CKT25A10XU7	1314185	Ex9CKT25A10XU7Q	1314123
277	Ex9CKT25A10N7	1314186	Ex9CKT25A10N7Q	1314124
440	Ex9CKT25A10R7	1314187	Ex9CKT25A10R7Q	1314125
480	Ex9CKT25A10T7	1314188	Ex9CKT25A10T7Q	1314126
600	Ex9CKT25A10Y7	1313993	Ex9CKT25A10Y7Q	1314084
Coil Voltage Vac	25A, Screw, 50/60Hz, Dual QCT		25A, Screw, 50/60Hz, Quad QCT	
	2-pole 2NO		2-pole 2NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT25A20B7	1314497	Ex9CKT25A20B7Q	1314437
120	Ex9CKT25A20G7	1314498	Ex9CKT25A20G7Q	1314438
208~240	Ex9CKT25A20XU7	1314499	Ex9CKT25A20XU7Q	1314439
277	Ex9CKT25A20N7	1314500	Ex9CKT25A20N7Q	1314440
440	Ex9CKT25A20R7	1314501	Ex9CKT25A20R7Q	1314441
480	Ex9CKT25A20T7	1314502	Ex9CKT25A20T7Q	1314442
600	Ex9CKT25A20Y7	1313998	Ex9CKT25A20Y7Q	1314624
Coil Voltage Vac	25A, Screw, 50/60Hz, Dual QCT		25A, Screw, 50/60Hz, Dual QCT	
	3-pole 3NO		4-pole 4NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT25A30B7	1314318	Ex9CKT25A40B7	1314378
120	Ex9CKT25A30G7	1314319	Ex9CKT25A40G7	1314379
208~240	Ex9CKT25A30XU7	1314320	Ex9CKT25A40XU7	1314380
277	Ex9CKT25A30N7	1314321	Ex9CKT25A40N7	1314381
440	Ex9CKT25A30R7	1314322	Ex9CKT25A40R7	1314382
480	Ex9CKT25A30T7	1314323	Ex9CKT25A40T7	1314383
600	Ex9CKT25A30Y7	1314003	Ex9CKT25A40Y7	1314008

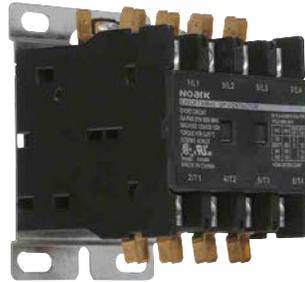
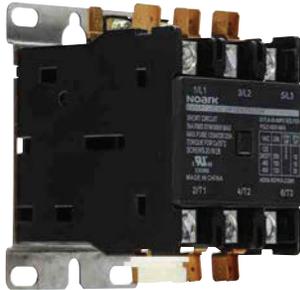
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Definite Purpose Contactors

Ex9CKT Products

Ex9CKT 25A



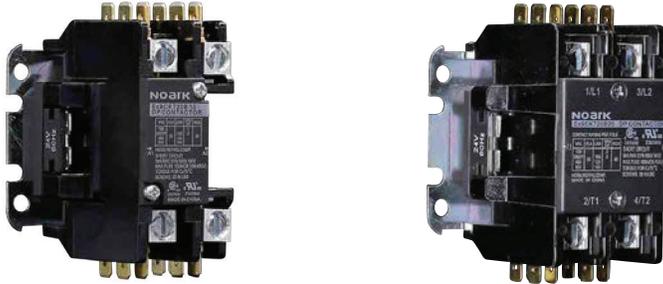
Coil Voltage Vac	25A, Lug, 50/60Hz, Dual QCT		25A, Screw, 50/60Hz, Quad QCT	
	1-pole 1NO+1Shunt		1-pole 1NO+1Shunt	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT25B10B7	1314152	Ex9CKT25B10B7Q	1314091
120	Ex9CKT25B10G7	1314153	Ex9CKT25B10G7Q	1314092
208~240	Ex9CKT25B10XU7	1314154	Ex9CKT25B10XU7Q	1314093
277	Ex9CKT25B10N7	1314155	Ex9CKT25B10N7Q	1314094
440	Ex9CKT25B10R7	1314156	Ex9CKT25B10R7Q	1314095
480	Ex9CKT25B10T7	1314157	Ex9CKT25B10T7Q	1314096
600	Ex9CKT25B10Y7	1314013	Ex9CKT25B10Y7Q	1314630
Coil Voltage Vac	25A, Lug, 50/60Hz, Dual QCT		25A, Screw, 50/60Hz, Quad QCT	
	2-pole 2NO		2-pole 2NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT25B20B7	1314467	Ex9CKT25B20B7Q	1314407
120	Ex9CKT25B20G7	1314468	Ex9CKT25B20G7Q	1314408
208~240	Ex9CKT25B20XU7	1314469	Ex9CKT25B20XU7Q	1314409
277	Ex9CKT25B20N7	1314470	Ex9CKT25B20N7Q	1314410
440	Ex9CKT25B20R7	1314471	Ex9CKT25B20R7Q	1314411
480	Ex9CKT25B20T7	1314472	Ex9CKT25B20T7Q	1314412
600	Ex9CKT25B20Y7	1314018	Ex9CKT25B20Y7Q	1314635
Coil Voltage Vac	25A, Lug, 50/60Hz, Dual QCT		25A, Screw, 50/60Hz, Dual QCT	
	3-pole 3NO		4-pole 4NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT25B30B7	1314288	Ex9CKT25B40B7	1314348
120	Ex9CKT25B30G7	1314289	Ex9CKT25B40G7	1314349
208~240	Ex9CKT25B30XU7	1314290	Ex9CKT25B40XU7	1314350
277	Ex9CKT25B30N7	1314291	Ex9CKT25B40N7	1314351
440	Ex9CKT25B30R7	1314292	Ex9CKT25B40R7	1314352
480	Ex9CKT25B30T7	1314293	Ex9CKT25B40T7	1314353
600	Ex9CKT25B30Y7	1314074	Ex9CKT25B40Y7	1314079



Definite Purpose Contactors

Ex9CKT Products

Ex9CKT 30A



Coil Voltage Vac	30A, Screw, 50/60Hz, Dual QCT		30A, Screw, 50/60Hz, Quad QCT	
	1-pole 1NO+1Shunt		1-pole 1NO+1Shunt	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT30A10B7	1314189	Ex9CKT30A10B7Q	1314127
120	Ex9CKT30A10G7	1314190	Ex9CKT30A10G7Q	1314128
208~240	Ex9CKT30A10XU7	1314191	Ex9CKT30A10XU7Q	1314129
277	Ex9CKT30A10N7	1314692	Ex9CKT30A10N7Q	1314130
440	Ex9CKT30A10R7	1314693	Ex9CKT30A10R7Q	1314131
480	Ex9CKT30A10T7	1314694	Ex9CKT30A10T7Q	1314132
600	Ex9CKT30A10Y7	1313994	Ex9CKT30A10Y7Q	1314620
Coil Voltage Vac	30A, Screw, 50/60Hz, Dual QCT		30A, Screw, 50/60Hz, Quad QCT	
	2-pole 2NO		2-pole 2NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT30A20B7	1314503	Ex9CKT30A20B7Q	1314443
120	Ex9CKT30A20G7	1314504	Ex9CKT30A20G7Q	1314444
208~240	Ex9CKT30A20XU7	1314505	Ex9CKT30A20XU7Q	1314445
277	Ex9CKT30A20N7	1314506	Ex9CKT30A20N7Q	1314446
440	Ex9CKT30A20R7	1314507	Ex9CKT30A20R7Q	1314447
480	Ex9CKT30A20T7	1314508	Ex9CKT30A20T7Q	1314448
600	Ex9CKT30A20Y7	1313999	Ex9CKT30A20Y7Q	1314625
Coil Voltage Vac	30A, Screw, 50/60Hz, Dual QCT		30A, Screw, 50/60Hz, Dual QCT	
	3-pole 3NO		4-pole 4NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT30A30B7	1314324	Ex9CKT30A40B7	1314384
120	Ex9CKT30A30G7	1314325	Ex9CKT30A40G7	1314385
208~240	Ex9CKT30A30XU7	1314326	Ex9CKT30A40XU7	1314386
277	Ex9CKT30A30N7	1314327	Ex9CKT30A40N7	1314387
440	Ex9CKT30A30R7	1314328	Ex9CKT30A40R7	1314388
480	Ex9CKT30A30T7	1314329	Ex9CKT30A40T7	1314389
600	Ex9CKT30A30Y7	1314004	Ex9CKT30A40Y7	1314009

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Definite Purpose Contactors

Ex9CKT Products

Ex9CKT 30A



Coil Voltage Vac	30A, Lug, 50/60Hz, Dual QCT		30A, Lug, 50/60Hz, Quad QCT	
	1-pole 1NO+1Shunt		1-pole 1NO+1Shunt	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT30B10B7	1314158	Ex9CKT30B10B7Q	1314097
120	Ex9CKT30B10G7	1314160	Ex9CKT30B10G7Q	1314098
208~240	Ex9CKT30B10XU7	1314161	Ex9CKT30B10XU7Q	1314099
277	Ex9CKT30B10N7	1314162	Ex9CKT30B10N7Q	1314100
440	Ex9CKT30B10R7	1314163	Ex9CKT30B10R7Q	1314101
480	Ex9CKT30B10T7	1314164	Ex9CKT30B10T7Q	1314102
600	Ex9CKT30B10Y7	1314014	Ex9CKT30B10Y7Q	1314631
Coil Voltage Vac	30A, Lug, 50/60Hz, Dual QCT		30A, Lug, 50/60Hz, Quad QCT	
	2-pole 2NO		2-pole 2NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT30B20B7	1314473	Ex9CKT30B20B7Q	1314413
120	Ex9CKT30B20G7	1314474	Ex9CKT30B20G7Q	1314414
208~240	Ex9CKT30B20XU7	1314475	Ex9CKT30B20XU7Q	1314415
277	Ex9CKT30B20N7	1314476	Ex9CKT30B20N7Q	1314416
440	Ex9CKT30B20R7	1314477	Ex9CKT30B20R7Q	1314417
480	Ex9CKT30B20T7	1314478	Ex9CKT30B20T7Q	1314418
600	Ex9CKT30B20Y7	1314019	Ex9CKT30B20Y7Q	1314636
Coil Voltage Vac	30A, Lug, 50/60Hz, Dual QCT		30A, Lug, 50/60Hz, Dual QCT	
	3-pole 3NO		4-pole 4NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT30B30B7	1314294	Ex9CKT30B40B7	1314354
120	Ex9CKT30B30G7	1314295	Ex9CKT30B40G7	1314355
208~240	Ex9CKT30B30XU7	1314296	Ex9CKT30B40XU7	1314356
277	Ex9CKT30B30N7	1314297	Ex9CKT30B40N7	1314357
440	Ex9CKT30B30R7	1314298	Ex9CKT30B40R7	1314358
480	Ex9CKT30B30T7	1314299	Ex9CKT30B40T7	1314359
600	Ex9CKT30B30Y7	1314075	Ex9CKT30B40Y7	1314080



Definite Purpose Contactors

Ex9CKT Products

Ex9CKT 32A



Coil Voltage Vac	32A, Screw, 50/60Hz, Dual QCT		32A, Screw, 50/60Hz, Quad QCT	
	1-pole 1NO+1Shunt		1-pole 1NO+1Shunt	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT32A10B7	1314695	Ex9CKT32A10B7Q	1314133
120	Ex9CKT32A10G7	1314704	Ex9CKT32A10G7Q	1314134
208~240	Ex9CKT32A10XU7	1314705	Ex9CKT32A10XU7Q	1314135
277	Ex9CKT32A10N7	1314706	Ex9CKT32A10N7Q	1314136
440	Ex9CKT32A10R7	1314707	Ex9CKT32A10R7Q	1314137
480	Ex9CKT32A10T7	1314716	Ex9CKT32A10T7Q	1314139
600	Ex9CKT32A10Y7	1313995	Ex9CKT32A10Y7Q	1314621
Coil Voltage Vac	32A, Screw, 50/60Hz, Dual QCT		32A, Screw, 50/60Hz, Quad QCT	
	2-pole 2NO		2-pole 2NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT32A20B7	1314509	Ex9CKT32A20B7Q	1314449
120	Ex9CKT32A20G7	1314510	Ex9CKT32A20G7Q	1314450
208~240	Ex9CKT32A20XU7	1314511	Ex9CKT32A20XU7Q	1314451
277	Ex9CKT32A20N7	1314512	Ex9CKT32A20N7Q	1314452
440	Ex9CKT32A20R7	1314513	Ex9CKT32A20R7Q	1314453
480	Ex9CKT32A20T7	1314514	Ex9CKT32A20T7Q	1314454
600	Ex9CKT32A20Y7	1314000	Ex9CKT32A20Y7Q	1314626
Coil Voltage Vac	32A, Screw, 50/60Hz, Dual QCT		32A, Screw, 50/60Hz, Dual QCT	
	3-pole 3NO		4-pole 4NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT32A30B7	1314330	Ex9CKT32A40B7	1314390
120	Ex9CKT32A30G7	1314331	Ex9CKT32A40G7	1314391
208~240	Ex9CKT32A30XU7	1314332	Ex9CKT32A40XU7	1314392
277	Ex9CKT32A30N7	1314333	Ex9CKT32A40N7	1314393
440	Ex9CKT32A30R7	1314334	Ex9CKT32A40R7	1314394
480	Ex9CKT32A30T7	1314335	Ex9CKT32A40T7	1314395
600	Ex9CKT32A30Y7	1314005	Ex9CKT32A40Y7	1314010

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Definite Purpose Contactors

Ex9CKT Products

Ex9CKT 32A



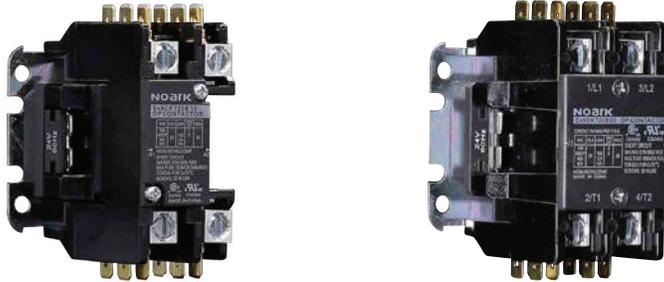
Coil Voltage Vac	32A, Lug, 50/60Hz, Dual OCT		32A, Lug, 50/60Hz, Quad OCT	
	1-pole 1NO+1Shunt		1-pole 1NO+1Shunt	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT32B10B7	1314165	Ex9CKT32B10B7Q	1314103
120	Ex9CKT32B10G7	1314166	Ex9CKT32B10G7Q	1314104
208~240	Ex9CKT32B10XU7	1314167	Ex9CKT32B10XU7Q	1314105
277	Ex9CKT32B10N7	1314168	Ex9CKT32B10N7Q	1314106
440	Ex9CKT32B10R7	1314169	Ex9CKT32B10R7Q	1314107
480	Ex9CKT32B10T7	1314170	Ex9CKT32B10T7Q	1314108
600	Ex9CKT32B10Y7	1314015	Ex9CKT32B10Y7Q	1314632
Coil Voltage Vac	32A, Lug, 50/60Hz, Dual OCT		32A, Lug, 50/60Hz, Quad OCT	
	2-pole 2NO		2-pole 2NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT32B20B7	1314479	Ex9CKT32B20B7Q	1314419
120	Ex9CKT32B20G7	1314480	Ex9CKT32B20G7Q	1314420
208~240	Ex9CKT32B20XU7	1314481	Ex9CKT32B20XU7Q	1314421
277	Ex9CKT32B20N7	1314482	Ex9CKT32B20N7Q	1314422
440	Ex9CKT32B20R7	1314483	Ex9CKT32B20R7Q	1314423
480	Ex9CKT32B20T7	1314484	Ex9CKT32B20T7Q	1314424
600	Ex9CKT32B20Y7	1314071	Ex9CKT32B20Y7Q	1314637
Coil Voltage Vac	32A, Lug, 50/60Hz, Dual OCT		32A, Lug, 50/60Hz, Dual OCT	
	3-pole 3NO		4-pole 4NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT32B30B7	1314300	Ex9CKT32B40B7	1314360
120	Ex9CKT32B30G7	1314301	Ex9CKT32B40G7	1314361
208~240	Ex9CKT32B30XU7	1314302	Ex9CKT32B40XU7	1314362
277	Ex9CKT32B30N7	1314303	Ex9CKT32B40N7	1314363
440	Ex9CKT32B30R7	1314304	Ex9CKT32B40R7	1314364
480	Ex9CKT32B30T7	1314305	Ex9CKT32B40T7	1314365
600	Ex9CKT32B30Y7	1314076	Ex9CKT32B40Y7	1314081



Definite Purpose Contactors

Ex9CKT Products

Ex9CKT 40A



Coil Voltage Vac	40A, Screw, 50/60Hz, Dual QCT		40A, Screw, 50/60Hz, Quad QCT	
	1-pole 1NO+1Shunt		1-pole 1NO+1Shunt	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT40A10B7	1314717	Ex9CKT40A10B7Q	1314140
120	Ex9CKT40A10G7	1314718	Ex9CKT40A10G7Q	1314141
208~240	Ex9CKT40A10XU7	1314719	Ex9CKT40A10XU7Q	1314142
277	Ex9CKT40A10N7	1314728	Ex9CKT40A10N7Q	1314143
440	Ex9CKT40A10R7	1314729	Ex9CKT40A10R7Q	1314144
480	Ex9CKT40A10T7	1314730	Ex9CKT40A10T7Q	1314145
600	Ex9CKT40A10Y7	1313996	Ex9CKT40A10Y7Q	1314622
Coil Voltage Vac	40A, Screw, 50/60Hz, Dual QCT		40A, Screw, 50/60Hz, Quad QCT	
	2-pole 2NO		2-pole 2NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT40A20B7	1314515	Ex9CKT40A20B7Q	1314455
120	Ex9CKT40A20G7	1314516	Ex9CKT40A20G7Q	1314456
208~240	Ex9CKT40A20XU7	1314517	Ex9CKT40A20XU7Q	1314457
277	Ex9CKT40A20N7	1314518	Ex9CKT40A20N7Q	1314458
440	Ex9CKT40A20R7	1314519	Ex9CKT40A20R7Q	1314459
480	Ex9CKT40A20T7	1314520	Ex9CKT40A20T7Q	1314460
600	Ex9CKT40A20Y7	1314001	Ex9CKT40A20Y7Q	1314627
Coil Voltage Vac	40A, Screw, 50/60Hz, Dual QCT		40A, Screw, 50/60Hz, Dual QCT	
	3-pole 3NO		4-pole 4NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT40A30B7	1314336	Ex9CKT40A40B7	1314396
120	Ex9CKT40A30G7	1314337	Ex9CKT40A40G7	1314397
208~240	Ex9CKT40A30XU7	1314338	Ex9CKT40A40XU7	1314398
277	Ex9CKT40A30N7	1314339	Ex9CKT40A40N7	1314399
440	Ex9CKT40A30R7	1314340	Ex9CKT40A40R7	1314400
480	Ex9CKT40A30T7	1314341	Ex9CKT40A40T7	1314401
600	Ex9CKT40A30Y7	1314006	Ex9CKT40A40Y7	1314011

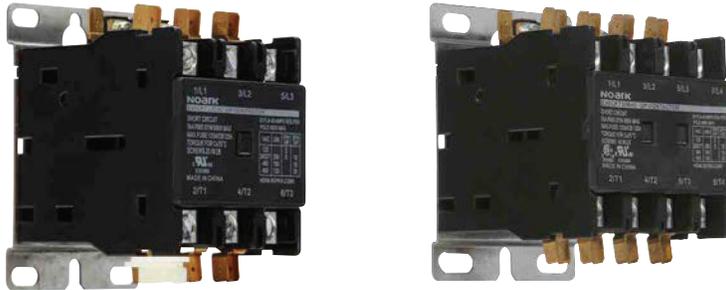
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Definite Purpose Contactors

Ex9CKT Products

Ex9CKT 40A



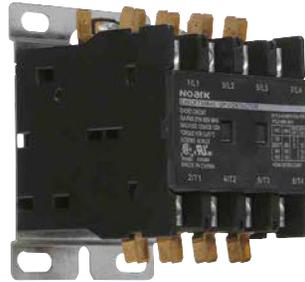
Coil Voltage Vac	40A, Lug, 50/60Hz, Dual QCT		40A, Lug, 50/60Hz, Dual QCT	
	1-pole 1NO+1Shunt		1-pole 1NO+1Shunt	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT40B10B7	1314171	Ex9CKT40B10B7Q	1314109
120	Ex9CKT40B10G7	1314172	Ex9CKT40B10G7Q	1314110
208~240	Ex9CKT40B10XU7	1314173	Ex9CKT40B10XU7Q	1314111
277	Ex9CKT40B10N7	1314174	Ex9CKT40B10N7Q	1314112
440	Ex9CKT40B10R7	1314175	Ex9CKT40B10R7Q	1314113
480	Ex9CKT40B10T7	1314176	Ex9CKT40B10T7Q	1314114
600	Ex9CKT40B10Y7	1314016	Ex9CKT40B10Y7Q	1314633
Coil Voltage Vac	40A, Lug, 50/60Hz, Dual QCT		40A, Lug, 50/60Hz, Dual QCT	
	2-pole 2NO		2-pole 2NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT40B20B7	1314485	Ex9CKT40B20B7Q	1314425
120	Ex9CKT40B20G7	1314486	Ex9CKT40B20G7Q	1314426
208~240	Ex9CKT40B20XU7	1314487	Ex9CKT40B20XU7Q	1314427
277	Ex9CKT40B20N7	1314488	Ex9CKT40B20N7Q	1314428
440	Ex9CKT40B20R7	1314489	Ex9CKT40B20R7Q	1314429
480	Ex9CKT40B20T7	1314490	Ex9CKT40B20T7Q	1314430
600	Ex9CKT40B20Y7	1314072	Ex9CKT40B20Y7Q	1314638
Coil Voltage Vac	40A, Lug, 50/60Hz, Dual QCT		40A, Lug, 50/60Hz, Dual QCT	
	3-pole 3NO		4-pole 4NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CKT40B30B7	1314306	Ex9CKT40B40B7	1314366
120	Ex9CKT40B30G7	1314307	Ex9CKT40B40G7	1314367
208~240	Ex9CKT40B30XU7	1314308	Ex9CKT40B40XU7	1314368
277	Ex9CKT40B30N7	1314309	Ex9CKT40B40N7	1314369
440	Ex9CKT40B30R7	1314310	Ex9CKT40B40R7	1314370
480	Ex9CKT40B30T7	1314311	Ex9CKT40B40T7	1314371
600	Ex9CKT40B30Y7	1314077	Ex9CKT40B40Y7	1314082



Definite Purpose Contactors

Ex9CK Products

Ex9CK 50-90A



Coil Voltage Vac	50A, Lug, 50/60Hz, Dual QCT		60A, Lug, 50/60Hz, Dual QCT	
	3-pole 3NO		3-pole 3NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CK50B30B7	1314521	Ex9CK60B30B7	1314533
120	Ex9CK50B30G7	1314524	Ex9CK60B30G7	1314536
208~240	Ex9CK50B30XU7	1314527	Ex9CK60B30XU7	1314539
277	Ex9CK50B30N7	1314528	Ex9CK60B30N7	1314540
440	Ex9CK50B30R7	1314530	Ex9CK60B30R7	1314542
480	Ex9CK50B30T7	1314531	Ex9CK60B30T7	1314543
600	Ex9CK50B30Y7	1314532	Ex9CK60B30Y7	1314544

Coil Voltage Vac	75A, Lug, 50/60Hz, Dual QCT		90A, Lug, 50/60Hz, Dual QCT	
	3-pole 3NO		3-pole 3NO	
	Catalog number	Item number	Catalog number	Item number
24	Ex9CK75B30B7	1314545	Ex9CK90B30B7	1314557
120	Ex9CK75B30G7	1314548	Ex9CK90B30G7	1314560
208~240	Ex9CK75B30XU7	1314551	Ex9CK90B30XU7	1314563
277	Ex9CK75B30N7	1314552	Ex9CK90B30N7	1314564
440	Ex9CK75B30R7	1314554	Ex9CK90B30R7	1314566
480	Ex9CK75B30T7	1314555	Ex9CK90B30T7	1314567
600	Ex9CK75B30Y7	1314556	Ex9CK90B30Y7	1314568





Definite Purpose Contactors

Ex9CKT Specifications

20~40A FLA

Description	Poles	Full Load Amperage (A)			Resistive @ 600Vac (A)	Locked Rotor (A)			Horsepower (hp)					
		240/277V	480V	600V		240/277V	480V	600V	Voltage (V)	1-phase	3-phase			
Ex9CKT20	1 & 2	25			35	150	125	100	120	1	-			
									240	2	-			
									120	2	-			
									240	3	-			
Ex9CKT25	1 & 2				25			35	150	125	100	120	1	-
												240	2	-
												120	2	-
												240	3	-
Ex9CKT30	1 & 2	32						40	200	150	120	120	1	-
												240	2	-
												120	2	-
												240	3	-
Ex9CKT32	1 & 2				32			40	200	150	120	120	1	-
												240	2	-
												120	2	-
												240	3	-
Ex9CKT40	1 & 2	40						50	240	200	160	120	2	-
												240	3	-
												120	2	-
												240	3	-
Ex9CKT20	3 & 4				25			35	150	125	100	120	2	-
												240/277	5	10
												480	-	15
												600	-	20
Ex9CKT25	3 & 4	25						35	150	125	100	120	2	-
												240/277	5	10
												480	-	15
												600	-	20
Ex9CKT30	3 & 4				32			40	200	150	120	120	2	-
												240/277	5	10
												480	-	15
												600	-	20
Ex9CKT32	3 & 4	32						40	200	150	120	120	2	-
												240/277	5	10
												480	-	15
												600	-	20
Ex9CKT40	3 & 4				40			50	240	200	160	120	3	-
												240/277	7.5	10
												480	-	20
												600	-	25



Definite Purpose Contactors

Ex9CK Specifications

Ex9CK 50~90A FLA

Description	Poles	Full Load Amperage (A)			Resistive @ 600 Vac (A)	Locked Rotor (A)			Horsepower (hp)		
		240/277V	480V	600V		240/277V	480V	600V	Voltage (V)	1-phase	3-phase
Ex9CK50	3	50		65	300	250	200	110/120	3	-	
								200/208	7.5	15	
								240/277	10	15	
								480	-	25	
								600	-	25	
Ex9CK60	3	60		75	360	300	240	110/120	5	-	
								200/208	7.5	25	
								240/277	10	25	
								480	-	30	
								600	-	30	
Ex9CK75	3	75		90	450	375	300	110/120	5	-	
								200/208	10	20	
								240/277	15	25	
								480	-	50	
								600	-	50	
Ex9CK90	3	90		120	540	450	360	110/120	7.5	-	
								200/208	15	25	
								240/277	20 (88A FLA)	30	
								480	-	60	
								600	-	60 (62A FLA)	



Mechanical & Electrical Life

Mechanical	1,000,000 cycles
Electrical	250,000 cycle (AC Resistance Air Heating Load) /100,000 cycle (Inductive Load)



Definite Purpose Contactors

Ex9CKT Specifications

1-pole Contactors FLA (20-40A)

	Coil Data						
	24V	120V	208-240V	277V	440V	480V	600V
Nominal Coil Resistance (Ω)	14.8	420	1185	2050	5400	6890	9480
Nominal Coil Voltage (Vac)	24	120	208-240	277	440	480	600
Pick-up Voltage (Max.)	20.4	102	177	236	374	408	510
Drop-out Voltage (Min)	4.8	24	48	56	88	96	120
Nominal Inrush (VA)							
50Hz	32	32	32	32	32	32	32
60Hz	31.5	31.5	31.5	31.5	31.5	31.5	31.5
Nominal Seal (VA)							
50Hz	9.3	9.3	9.3	9.3	9.3	9.3	9.3
60Hz	9	9	9	9	9	9	9

2-pole Contactors FLA (20-40A)

	Coil Data						
	24V	120V	208-240V	277V	440V	480V	600V
Nominal Coil Resistance (Ω)	10.5	250	880	1400	3630	3845	6250
Nominal Coil Voltage (Vac)	24	120	208-240	277	440	480	600
Pick-up Voltage (Max.)	20.4	102	177	236	374	408	510
Drop-out Voltage (Min)	4.8	24	48	56	88	96	120
Nominal Inrush (VA)							
50Hz	40	40	40	40	40	40	40
60Hz	38.5	38.5	38.5	38.5	38.5	38.5	38.5
Nominal Seal (VA)							
50Hz	10	10	10	10	10	10	10
60Hz	9.5	9.5	9.5	9.5	9.5	9.5	9.5



Definite Purpose Contactors

Ex9CKT Specifications

3-pole Contactors FLA (20-40A)

	Coil Data						
	24V	120V	208-240V	277V	440V	480V	600V
Nominal Coil Resistance (Ω)	8.5	178	630	1180	1205	2650	5150
Nominal Coil Voltage (Vac)	24	120	208-240	277	440	480	600
Pick-up Voltage (Max.)	20.4	102	177	236	374	408	510
Drop-out Voltage (Min)	4.8	24	48	56	88	96	120
Nominal Inrush (VA)							
50Hz	60	60	75	60	60	60	60
60Hz	53	53	68	53	53	53	53
Nominal Seal (VA)							
50Hz	8	8	11	8	8	8	8
60Hz	6.5	6.5	8.8	6.5	6.5	6.5	6.5

4-pole Contactors FLA (20-40A)

	Coil Data						
	24V	120V	208-240V	277V	440V	480V	600V
Nominal Coil Resistance (Ω)	6	152.5	527	790	1700	2530	3480
Nominal Coil Voltage (Vac)	24	120	208-240	277	440	408	600
Pick-up Voltage (Max.)	20.4	102	177	236	374	320	510
Drop-out Voltage (Min)	4.8	24	48	56	88	96	120
Nominal Inrush (VA)							
50Hz	80.5	80.5	80.5	80.5	84	80.5	80.5
60Hz	73	73	73	73	76	73	73
Nominal Seal (VA)							
50Hz	10.5	10.5	10.5	10.5	10.5	10.5	10.5
60Hz	8.8	8.8	8.8	8.8	8.8	8.5	8.8





Definite Purpose Contactors

Ex9CK Specifications

50~90A FLA Coil

		50	60	75	90
Poles		3-Pole			
Power Consumption*	In-Rush (Vac) @ 50Hz	84		165	
	Sealed (Vac) @ 50Hz	14		30	
	In-Rush (Vac) @ 60Hz	83		250	
	Sealed (Vac) @ 60Hz	9.3		27	
Operation Range	Pick-Up Voltage	85~110% US			
	Drop-Out Voltage	20~65% US			
Power Supply Voltage Us		50/6Hz; 24~600Vac			

* Power consumption is the same for 24, 120, 240, 277 and 480 Vac



Definite Purpose Contactors

Specifications

20~90A FLA Terminal

1 and 2 Pole (20-40A)

			20	25	30	32	40
Line and Load Terminals			#10-32 Screw Box Lug				
Copper Cable AWG (mm ²)	Ridge Wire with Single Core	Screw	14~10 (2.5~6)		12~8 (6~10)		10~8 (4~10)
		Lug	14~10 (2.5~6)		12~8 (6~10)		10~8 (4~10)
	Flexible Stranded Wire	Screw	14~12 (2.5~4)		14~10 (2.5~6)		14~10 (2.5~6)
		Lug	14~12 (2.5~4)		14~10 (2.5~6)		14~10 (2.5~6)
Tightening Torque in-lb (N.m)	Coil		-				
	Main Circuit	Screw	20 (2.3)				
		Lug	40 (4.5)				
Quick Connects	Coil Terminals		Dual 0.250 QC (2)				
	Power Terminals		Dual 0.25 QC (2 or 4)				
Insulation System			Class B 266°F (130°C)				

3 and 4-pole (20-40A)

			20	25	30	32	40		
Line and Load Terminals			#10-32 Screw Box Lug						
Copper Cable AWG (mm ²)	Ridge Wire with Single Core	Screw	14~10 (2.5~6)	12~8 (4~10)	16~8 (1.5~10)	2~8 (4~10)	16~8 (1.5~10)	2~8 (4~10)	16~8 (1.5~10)
		Lug	14~8 (2.5~10)						
	Flexible Stranded Wire	Screw	14~12 (2.5~6)						
		Lug	14~8 (2.5~10)						
Tightening Torque in-lb (N.m)	Coil		10.5 (1.2)						
	Main Circuit	Screw	20 (2.3)						
		Lug	40 (4.5)						
Quick Connects	Coil Terminals		Dual 0.250 QC (2)						
	Power Terminals		3/4P Dual						
Insulation System			Class B 266°F (130°C)						

3-pole (50-90A)

			50	60	75	90
Line and Load Terminals			#10-32 Screw Box Lug			
Copper Cable AWG (mm ²)	Ridge Wire with Single Core	Screw	-			
		Lug	10~6 (6~16) (this is for 50)	14~6 (2.5~16) (this is for 60)	6~3 (16~35)	4~3 (25~35)
	Flexible Stranded Wire	Screw	-			
		Lug	10~8 (4~10)		8~4 (10~25)	8~4 (16~25)
Tightening Torque in-lb (N.m)	Coil		10 (0.8~1.2)			
	Main Circuit	Screw	-			
		Lug	40 (4.5)		50 (5.6)	
Quick Connects	Coil Terminals	Dual 0.250 QC (2)	6-32 Screw and 0.250 QC (2)		Dual 0.250 QC (2)	
	Power Terminals		Dual 0.250 QC (2)			
Insulation System			Class B 266°F (130°C)			





Definite Purpose Contactors

Specifications

SCCR Ratings

* CB: must be NOARK UL MCCB M1N

SCCR (kA)	600V			480V		
	Ex9CKT	Fuse Type	Max. Rated Current	CB*	Max. Rated Current	
100	Ex9CKT20...	Class J	80A	M1N50T3L	50A	
	Ex9CKT25...					
	Ex9CKT30...					
	Ex9CKT32...					
	Ex9CKT40...		200A	100A	M1N70T3L	70A
	Ex9CK50...				M1N100T3L	100A
	Ex9CK60...			M1N125T3L M2N125T3L	125A	
	Ex9CK75...					
Ex9CK90...						

Lighting Data

25-40A; 1P/2P

Inductive Rating (DP Contactor FLA)	Tungsten & Ballast Rating
25A	30A
30A	40A
40A	40A (Ballast) 50A (Tungsten)

25-40A; 3P/4P

Inductive Rating (DP Contactor FLA)	Tungsten & Ballast Rating
25A	30A
30A	40A
40A	40A (Ballast) 50A (Tungsten)



Definite Purpose Contactors

Ex9CKT/Ex9CK Packaging

Full Load Amperage (A)	Poles	MOQ	Quantity (pc/carton)	Carton Weight lbs (kgs)		Piece Weight lbs (kgs)		Carton Dimensions in (mm)
				Gross	Net	Gross	Net	
20	1	64	64	45.03 (20.42)	40.96 (18.60)	0.7 (0.32)	0.64 (0.29)	15.67x9.53x12.64 (398x250x335)
25				45.03 (20.42)	40.96 (18.60)	0.7 (0.32)	0.64 (0.29)	
30				45.03 (20.42)	40.96 (18.60)	0.7 (0.32)	0.64 (0.29)	
32				45.03 (20.42)	40.96 (18.60)	0.7 (0.32)	0.64 (0.29)	
40				45.03 (20.42)	40.96 (18.60)	0.7 (0.32)	0.64 (0.29)	
20	2			53.62 (24.32)	48.00 (21.77)	0.84 (0.38)	0.75 (0.34)	
25				53.62 (24.32)	48.00 (21.77)	0.84 (0.38)	0.75 (0.34)	
30				53.62 (24.32)	48.00 (21.77)	0.84 (0.38)	0.75 (0.34)	
32				53.62 (24.32)	48.00 (21.77)	0.84 (0.38)	0.75 (0.34)	
40				53.62 (24.32)	48.00 (21.77)	0.84 (0.38)	0.75 (0.34)	
20	3	54	54	56.48 (25.62)	52.14 (23.65)	1.04 (0.47)	0.97 (0.44)	15.67x9.53x12.64 (476x325x291)
25				56.48 (25.62)	52.14 (23.65)	1.04 (0.47)	0.97 (0.44)	
30				56.48 (25.62)	52.14 (23.65)	1.04 (0.47)	0.97 (0.44)	
32				56.48 (25.62)	52.14 (23.65)	1.04 (0.47)	0.97 (0.44)	
40				56.48 (25.62)	52.14 (23.65)	1.04 (0.47)	0.97 (0.44)	
20	4	24	24	32.83 (14.89)	30.42 (13.8)	1.37 (0.62)	1.27 (0.58)	15.67x9.53x12.64 (424x254x206)
25				32.83 (14.89)	30.42 (13.8)	1.37 (0.62)	1.27 (0.58)	
30				32.83 (14.89)	30.42 (13.8)	1.37 (0.62)	1.27 (0.58)	
32				32.83 (14.89)	30.42 (13.8)	1.37 (0.62)	1.27 (0.58)	
40				32.83 (14.89)	30.42 (13.8)	1.37 (0.62)	1.27 (0.58)	
50	3	27	27	38.18 (17.29)	34.56 (15.68)	1.41 (0.64)	1.28 (0.58)	15.67x9.53x12.64 (398x242x321)
60				38.18 (17.29)	34.56 (15.68)	1.41 (0.64)	1.28 (0.58)	
75		12	12	43.43 (19.70)	39.96 (18.13)	3.62 (1.64)	3.33 (1.51)	14.33x8.82x16.50 (364x224x419)
90				43.43 (19.70)	39.96 (18.13)	3.62 (1.64)	3.33 (1.51)	



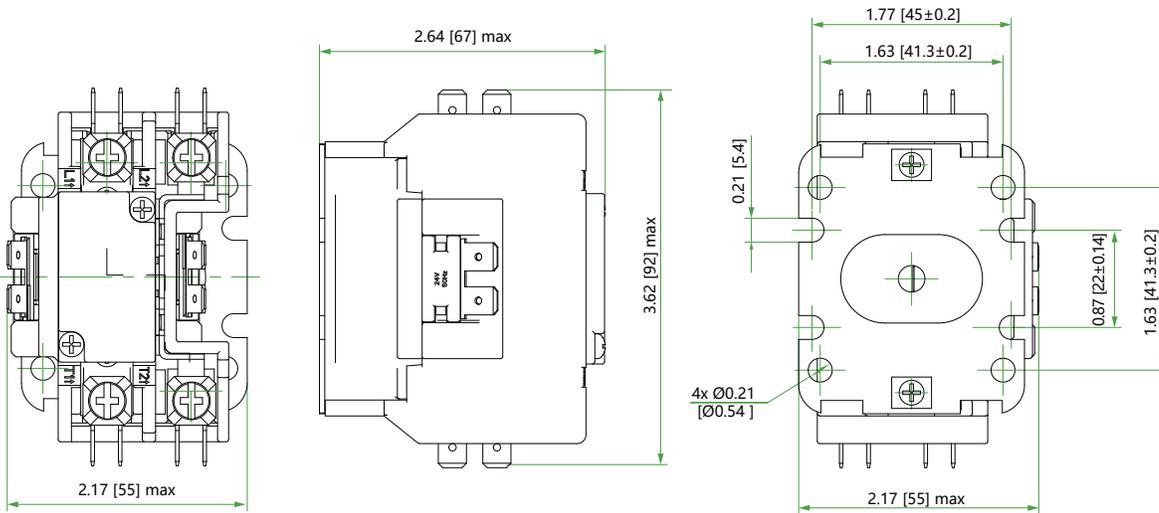


Definite Purpose Contactors

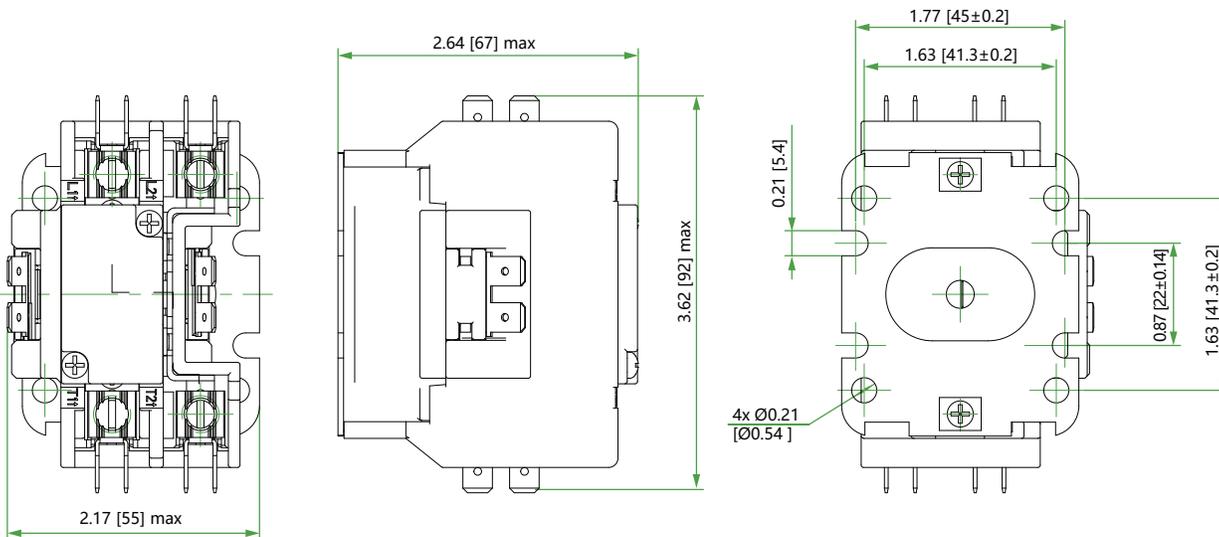
Ex9CKT Dimensions

Ex9CKT20~40 Screw 1-pole

in [mm]



Ex9CKT20~40 Lug 1-pole



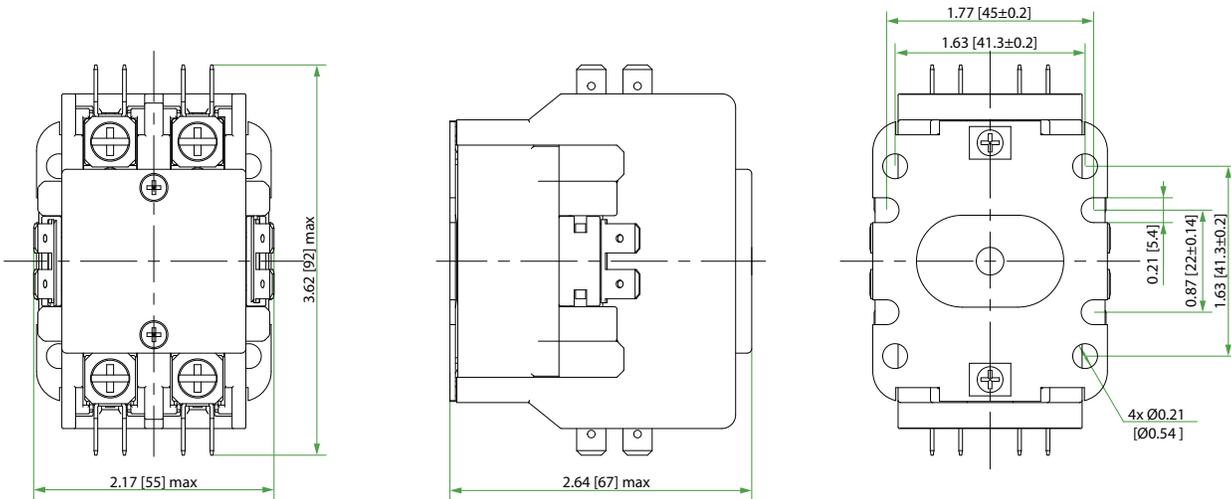


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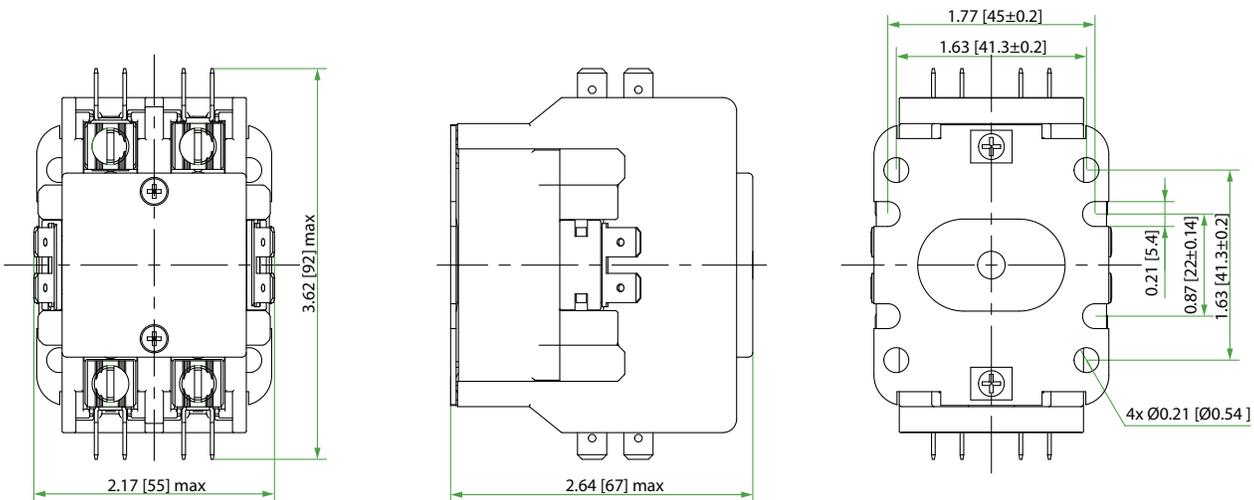
Ex9CKT Dimensions

Ex9CKT20~40 Screw 2-pole

in [mm]



Ex9CKT20~40 Lug 2-pole



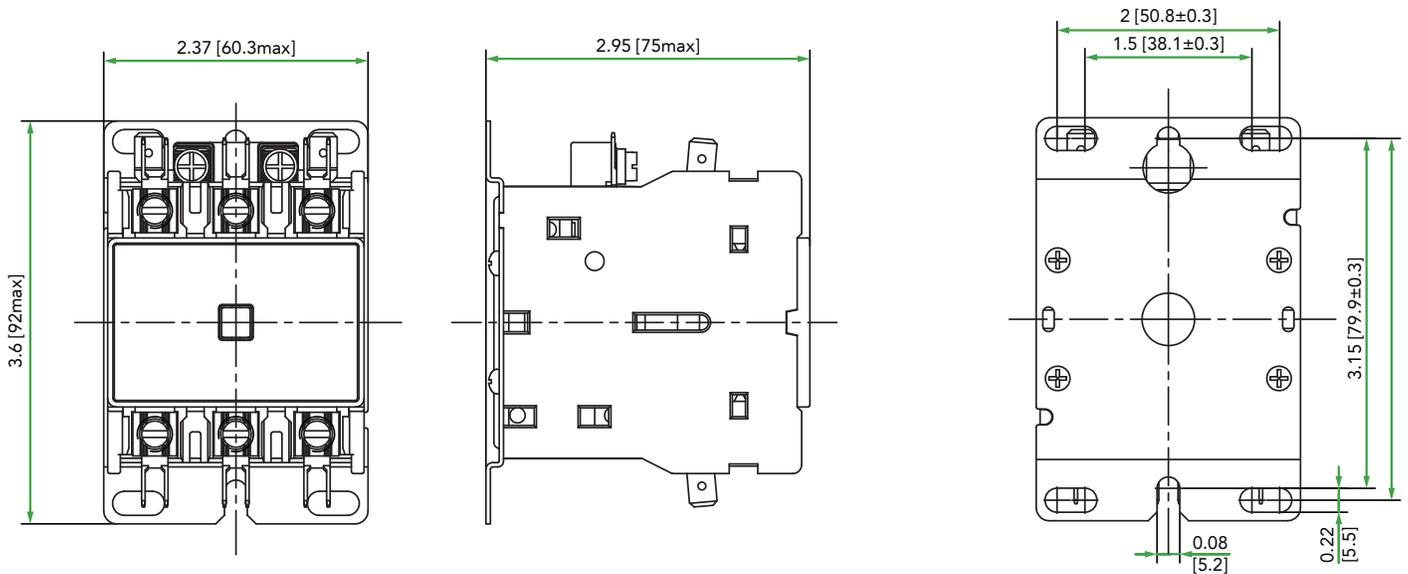


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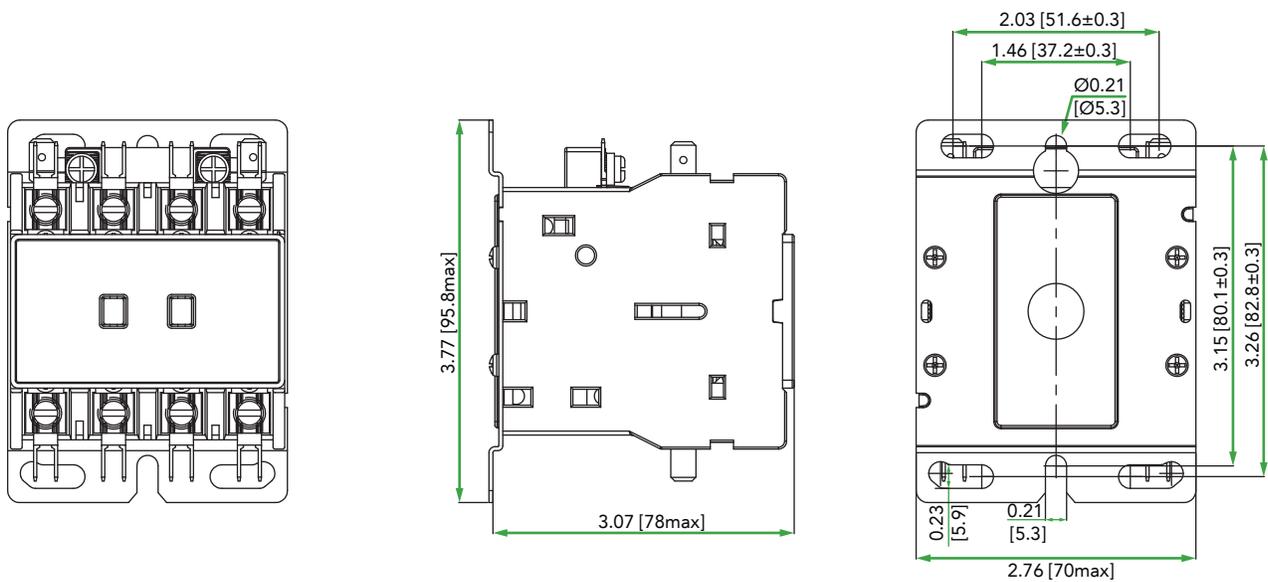
Ex9CKT Dimensions

Ex9CKT20~40 3-pole

in [mm]



Ex9CKT20~40 4-pole



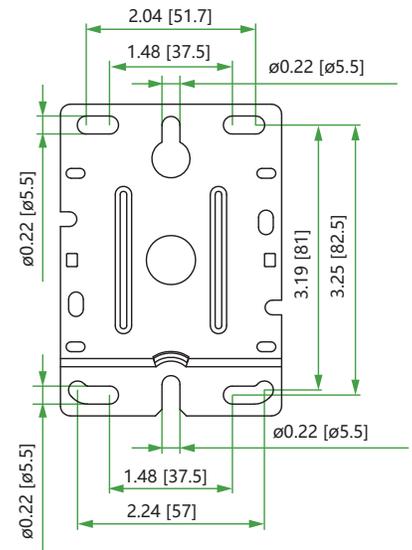
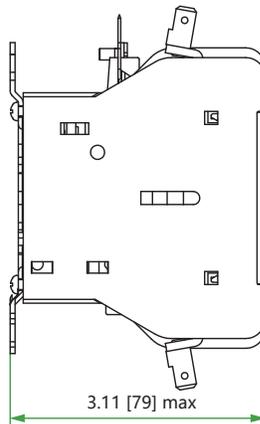
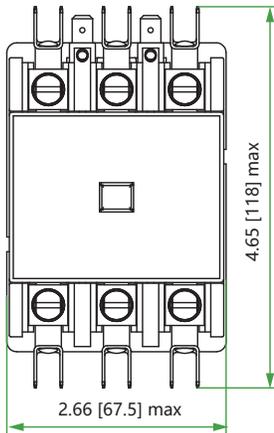


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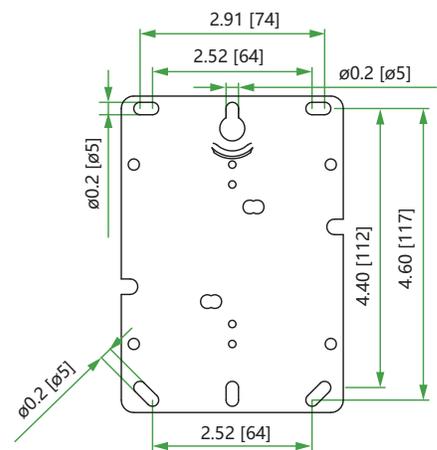
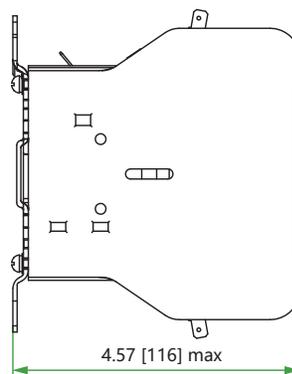
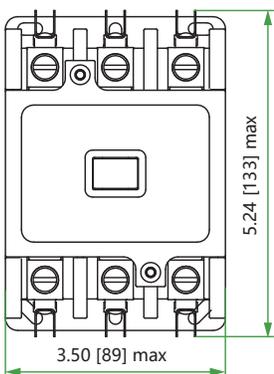
Ex9CK Dimensions

Ex9CK50~60 3-pole

in [mm]



Ex9CK75~90 3-pole

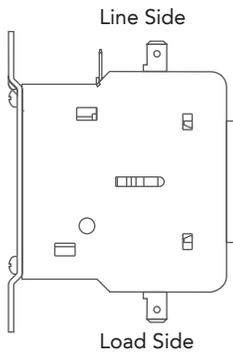




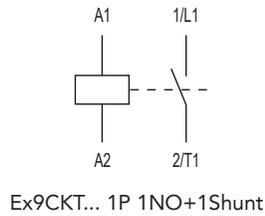
Definite Purpose Contactors

Ex9CKT/Ex9CK Wiring Diagram

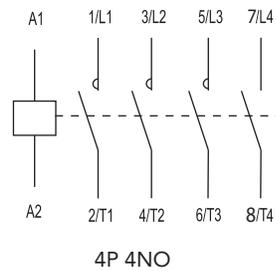
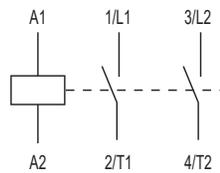
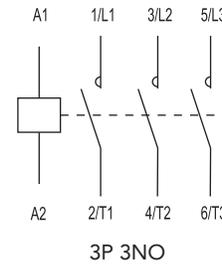
Ex9CKT20~40



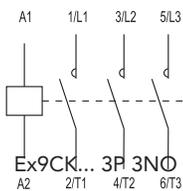
Ex9CKT20~40



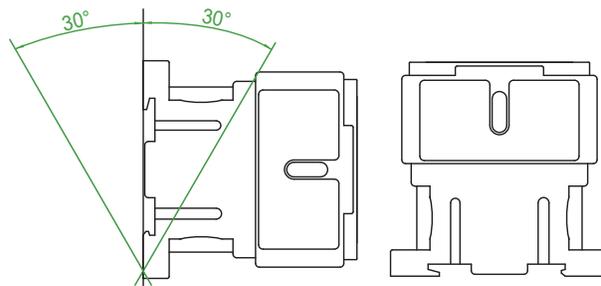
Ex9CKT20~40



Ex9CKT20~40



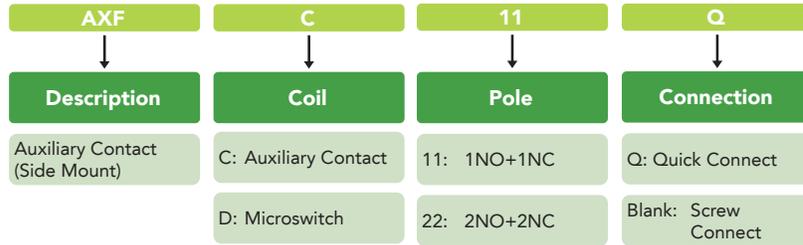
Ex9CK50 ~ 90





Definite Purpose Contactors

Ex9CKT/Ex9CK Accessories and Specifications



Accessory Description	Matched Contactor	Product	Item number
Auxiliary Contact (Side Mount)	Ex9CK20~90 3P Ex9CKT20~40 3P & 4P	AXFC11	1311725
		AXFC11Q	1314051
Microswitch	Ex9CKT20~40 3P & 4P	AXFD11	1314052
		AXFD22	1314053

- Contact a NOARK sales representative for more information.

Auxiliary Contact	AXFC11/AXFC11Q	AXFD11	AXFD22
Microswitch	-	SPDT One Switch Per Side	SPDT Two Switches Per Side
Mounting	Side Mounted (Maximum of two) Ex9CKT 20-40 Side Mounted Only	One Auxiliary Only	
	1NO+1NC	1NO+1NC	2NO+2NC
Wiring	0.250 Quick Connection Terminals		
	#6~32 Screw Terminal	-	

Contact Ratings - AXFC		
Break (A)	120Vac	3
	240Vac	1.50
	480Vac	0.75
	600Vac	0.60
Make (A)	120Vac	30
	240Vac	15
	480Vac	7.50
	600Vac	6
Continuous (A)	120Vac	10
	240Vac	
	480Vac	
	600Vac	

Contact Ratings - AXFD	
125 or 250Vac	15A
120Vac on Lamp Load	4A
125Vdc	1/2A
250Vdc	1/4A



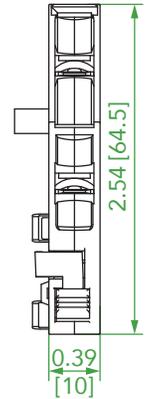
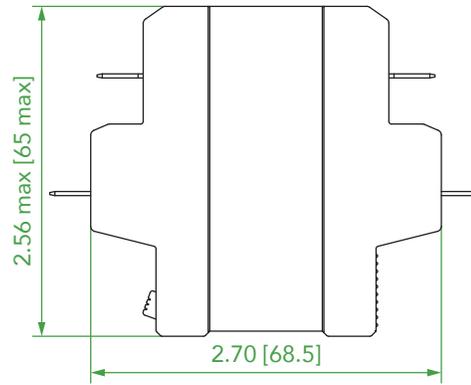
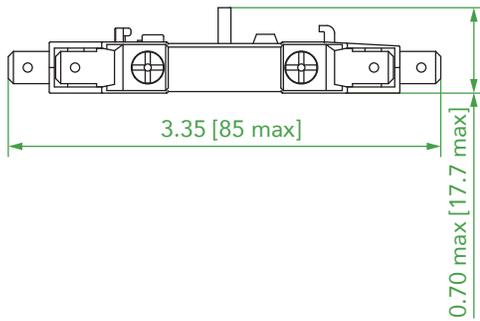


Definite Purpose Contactors

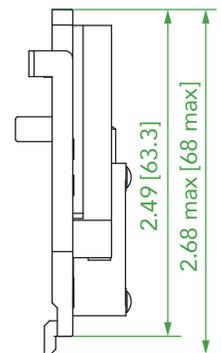
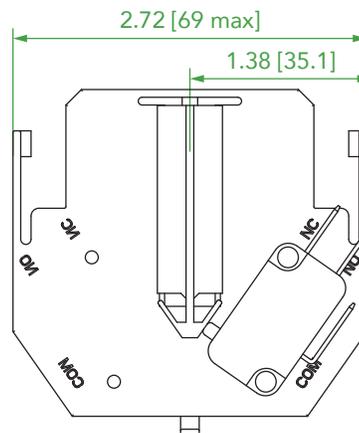
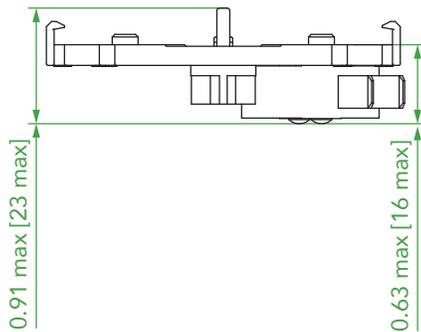
Ex9CKT/Ex9CK Accessories Dimensions

AXFC11/AXFC11Q

in [mm]



AXFD11/AXFD22



• Contact a NOARK sales representative for AXFB11 and AXFB11Q dimensions.



Ex9S Manual Motor Starters

Product Overview

Ex9S Manual Motor Starters provide manual isolation, manual motor control, and overcurrent protection. They are electro-mechanical devices combining the functions below in one unit.

- Disconnect for Motor Branch Circuit
- Manual Motor Control (automatic when used with contactor)
- Branch-Circuit Short Circuit Protection (Magnetic Protection)
- Overload Protection (Thermal Protection) - Trip Class 10

The National Electrical Code requires an individual Motor Branch Circuit to be protected by a UL/CSA Listed Fuse, Circuit breaker or Self-Protected Combination Motor Controller.

Design Features

- Up to 80A @600Vac
- UL 60947-4-1 Type E Self Protection-Ex9S32 and Ex9S80
- UL 60947-4-1 Type F Group Motor Protection-Ex9S32
- Built-in fault indication
- Full range of accessories
- Lockable handle

Certifications

- UL listed
- CCC Certified
- NOM Certified
- RoHs Compliant



Standards Compliance

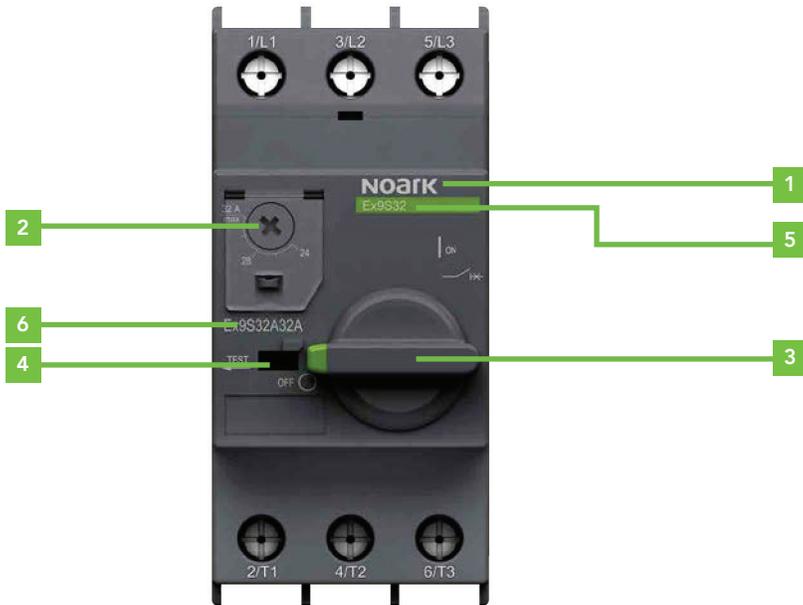
- UL 60947-1; UL 60947-4-1
- IEC/EN 60947-1, IEC/EN 60947-2, IEC/EN 60947-4-1, IEC/EN 60947 -5-1
- GB 14048.1, GB 14048.2, GB 14048.4
- CSA 22.2 NO. 60947-1, CSA 22.2 NO. 60947-4-1



Ex9S Manual Motor Starters

Product Label/Product Selection Guide

Ex9S Product Label



- | | |
|---|----------------------------|
| 1 | Brand |
| 2 | Adjustable Current Range |
| 3 | Rotary Handle with Padlock |
| 4 | Test Button |
| 5 | Product Selection |
| 6 | Rated Current |

Ex9S Product Selection Guide

Ex9S	32	A	25	A	M
NOARK Manual Motor Starter	Frame Sizes	Operation Type	Setting Current	Instantaneous Magnetic Trip Type	Protection Type
	32: Up to 32A 80: Up to 80A	A: Rotary Operation B: Pushbutton Operation (Not Available Now)	* 0.16: 0.1-0.16A 0.25: 0.16-0.25A 0.4: 0.25-0.4A 0.63: 0.4-0.63A 1: 0.63-1A 1.6: 1-1.6A 2.5: 1.6-2.5A 4: 2.5-4A 6.3: 4-6.3A 10: 6-10A 14: 9-14A 18: 13-18A 23: 17-23A 25: 20-25A 32: 24-32A ** 20: 14-20A 25: 18-25A 32: 23-32A 40: 30-40A 50: 38-50A 63: 48-63A 72: 60-72A 80: 70-80A	A : Standard **B: High	Blank: Thermal-Magnetic **M: Magnetic

* Applies to Ex9S32
** Applies to Ex9S80



Ex9S Manual Motor Starters

Products



Ex9S32		
Rated Current Amp (Min-Max)	Thermal Magnetic protection	
	Catalog number	Item number
0.10~0.16	Ex9S32A0.16A	1600046
0.16~0.25	Ex9S32A0.25A	1600047
0.25~0.40	Ex9S32A0.4A	1600048
0.40~0.63	Ex9S32A0.63A	1600049
0.63~1	Ex9S32A1A	1600050
1~1.6	Ex9S32A1.6A	1600051
1.6~2.5	Ex9S32A2.5A	1600052
2.5~4	Ex9S32A4A	1600053
Rated Current Amp (Min-Max)	Thermal Magnetic protection	
	Catalog number	Item number
4~6.3	Ex9S32A6.3A	1600054
6~10	Ex9S32A10A	1600055
9~14	Ex9S32A14A	1600056
13~18	Ex9S32A18A	1600057
17~23	Ex9S32A23A	1600058
20~25	Ex9S32A25A	1600059
24~32	Ex9S32A32A	1600060

Ex9S80		
Rated Current Amp (Min-Max)	Thermal Magnetic protection	
	Catalog number	Item number
14~20	Ex9S80A20A	1600170
18~25	Ex9S80A25A	1600171
23~32	Ex9S80A32A	1600172
30~40	Ex9S80A40A	1600173
38~50	Ex9S80A50A	1600174
48~63	Ex9S80A63A	1600175
60~72	Ex9S80A72A	1600176
70~80	Ex9S80A80A	1600177
Rated Current Amp (Min-Max)	Magnetic protection	
	Catalog number	Item number
14~20	Ex9S80A20AM	1600185
18~25	Ex9S80A25AM	1600186
23~32	Ex9S80A32AM	1600187
30~40	Ex9S80A40AM	1600188
38~50	Ex9S80A50AM	1600189
48~63	Ex9S80A63AM	1600190
60~72	Ex9S80A72AM	1600191
70~80	Ex9S80A80AM	1600192
Rated Current Amp (Min-Max)	Thermal Magnetic protection	
	Catalog number	Item number
14~20	Ex9S80A20B	1600178
18~25	Ex9S80A25B	1600179
23~32	Ex9S80A32B	1600180
30~40	Ex9S80A40B	1600181
38~50	Ex9S80A50B	1600182
48~63	Ex9S80A63B	1600183
60~72	Ex9S80A72B	1600184
Rated Current Amp (Min-Max)	Magnetic protection	
	Catalog number	Item number
14~20	Ex9S80A20BM	1600193
18~25	Ex9S80A25BM	1600194
23~32	Ex9S80A32BM	1600195
30~40	Ex9S80A40BM	1600196
38~50	Ex9S80A50BM	1600197
48~63	Ex9S80A63BM	1600198
60~72	Ex9S80A72BM	1600199



Ex9S Manual Motor Starters

Specifications

Technical Data

Description		Ex9S32	Ex9S80
Rated operational current I _o (A)		32A	80A
Conventional rated thermal current I _{th} (A)		0.16~32A	14~80A
Tripping Class		10	
Rated insulation voltage U _i (Vac)		690/IEC; 600/UL, CSA	
Rated operational voltage U _e (AC)		230/240, 400/415, 460/480, 575/600	
Rated impulse withstand voltage U _{imp} (AC)		6,000V	
Rated Operational Frequency (Hz)		50/60Hz	
Resistance to shock		30 gn -11 ms	
Resistance to vibrations		5gn (5 -150Hz)	
Environmental Temperature	Transportation or Storage	-40°F to 176°F (-40°C to 80°C) ¹	
	Working at	-4°F to 140°F (-20°C to 60°C) ²	
	Testing at	59°F to 77°F (15°C to 25°C)	
	Instantaneous limit	-31°F to 158°F (-35°C to 70°C)	
Altitude ft (m)		Not to exceed 6,562 (2,000)	
Ambient Conditions		At mounting site, relative humidity not exceed 90% at the temperature 104°F (40°C), higher relative humidity is allowable under lower temperature	
Pollution Grade		III	
Mounting Conditions		The inclination between the mounting plane and the vertical plane shall not exceed 30°; The product shall be installed and operated at a place without obvious shock, impact and vibration.	
Service life* (cycles)	Electrical	50,000	50,000 (up to 63A); 30,000 (72A&80A)
	Mechanical	100,000	50,000 (up to 72A); 30,000 (80A)
Duty Class (cycles/hr)		30, max. operating rate	
Degree of Protection		IP 20	

1: 24 hours max. at the ultimated temperature

2: with temperature reduction factor

*: close/open operation, and 30cycles/hr for AC-3 Duty @ 400/415Vac



Ex9S Manual Motor Starters

Specifications

Overload Protection Properties					
	Multiple of Setting Current	Initial Status	Time	Expected Results	Ambient Temperature
1	1.05	Cold Status	$t \geq 2h$	Non-Tripping	68°F to ±35.6°F (+20°C to ±2°C)
2	1.25	Heat Status (right after test 1)	$t < 2h$	Tripping	
3	1.50		$t < 4 \text{ min}$		
4	7.20	Cold Status	$4s < t \leq 10s$		

Phase Failure Protection Properties						
	Multiple of Setting Current		Initial Status	Time	Expected Results	Ambient Temperature
	Any 2 Phase	The Other Phase				
1	1.0	0.9	Cold Status	$t \geq 2h$	Non-Tripping	68°F to ±35.6°F (+20°C to ±2°C)
2	1.15	0	Heat Status (right after test 1)	$t < 2h$	Tripping	

Temperature Compensation Properties					
	Multiple of Setting Current	Initial Status	Time	Expected Results	Ambient Temperature
1	1.0	Cold Status	$t \geq 2h$	Non-Tripping	104°F to ±35.6°F (+40°C to ±2°C)
2	1.25	Heat Status (right after test 1)	$t < 2h$	Tripping	
3	1.05	Cold Status	$t \geq 2h$	Non-Tripping	-23°F to ±35.6°F (-5°C to ±2°C)
4	1.3	Heat Status (right after test 1)	$t < 2h$	Tripping	



Ex9S Manual Motor Starters

Specifications

IEC Motor Power

Manual self-protected starter	Overload Trip Range	Standard rated power of three-phase motor (kW) AC-3, 50Hz/60Hz			
		230/240Vac	400/415Vac	500Vac	690Vac
Ex9S32A0.16A	0.1~0.16A	-	-	0.06	0.06
Ex9S32A0.25A	0.16~0.25A	-	0.06	0.09	0.12
Ex9S32A0.4A	0.25~4A	0.06	0.09	0.12	0.18
Ex9S32A0.63A	0.4~0.63A	0.09	0.18	0.18	0.25
Ex9S32A1A	0.63~1A	0.18	0.25	0.37	0.55
Ex9S32A1.6A	1~1.6A	0.25	0.55	0.75	1.1
Ex9S32A2.5A	1.6~2.5A	0.37	0.75	1.1	1.5
Ex9S32A4A	2.5~4A	0.75	1.5	2.2	3
Ex9S32A6.3A	4~6.3A	1.5	2.2	3	4
Ex9S32A10A	6~10A	2.2	4	5.5	7.5
Ex9S32A14A	9~14A	3	5.5	7.5	11
Ex9S32A18A	13~18A	4	7.5	11	15
Ex9S32A23A	17~23A	5.5	11	15	18.5
Ex9S32A25A	20~25A	5.5	11	15	22
Ex9S32A32A	24~32A	7.5	15	18.5	22
Ex9S80A20A(M)	14~20A	4	7.5	11	15
Ex9S80A20B(M)	14~20A	4	7.5	11	15
Ex9S80A25A(M)	18~25A	5.5	11	15	22
Ex9S80A25B(M)	18~25A	5.5	11	15	22
Ex9S80A32A(M)	23~32A	7.5	15	18.5	30
Ex9S80A32B(M)	23~32A	7.5	15	18.5	30
Ex9S80A40A(M)	30~40A	11	18.5	22	37
Ex9S80A40B(M)	30~40A	11	18.5	22	37
Ex9S80A50A(M)	38~50A	11	22	30	45
Ex9S80A50B(M)	38~50A	11	22	30	45
Ex9S80A63A(M)	48~63A	15	30	37	55
Ex9S80A63B(M)	48~63A	15	30	37	55
Ex9S80A72A(M)	60~72A	18.5	37	45	65
Ex9S80A72B(M)	60~72A	18.5	37	45	65
Ex9S80A80A(M)	70~80A	22	45	50	70



Ex9S Manual Motor Starters

Specifications

IEC Interrupting Capacity

Manual self-protected starter	Overload Trip Range	400Vac				690Vac			
				FUSE				FUSE	
		Icu (kA)	Ics (kA)	aM	gI/gG	Icu (kA)	Ics (kA)	aM	gI/gG
Ex9S32A0.16A	0.1~0.16A	100	100	-	-	100	100	-	-
Ex9S32A0.25A	0.16~0.25A	100	100	-	-	100	100	-	-
Ex9S32A0.4A	0.25~4A	100	100	-	-	100	100	-	-
Ex9S32A0.63A	0.4~0.63A	100	100	-	-	100	100	-	-
Ex9S32A1A	0.63~1A	100	100	-	-	100	100	-	-
Ex9S32A1.6A	1~1.6A	100	100	-	-	100	100	-	-
Ex9S32A2.5A	1.6~2.5A	100	100	-	-	100	100	-	-
Ex9S32A4A	2.5~4A	100	100	-	-	6	4	25	32
Ex9S32A6.3A	4~6.3A	100	100	-	-	6	4	32	40
Ex9S32A10A	6~10A	100	100	-	-	6	4	32	40
Ex9S32A14A	9~14A	100	100	-	-	6	4	40	50
Ex9S32A18A	13~18A	50	30	63	80	6	4	40	50
Ex9S32A23A	17~23A	50	30	80	100	6	4	40	50
Ex9S32A25A	20~25A	50	30	80	100	6	4	40	50
Ex9S32A32A	24~32A	50	30	100	125	6	4	50	63
Ex9S80A20A(M)	14~20A	100	100	-	-	8	8	50	63
Ex9S80A20B(M)	14~20A	100	100	-	-	8	8	50	63
Ex9S80A25A(M)	18~25A	100	100	-	-	8	8	50	63
Ex9S80A25B(M)	18~25A	100	100	-	-	8	8	50	63
Ex9S80A32A(M)	23~32A	100	100	-	-	8	8	50	63
Ex9S80A32B(M)	23~32A	100	100	-	-	8	8	50	63
Ex9S80A40A(M)	30~40A	50	50	125	160	8	8	63	80
Ex9S80A40B(M)	30~40A	50	50	125	160	8	8	63	80
Ex9S80A50A(M)	38~50A	50	50	125	160	8	8	63	80
Ex9S80A50B(M)	38~50A	50	50	125	160	8	8	63	80
Ex9S80A63A(M)	48~63A	50	50	125	160	8	8	80	100
Ex9S80A63B(M)	48~63A	50	50	125	160	8	8	80	100
Ex9S80A72A(M)	60~72A	50	50	160	200	8	8	100	125
Ex9S80A72B(M)	60~72A	50	50	160	200	8	8	100	125
Ex9S80A80A(M)	70~80A	50	50	160	200	8	8	100	125



Ex9S Manual Motor Starters

Specifications

UL Motor Power

UL Motor Power (hp)								
Manual self-protected starter	Overload Trip Range	1PH		3PH				
		110-120Vac	220-240Vac	200Vac	208Vac	220-240Vac	460-480Vac	575-600Vac
Ex9S32A0.16A	0.1~0.16A	-	-	-	-	-	-	-
Ex9S32A0.25A	0.16~0.25A	-	-	-	-	-	-	-
Ex9S32A0.4A	0.25~4A	-	-	-	-	-	-	-
Ex9S32A0.63A	0.4~0.63A	-	-	-	-	-	-	-
Ex9S32A1A	0.63~1A	-	-	-	-	-	-	0.5
Ex9S32A1.6A	1~1.6A	-	0.1	-	-	-	0.75	0.75
Ex9S32A2.5A	1.6~2.5A	-	0.167	0.5	0.5	0.5	1	1.5
Ex9S32A4A	2.5~4A	0.125	0.333	0.75	0.75	0.75	2	3
Ex9S32A6.3A	4~6.3A	0.25	0.5	1	1	1.5	3	5
Ex9S32A10A	6~10A	0.5	1.5	2	2	3	5	7.5
Ex9S32A14A	9~14A	0.75	2	3	3	3	10	10
Ex9S32A18A	13~18A	1	3	5	5	5	10	15*
Ex9S32A23A	17~23A	1.5	3	5	-	7.5	15	20*
Ex9S32A25A	20~25A	2	-	-	-	7.5	15	20*
Ex9S32A32A	24~32A	2	5	7.5	7.5	10	20	25*
Ex9S80A20A(M)	14~20A	1	3	5	5	5	10	15
Ex9S80A20B(M)	14~20A	1	3	5	5	5	10	15
Ex9S80A25A(M)	18~25A	2	-	-	7.5	7.5	15	20
Ex9S80A25B(M)	18~25A	2	-	-	7.5	7.5	15	20
Ex9S80A32A(M)	23~32A	2	5	7.5	7.5	10	20	25
Ex9S80A32B(M)	23~32A	2	5	7.5	7.5	10	20	25
Ex9S80A40A(M)	30~40A	3	-	10	10	-	25	30
Ex9S80A40B(M)	30~40A	3	-	10	10	-	25	30
Ex9S80A50A(M)	38~50A	-	-	15	15	15	30	40
Ex9S80A50B(M)	38~50A	-	-	15	15	15	30	40
Ex9S80A63A(M)	48~63A	5	10	15	20	20	40	50
Ex9S80A63B(M)	48~63A	5	10	15	20	20	40	50
Ex9S80A72A(M)	60~72A	-	-	20	-	25	50	60
Ex9S80A72B(M)	60~72A	-	-	20	-	25	50	60
Ex9S80A80A(M)	70~80A	-	-	25	25	-	60	75

* Manual Motor Control and Motor Disconnect only, not applied in Combination Motor Control.



Ex9S Manual Motor Starters

Specifications

Short-Circuit Current Rating



Type E: Self-Protected Combination Motor Controller

Manual self-protected starter	Overload Trip Range	Type E		Type E		Type E		Matching accessories
		SCCR (kA)	240Vac	SCCR (kA)	480Y/277Vac	SCCR (kA)	600Y/347Vac	
Ex9S32A0.16A	0.1~0.16A			65			10	CCE51, AL5111
Ex9S32A0.25A	0.16~0.25A			65			10	
Ex9S32A0.4A	0.25~0.4A			65			10	
Ex9S32A0.63A	0.4~0.63A			65			10	
Ex9S32A1A	0.63~1A			65			10	
Ex9S32A1.6A	1~1.6A			65			10	
Ex9S32A2.5A	1.6~2.5A			65			10	
Ex9S32A4A	2.5~4A			65			10	
Ex9S32A6.3A	4~6.3A			65			10	
Ex9S32A10A	6~10A			65			10	
Ex9S32A14A	9~14A			65			10	
Ex9S32A18A	13~18A			42			-	
Ex9S32A23A	17~23A			42			-	
Ex9S32A25A	20~25A			42			-	
Ex9S32A32A	24~32A			42			-	
Ex9S80A20A/B	14~20A			42			30	AL5111
Ex9S80A25A/B	18~25A			42			30	
Ex9S80A32A/B	23~32A			42			30	
Ex9S80A40A/B	30~40A			42			18	
Ex9S80A50A/B	38~50A			42			18	
Ex9S80A63A/B	48~63A			42			10	
Ex9S80A72A/B	60~72A			42			10	
Ex9S80A80A	70~80A			10			10	



Ex9S Manual Motor Starters

Specifications

Short-Circuit Current Rating Continued



Type F: Manual Self-Protected Combination Motor Controller

Manual Self-Protected Starter	Associated Cable, AWG 75°C, Cu	Type of Contactor Required	Overload Trip Range(A)	SCCR (kA)				Combination Block	Mounting Bracket
				240V	480Y/277V	600Y/347V	Fault Signaling Accessory		
Ex9S32A0.16A	14	Ex9CS06/09 Ex9C09	0.1~0.16	65	10	AL5111	CC51/CC52	-/DRA51	
Ex9S32A0.25A			0.16~0.25						
Ex9S32A0.4A			0.25~0.4						
Ex9S32A0.63A			0.4~0.63						
Ex9S32A1A			0.63~1						
Ex9S32A1.6A			1~1.6						
Ex9S32A2.5A			1.6~2.5						
Ex9S32A4A			2.5~4						
Ex9S32A6.3A			4~6.3						
Ex9S32A10A			Ex9CS12/9C12						6~10
Ex9S32A14A	12	Ex9C18	9~14	42	-	CC52	DRA51		
Ex9S32A18A		Ex9C25	13~18						
Ex9S32A23A	10	Ex9C38/32	17~23	42	-	CC53	DRA51		
Ex9S32A25A			20~25						
Ex9S32A32A			24~32						



Ex9S Manual Motor Starters

Specifications

Temperature Derating Factor

Device	-20°C ≤ T ≤ 0°C		0°C < T < 30°C		30°C ≤ T ≤ 40°C		40°C < T ≤ 60°C	
	single	group	single	group	single	group	single	group
Ex9S32A0.16A	1.05	1	1	1	1	1	1	0.98
Ex9S32A0.25A	1.05	1	1	1	1	0.99	0.98	0.97
Ex9S32A0.4A	1.05	1	1	1	1	0.96	0.96	0.93
Ex9S32A0.63A	1.05	1	1	1	1	0.97	0.96	0.94
Ex9S32A1A	1.05	1	1	1	1	0.96	0.96	0.91
Ex9S32A1.6A	1.05	1	1	1	1	0.96	0.96	0.93
Ex9S32A2.5A	1.05	1	1	1	1	1	1	0.99
Ex9S32A4A	1.05	1	1	0.98	1	0.98	0.98	0.96
Ex9S32A6.3A	1.05	1	1	0.97	1	0.96	0.96	0.95
Ex9S32A10A	1.05	1	1	0.96	1	0.94	0.94	0.91
Ex9S32A14A	1.05	1	1	0.96	1	0.94	0.94	0.90
Ex9S32A18A	1.05	1	1	0.96	1	0.93	0.92	0.90
Ex9S32A23A	1.05	1	1	0.95	1	0.94	0.93	0.90
Ex9S32A25A	1.05	1	1	0.95	1	0.94	0.93	0.90
Ex9S32A32A	1.05	1	1	0.92	1	0.91	0.91	0.87
Ex9S80A20A/B	1.05	1	1	1	1	0.98	1	0.96
Ex9S80A25A/B	1.05	1	1	1	1	0.98	1	0.96
Ex9S80A32A/B	1.05	1	1	1	1	0.98	1	0.96
Ex9S80A40A/B	1.05	1	1	0.98	1	0.98	1	0.96
Ex9S80A50A/B	1.05	1	1	0.97	1	0.96	0.96	0.93
Ex9S80A63A/B	1.05	1	1	0.95	1	0.93	0.92	0.9
Ex9S80A72A/B	1.05	1	1	0.95	1	0.93	0.93	0.9
Ex9S80A80A	1.05	1	1	0.94	1	0.9	0.9	0.88

* Please refer to derating table for multiple use of electromagnetic product or use single unit above 40°C

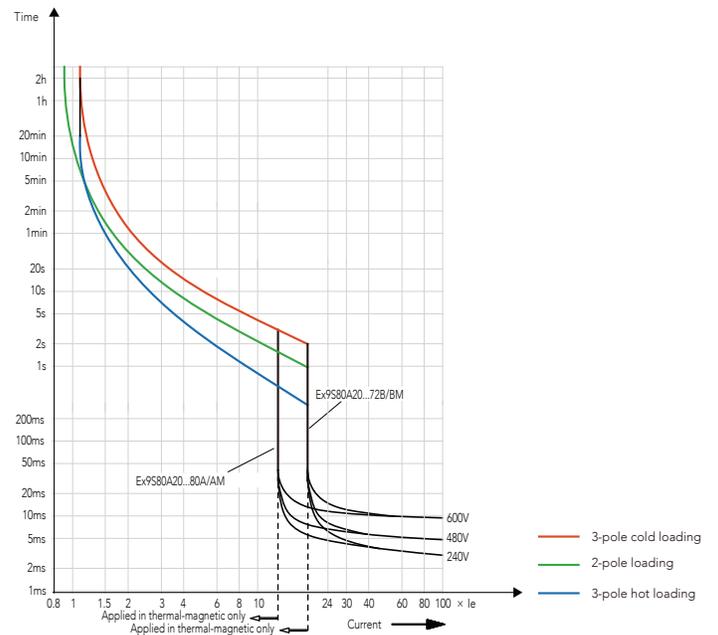
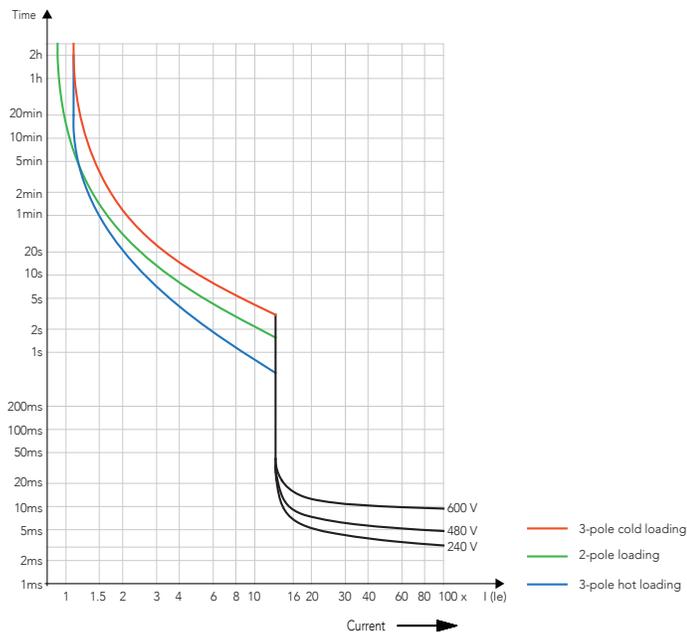


Ex9S Manual Motor Starters

Specifications

Manual self-protected starter	Setting Current (A)		Magnetic Trip Rating (A)	
	Minimum	Maximum	A	B
Ex9S32A0.16A	0.1	0.16	2.1	-
Ex9S32A0.25A	0.16	0.25	3.2	-
Ex9S32A0.4A	0.25	4	4.8	-
Ex9S32A0.63A	0.4	0.63	7.2	-
Ex9S32A1A	0.63	1	11	-
Ex9S32A1.6A	1	1.6	20	-
Ex9S32A2.5A	1.6	2.5	30	-
Ex9S32A4A	2.5	4	50	-
Ex9S32A6.3A	4	6.3	72.5	-
Ex9S32A10A	6	10	130	-
Ex9S32A14A	9	14	175	-
Ex9S32A18A	13	18	230	-
Ex9S32A23A	17	23	280	-
Ex9S32A25A	20	25	322	-
Ex9S32A32A	24	32	416	-
Ex9S80A20A(M)	14	20	310	400
Ex9S80A20B(M)	14	20	310	400
Ex9S80A25A(M)	18	25	375	500
Ex9S80A25B(M)	18	25	375	500
Ex9S80A32A(M)	23	32	445	680
Ex9S80A32B(M)	23	32	445	680
Ex9S80A40A(M)	30	40	560	800
Ex9S80A40B(M)	30	40	560	800
Ex9S80A50A(M)	38	50	700	960
Ex9S80A50B(M)	38	50	700	960
Ex9S80A63A(M)	48	63	950	1150
Ex9S80A63B(M)	48	63	950	1150
Ex9S80A72A(M)	60	72	1000	1150
Ex9S80A72B(M)	60	72	1000	1150
Ex9S80A80A(M)	70	80	1150	-

Ex9S32 Trip Curve



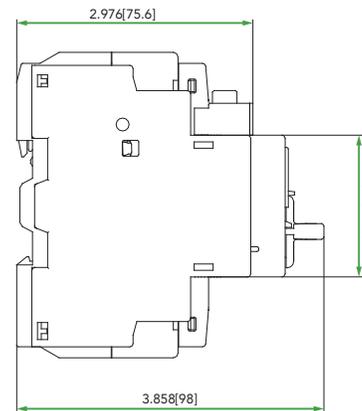
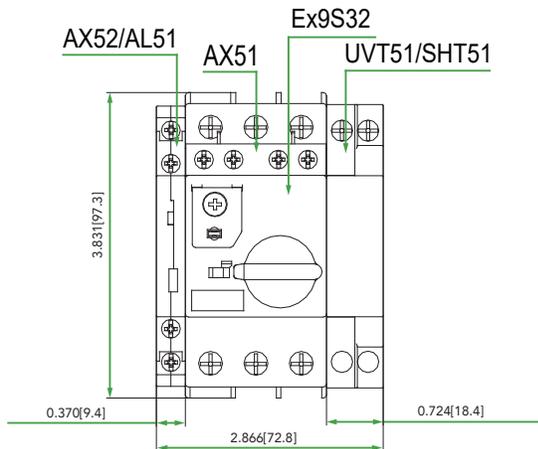
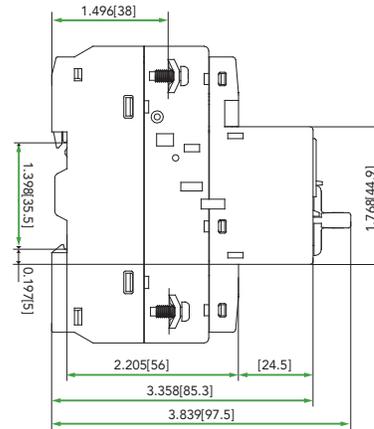
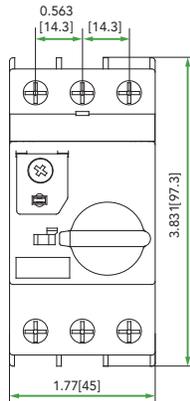


Ex9S Manual Motor Starters

Dimensions

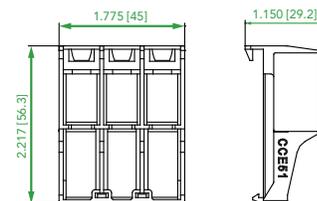
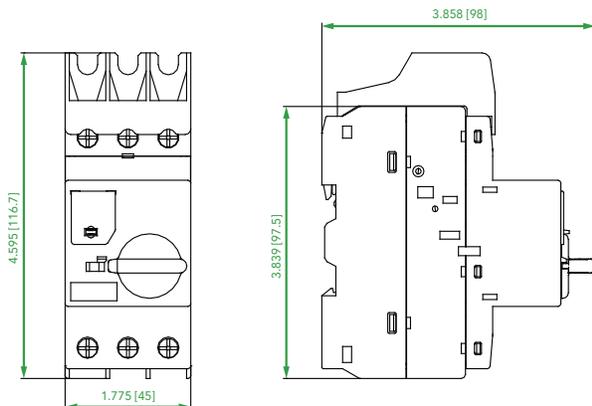
Ex9S32

in [mm]



Ex9S32 + CCE51

CCE51



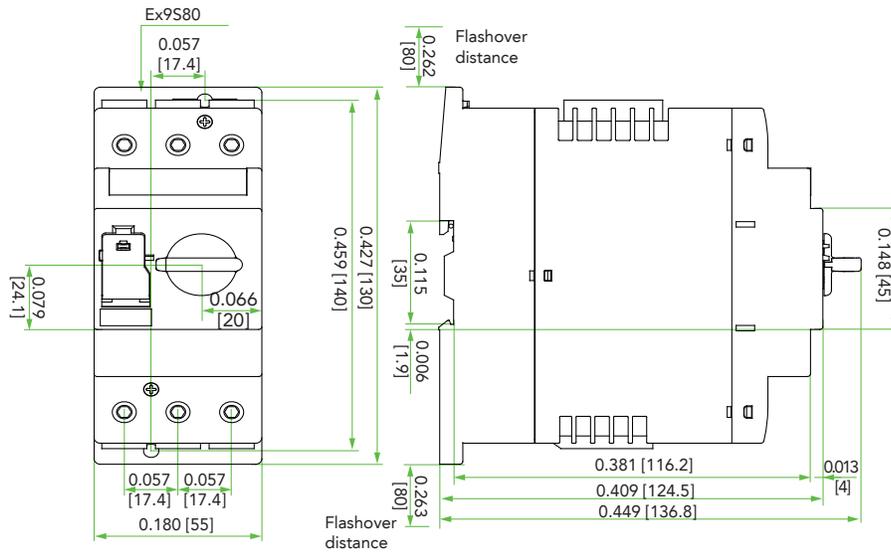


Ex9S Manual Motor Starters

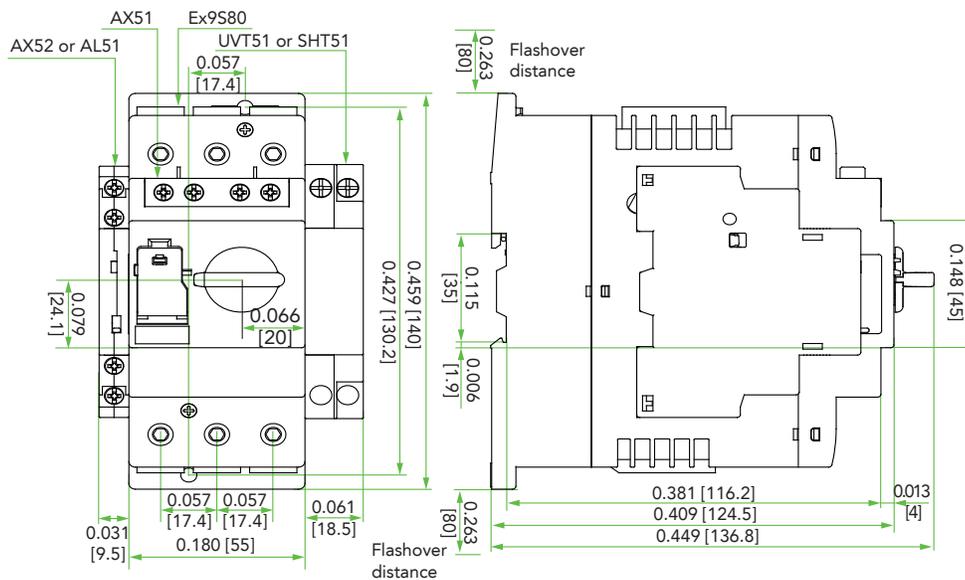
Dimensions

Ex9S80

in [mm]



Ex9S80+Accessory



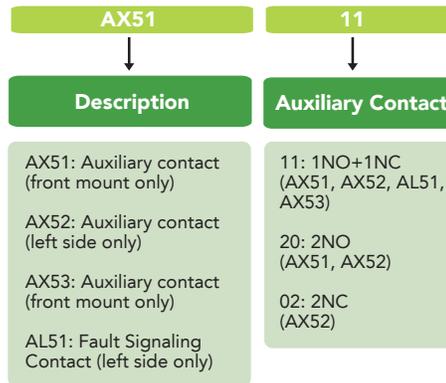


Ex9S Manual Motor Starters

Ex9S Accessories and Specifications



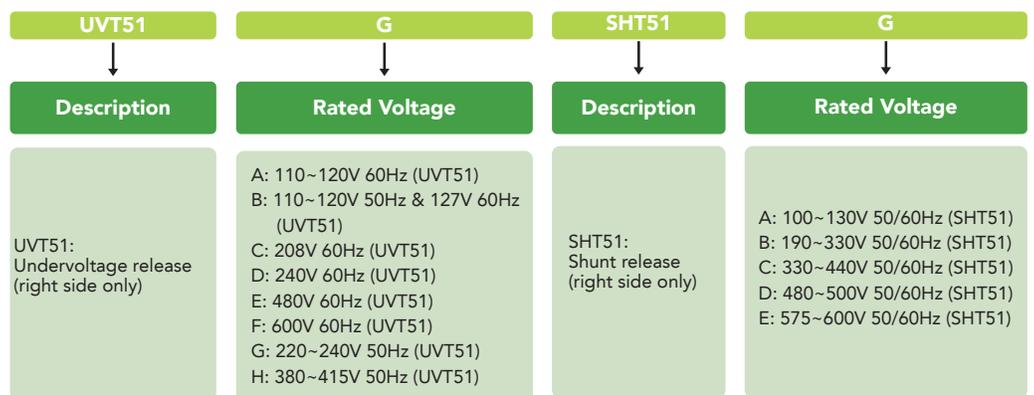
Auxiliary Contact Blocks
Applies to Ex9S32 and Ex9S80



Description	Mounting Location	Max. No. of Blocks	Contact Type	SKU
Instantaneous auxiliary contacts	Front	1	NO+NC	AX5111
			NO+NO	AX5120
			NO+NC	AX5311
	Left Side	2	NO+NC	AX5211
			NO+NO	AX5220
Fault Signaling Contact	Left Side	1	NC+NC	AX5202
			NO+NC	AL5111



Electrical Trip Unit
Applies to Ex9S32 and Ex9S80



Description	Mounting Location	Voltage	Hz	SKU
Undervoltage Release	Right Side	110~120V	60	UVT51A
		127V	60	UVT51B
		110~120V	50	UVT51B
		208V	60	UVT51C
		240V	60	UVT51D
		480V	60	UVT51E
		600V	60	UVT51F
		220~240V	50	UVT51G
		380~415V	50	UVT51H
Shunt Release	Right Side	100~130V	50/60	SHT51A
		190~330V	50/60	SHT51B
		330~440V	50/60	SHT51C
		480~500V	50/60	SHT51D
		575~600V	50/60	SHT51E



Ex9S Manual Motor Starters

Ex9S Accessories and Specifications



BBUM 454

Busbars
Applies to Ex9S32

Description	No. of Ex9S32 Starter	No. of Side-Mounted Aux Contact on each Ex9S32 starter	Busbar Pitch (mm)	SKU
Sets of 3-pole, 63A Busbar	2	None	45	BBUM 245
		1 of AX52, AL51	54	BBUM 254
	3	None	45	BBUM 345
		1 of AX52, AL51	54	BBUM 354
	4	None	45	BBUM 445
		1 of AX52, AL51	54	BBUM 454
	5	None	45	BBUM 545
		1 of AX52, AL51	54	BBUM 554



CCE51

Wiring Accessories
Applies to Ex9S32

CC	51
Description	Type
Combination Block	51: Ex9CS 09-12A, applies to Ex9S32
	52: Ex9C 09-18A, applies to Ex9S32
	53: Ex9C 25-38A, applies to Ex9S32

Description	Application	SKU
Input Terminal for CBB51 Busbar	Terminal block for power supply to one or more CBB51 bus bar	CCT51
Protective end cover	For unused busbar outlets	PC51
Terminal Cover	Terminal cover for Ex9S32 for use in type E application	CCE51



WPB51B



WPB51Y

Enclosures
Applies to Ex9S32

WPB	51	B
Description	Type	Color of Handle
Waterproof Enclosure	51: for Ex9S32	B: Black/Gray
		Y: Yellow/Red

Description	Type	Color	Rating	SKU
Waterproof Enclosure; Ex9S32 Protectors	Operation by rotary handle	Black/Gray	NEMA 4X/4, IP 65	WPB51B
		Yellow/Red		WPB51Y

Note: Contact Sales if the customer need 3/6/7/8/9 Ex9S32 in group installation



Ex9S Manual Motor Starters

Ex9S Accessories and Specifications



ERH51B

Operation Handle
Applies to Ex9S32 and Ex9S80

ERH	51	B
Description	Type	Color of Handle
Extended Rotary Handle	51: for Ex9S	B: Black/Gray
		Y: Yellow/Red

Description	Type	Color	Rating	SKU
Extended Rotary Handle	9 inch (230mm) shaft, with bracket	Black/Gray	NEMA 4X/4, IP65	ERH51B
		Yellow/Red		ERH51Y

The extended rotary handle makes it possible for a door-mounted rotary handle to operate starter installed on the inside back panel of an enclosure. The extended rotary handle consists of the following:

- a set of screws onto the handle of the starter
- an assembly (handle and front plate) that fits on the enclosure door
- an extension shaft which must be adjusted according to the distance between the mounting surface and the door: 9 inch (230mm)
- a bracket that install with starter and the shaft through



DRA51

Mounting Accessories
Applies to Ex9S32

DRA	51
Description	Type
Mounting Bracket	51: for mounting Ex9S32 with Ex9C 09-38A

Description	Application	SKU
Combination Block	Between Ex9S32 and Ex9C Mini Type Contactor, 09-12A	CC51
	Between Ex9S32 and Ex9C Standard Type Contactor, 09-18A	CC52
	Between Ex9S32 and Ex9C Standard Type Contactor, 25-38A	CC53
Mounting Bracket	For mounting a Ex9S32 to a Ex9C Standard Type Contactor, 09-38A	DRA51



Ex9S32 + CC53 + Ex9C32 + DRA51



CC51



CC52



CC53



Ex9S Manual Motor Starters

Ex9S Accessories and Specifications

Technical Data

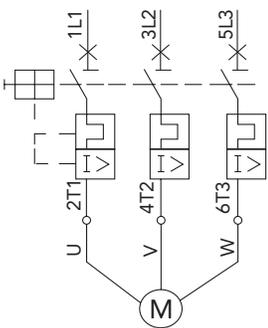
	Auxiliary contacts	Auxiliary contacts	Auxiliary contacts	Auxiliary contacts
	AX51	AX52	AX53	AX51
Rated operational voltage Ue	300V	600V	60Vac, 24Vdc	600V
Rated frequency	50/60Hz	50/60Hz	-	50/60Hz
Rated impulse withstand voltage Uimp	2500V	6000V	800V	6000V
Conventional rated thermal current (Ith)	2.5A	5A	1A	5A
Mechanical life (C-O operations)	100000	100000	100000	100000
Electrical Rating	C300, Q300	B600, Q300	AC-12:60V/0.1A DC-12:24V/1A	B600, Q300
Minimum connection Load	5mA/24Vac, 24Vdc	8mA/24Vac, 24Vdc	2mA/12Vac, 12Vdc or 3mA/5Vdc	8mA/24Vac, 24Vdc

Terminal Wiring

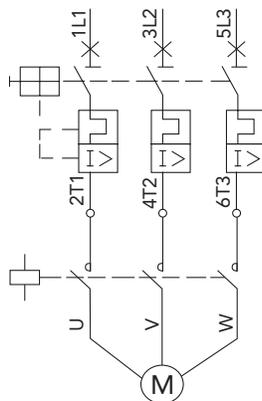
Screw Type	Ex9S32	Ex9S80
	M4, Phil-Slot head	M8, Phil-Hex head
Pull wire length inch (mm)	0.4 (10)	0.59 (15)
Wire range AWG	(1)x14-(2)x8	14~3
Torques lb-in (N.m)	22 (2.5)	53 (6)

Model	Wire Ranges(AWG)	Torques lb-in (N.m)	Screw Type
AX51	(1)x18-(2)x12	7 (0.8)	M3
AX52	(1)x18-(2)x12	7 (0.8)	M3
AX53	(1)x18-(2)x14	7 (0.8)	M3
AL51	(1)x18-(2)x12	7 (0.8)	M3
UVT51	(1)x18-(2)x12	15 (1.7)	M3.5
SHT51	(1)x18-(2)x12	15 (1.7)	M3.5

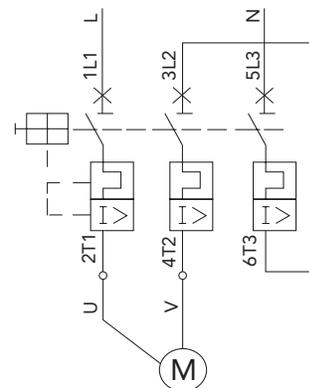
Electrical Diagram



Operating principle diagram of starter



Principle connection diagram of starter and contactor



Principle connection diagram of single-phase Motor



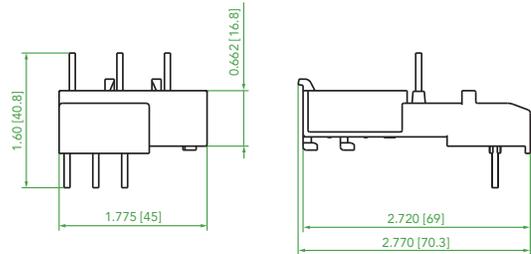
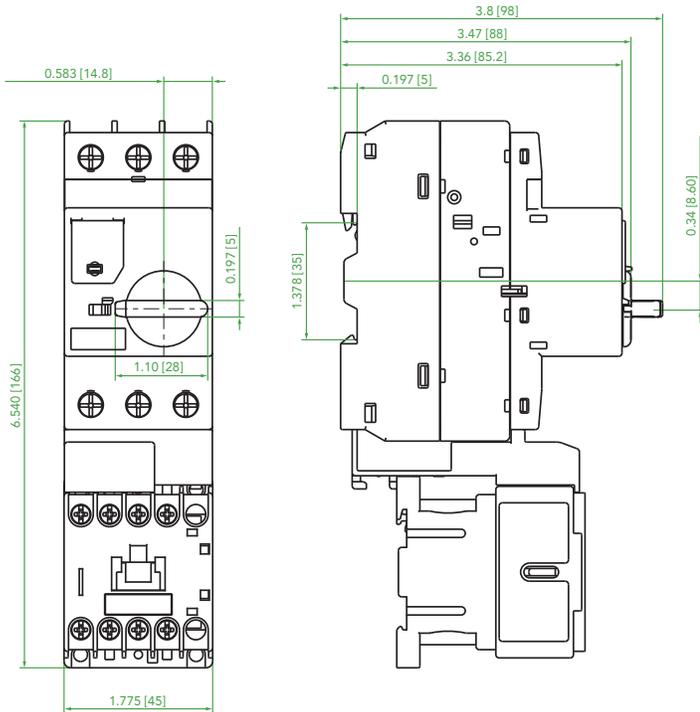
Ex9S Manual Motor Starters

Accessory Dimensions

Ex9S32 + CC51 + Ex9CS06, 09, 12

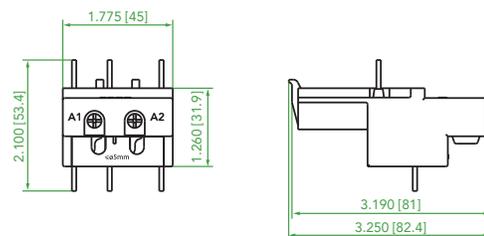
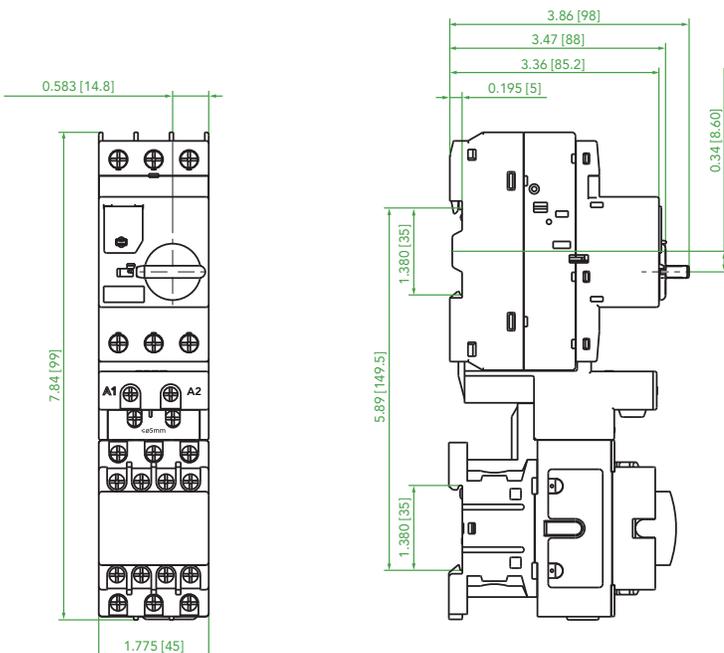
CC51

in [mm]



Ex9S32 + CC52 + Ex9C09, 12 18

CC52





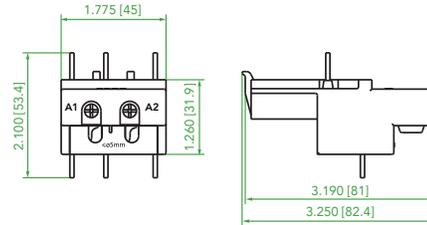
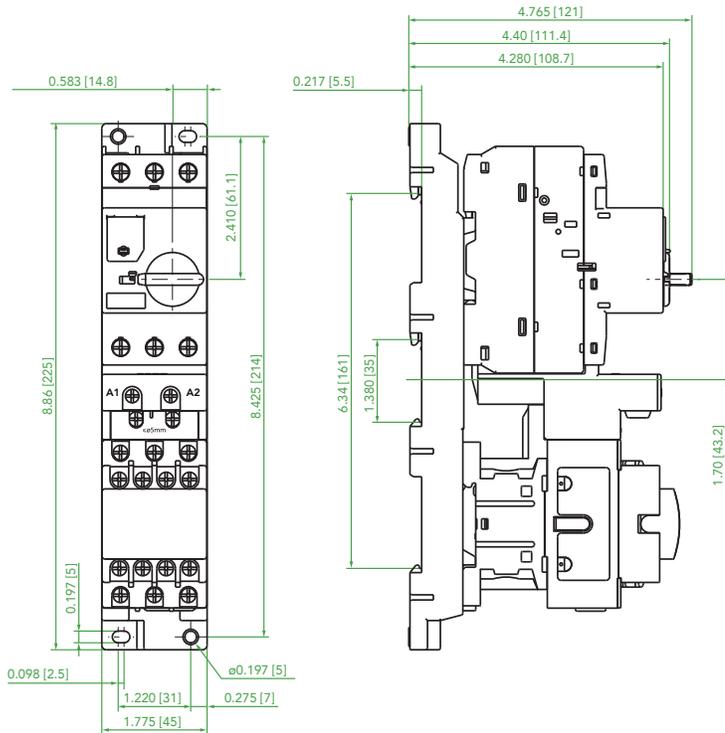
Ex9S Manual Motor Starters

Accessory Dimensions

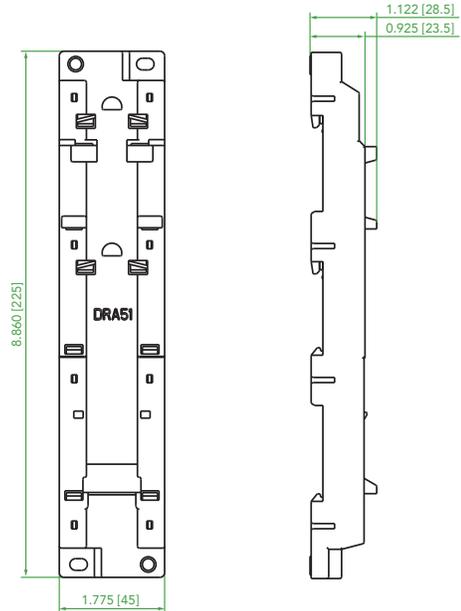
Ex9S32 + CC52 + Ex9C09, 12, 18 + DRA51

CC52

in [mm]

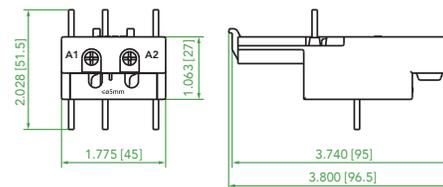
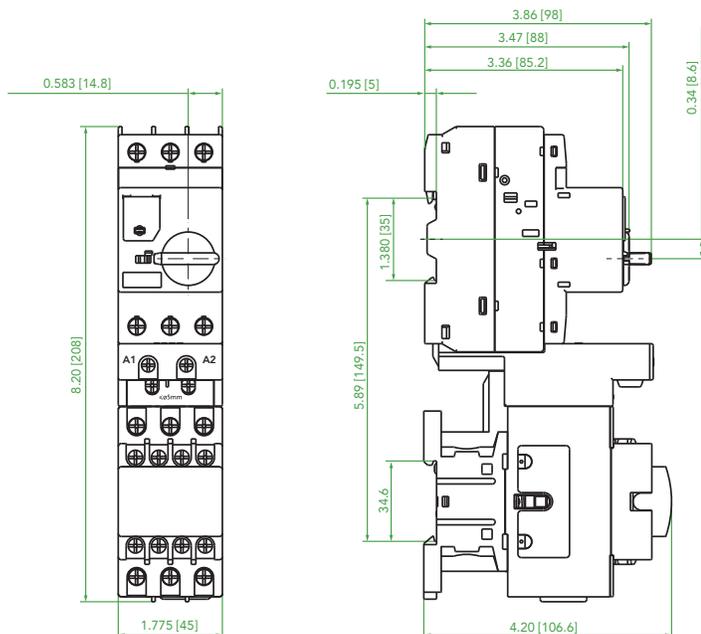


DRA51



Ex9S32 + CC53 + Ex9C25, 32, 38

CC53





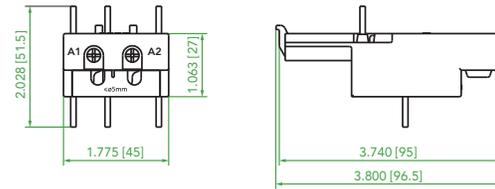
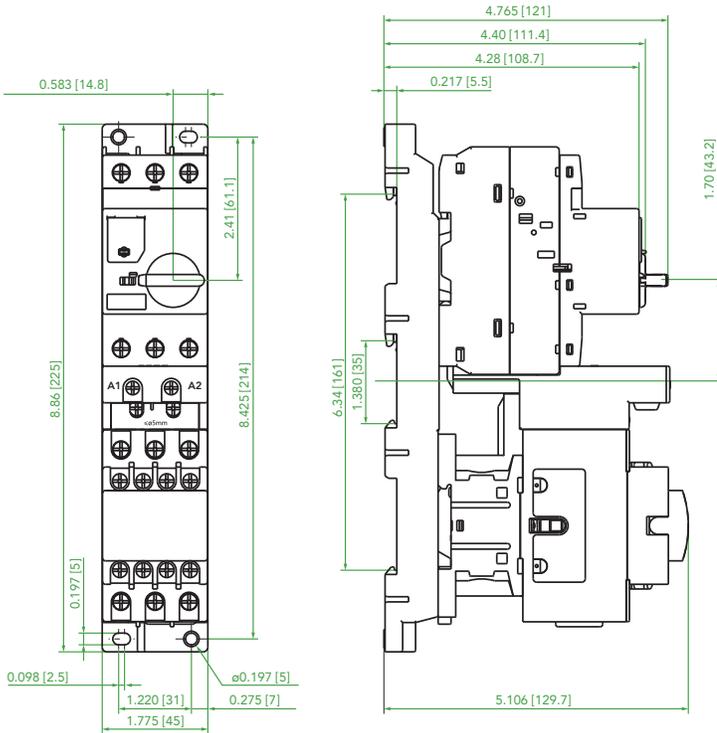
Ex9S Manual Motor Starters

Accessory Dimensions

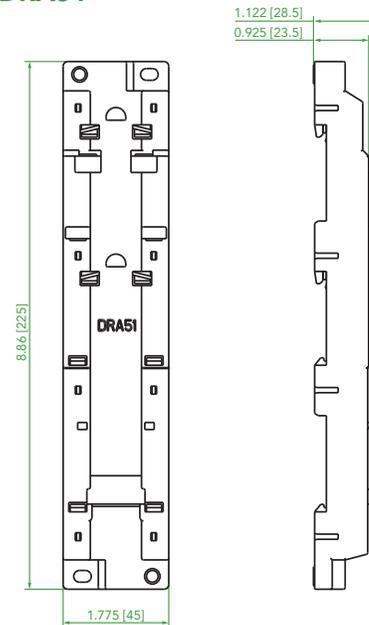
Ex9S32 + CC53 + Ex9C25, 32, 38 + DRA51

CC53

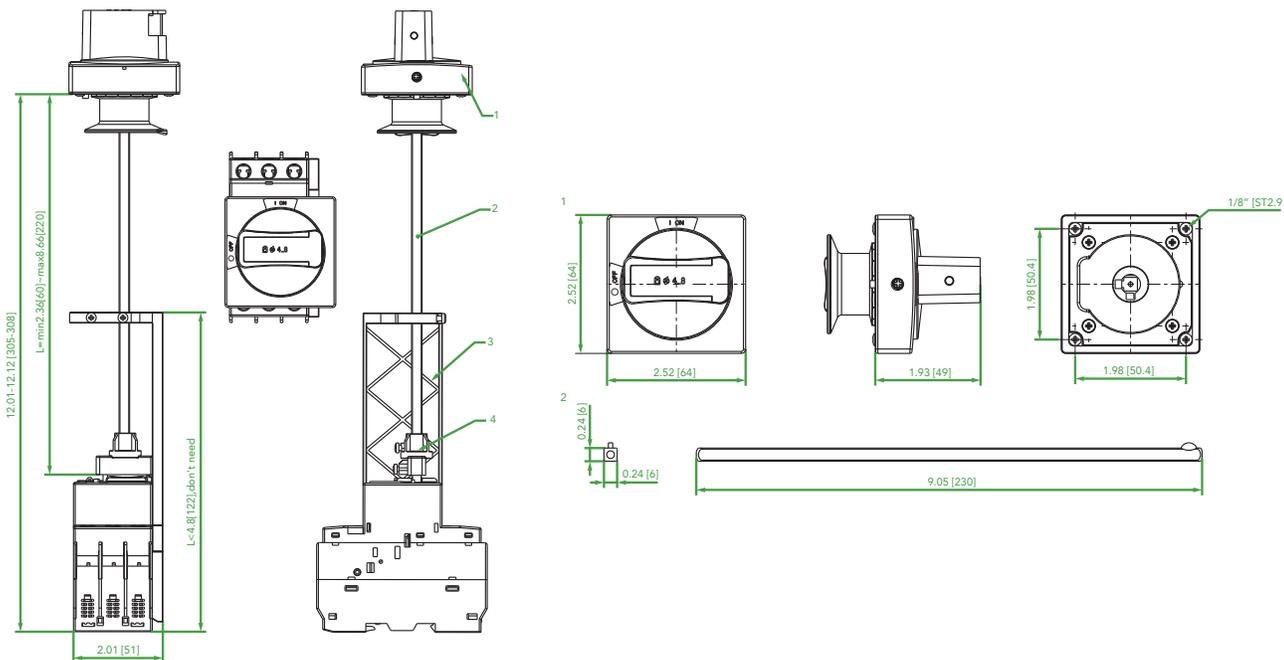
in [mm]



DRA51



ERH51



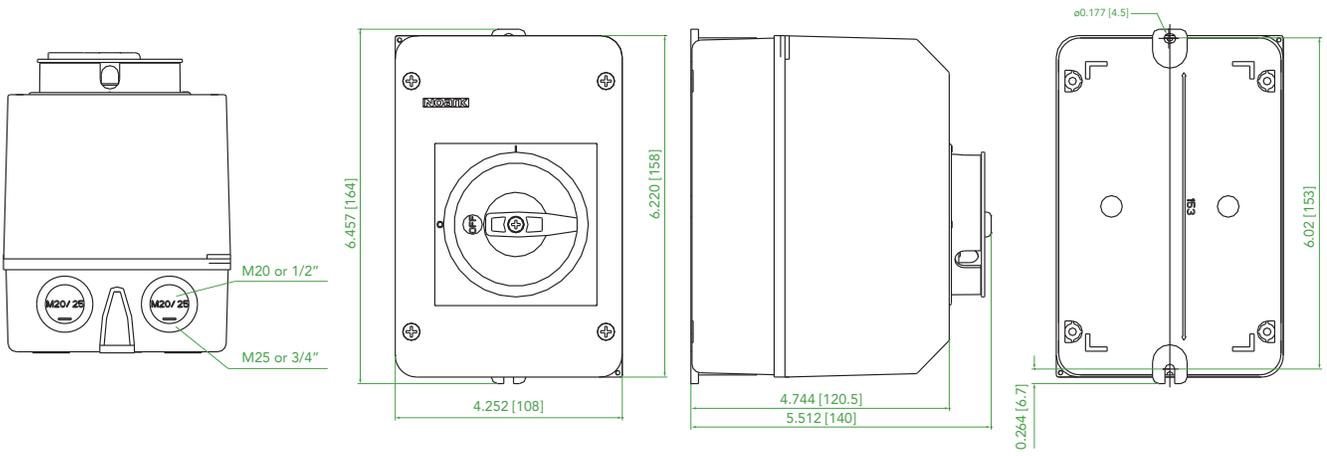


Ex9S Manual Motor Starters

Accessory Dimensions

WPB51

in [mm]





Ex9SN Manual Motor Starters

Product Overview

Manual motor starters are electromechanical protection devices for the main circuit. They are used mainly to switch motors manually ON/OFF and protect them fuse less against short circuit and loss-phase. None-fuse protection with a manual motor starter saves costs, space and ensures a quick reaction under short-circuit condition, by switching off the motor within milliseconds. Manual motor starter combinations are setup together with contactors and overload relays.

Design Features

- Available with enclosed coils for protection against particle contamination
- Short-circuit protection
- Disconnect function
 - ✓ Overload protection
 - ✓ Loss-phase protection
- Suitable for three and single-phase application
- Trip-free mechanism
- Clear switch position indication ON/OFF/TRIP
- Lockable handle

Certifications

- UL 508 Listed, File Number E467185, UL 60947-1 and 60947-4-1
- Certified for Canada according to CSA standards 22.2 No. 14
- IEC/EN 60947-2 and 60947-4-1
- CE Approved
- RoHS Compliant

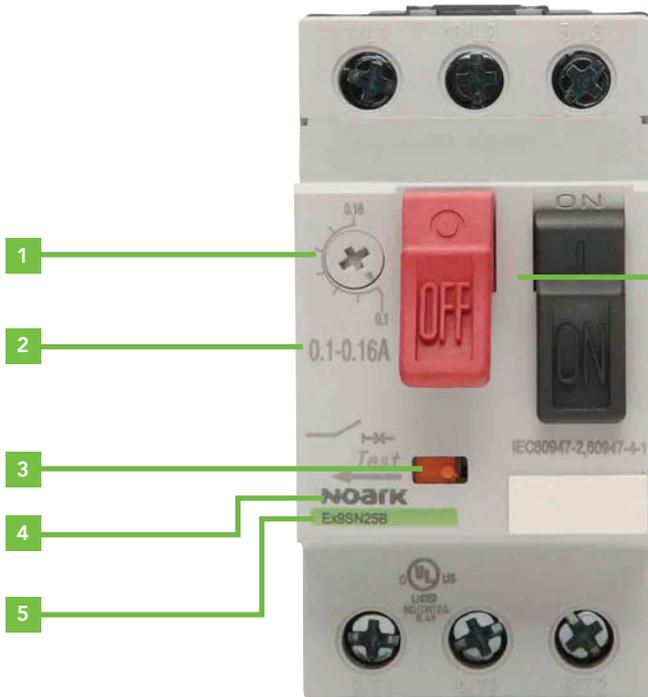




Ex9SN Manual Motor Starters

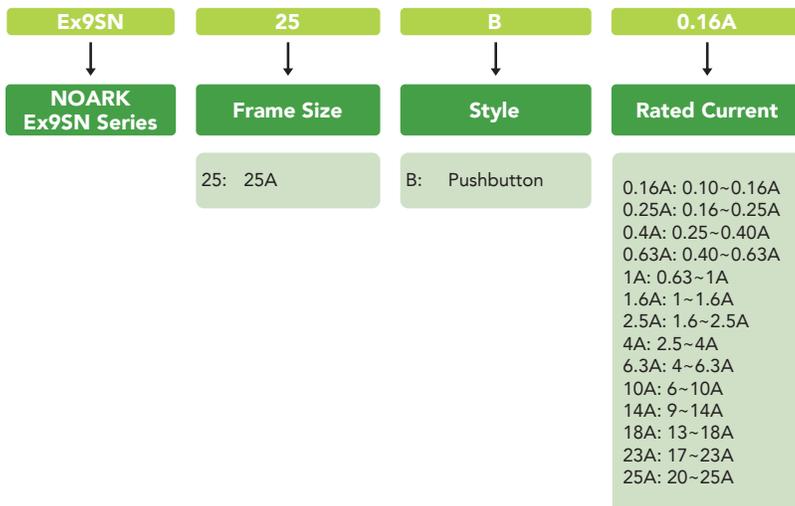
Product Label/Product Selection Guide

Ex9SN Product Label



- 1 Adjustable Current Range
- 2 Rated Current
- 3 Test Button
- 4 Brand
- 5 Product Selection
- 6 OFF/ON Push Buttons or Rotary Handle with Padlock

Ex9S Product Selection Guide





Ex9SN Manual Motor Starters

Products



Rated Current Amp (Min-Max)	25A	
	Pushbutton	
	Catalog number	Item number
0.10~0.16	Ex9SN25B0.16A	1600015
0.16~0.25	Ex9SN25B0.25A	1600016
0.25~0.40	Ex9SN25B0.4A	1600017
0.40~0.63	Ex9SN25B0.63A	1600018
0.63~1	Ex9SN25B1A	1600019
1~1.6	Ex9SN25B1.6A	1600020
1.6~2.5	Ex9SN25B2.5A	1600021
2.5~4	Ex9SN25B4A	1600022
4~6.3	Ex9SN25B6.3A	1600023
6~10	Ex9SN25B10A	1600024
9~14	Ex9SN25B14A	1600025
13~18	Ex9SN25B18A	1600026
17~23	Ex9SN25B23A	1600027
20~25	Ex9SN25B25A	1600028

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Ex9SN Manual Motor Starters

Specifications

Operating Conditions						
Tripping Class		Class 10 A				
Environmental Temperature	Transportation or Storage	-76 to 176°F (-60 to +80°C)				
	Working at	-4 to 131°F (-20 to +55°C)				
	Testing at	23 to 104°F (-5 to +40°C)				
Altitude ft (m)		Not to exceed 6,562 (2,000)				
Ambient Conditions		At mounting site, relative humidity not exceed 50% at the max temperature of 104 °F (+4°C), higher relative humidity is allowable under lower temperature				
Pollution Grade		Class III				
Release Grade		10 A (SN25)				
Rated Operational Frequency (Hz)		50/60				
Mounting Conditions		The inclination between the mounting plane and the vertical plane shall not exceed 5°. The product shall be installed and operated at a place without obvious shake, impact and vibration.				
Rated Insulation Voltage Ui (V)		IEC 690, UL/CSA 600				
Rated Operational Voltage Ue (V)		230/240, 400/415, 460/480, 575/600				
Rated Impulse Withstand Voltage Uimp (V)		6,000				
Interrupting Rating Icu		5 kA				
Service Life	Electrical	2,000				
	Mechanical	10,000				
Degree of Protection		IP 20				
Overload Protection Properties						
Series Number	Multiple of Setting Current	Initial Status	Time	Expected Results	Ambient Temperature	
1	1.05	Cold Status	t≥2h	Non-Tripping	68°F to ±35.6°F (+20°C to ±2°C)	
2	1.20	Heat Status (right after test 1)	t<2h	Tripping		
3	1.50		t<2 min			
4	7.20	Cold Status	2s<t≤10s			
Phase Failure Protection Properties						
Series Number	Multiple of Setting Current		Initial Status	Time	Expected Results	Ambient Temperature
	Any 2 Phase	The Other Phase				
1	1.0	0.9	Cold Status	t≥2h	Non-Tripping	68°F to ±35.6°F (+20°C to ±2°C)
2	1.15	0	Heat Status (right after test 1)	t<2h	Tripping	
Temperature Compensation Properties						
Series Number	Multiple of Setting Current	Initial Status	Time	Expected Results	Ambient Temperature	
1	1.0	Cold Status	t≥2h	Non-Tripping	104°F to ±35.6°F (+40°C to ±2°C)	
2	1.2	Heat Status (right after test 1)	t<2h	Tripping		
3	1.05	Cold Status	t≥2h	Non-Tripping	-23°F to ±35.6°F (-5°C to ±2°C)	
4	1.3	Heat Status (right after test 1)	t<2h	Tripping		



Ex9SN Manual Motor Starters

Specifications

Setting Current Range (A)		0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.6~2.5	2.5~4	4~6.3	6~10	9~14	13~18	17~23	20~25		
Rated Current of Release		0.16	0.25	0.4	0.63	1	1.6	2.5	4	6.3	10	14	18	23	25		
UL Ratings																	
Single-Phase (HP)	120Vac						-	-	1/8	1/4	1/2	3/4	1	1.5	2		
	240Vac					-	1/10	1/6	1/3	1/2	1.5	2	3				
Three-Phase (HP)	240Vac	-	-	-	-		-	1/2	1	1.5	3		7.5				
	480Vac					1/2	3/4	1	2	3	5	10	10	15			
	600Vac							1.5	3	5	7.5	10	15	20			
IEC Ratings																	
400/415 Vac	Icu (kA)	100					100					15					
	Ics % Icu	100					100					50		40			
690 Vac	Icu (kA)	100					100					3					
	Ics % Icu	100					100					75					
Rated Ultimate Short-Circuit Breaking Capacity Icu (kA)	230/240V	100					100					100		50			
	400/415V	100					100					15					
	440V	100					100					50	15	8	6		
	480/500V	100					100					50	10	6	4		
	660/690V	100					100					3					
Rated Service Short-Circuit Breaking Capacity Ics (kA)	230/240V	100					100					100		50			
	400/415V	100					100					7.5					
	440V	100					100					50	15	4	3		
	480/500V	100					100					50	10	4.5	3		
	660/690V	100					100					2.25					
Arcing Distance in (mm)		1.57 (40)															
Standard Rated Power of Three-Phase Motor (kW)	230/240V	-			-		-	0.37	0.75	1.1	2.2	3	4	5.5			
	400V	-			-		0.37	0.75	1.5	2.2	4	5.5	7.5	11			
	415V	-			-		-	0.75	1.5	2.2	4	5.5	9	11	11		
	440V	-			0.37		0.55	1.1	2.2	3	5.5	7.5	9	11	15		
	500V	-			0.37		0.55	1.1	1.5	3	4	7.5	9	11	15	18.5	
660/690V	-			0.37		0.55	1.1	1.5	3	4	7.5	9	11	15	18.5		
Current Setting Value of Instantaneous Electromagnetic Release Ir (A)		1.5	2.4	5	8	13	22.5	33.5	51	78	138	170	223	327			
Current Rating of Fuse-Link of Back-Up Fuse, Which is Only Needed in Case of Icc>Icu (Icc: Prospective Short-Circuit Breaking Current) †: Fuse is not Required	230/240V	aM A	†					†					80				
		gl/gG A	†					†					100				
	400/415V	aM A	†					†					63				
		gl/gG A	†					†					80				
	440V	aM A	†					†					50				
		gl/gG A	†					†					63				
	500V	aM A	†					†					50				
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690V	aM A	†					16	25	32		40						
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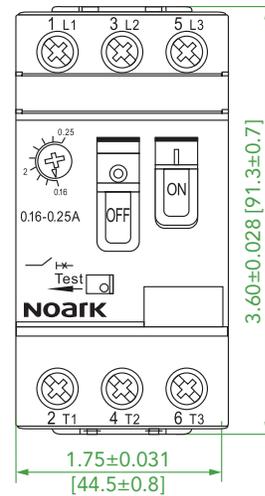
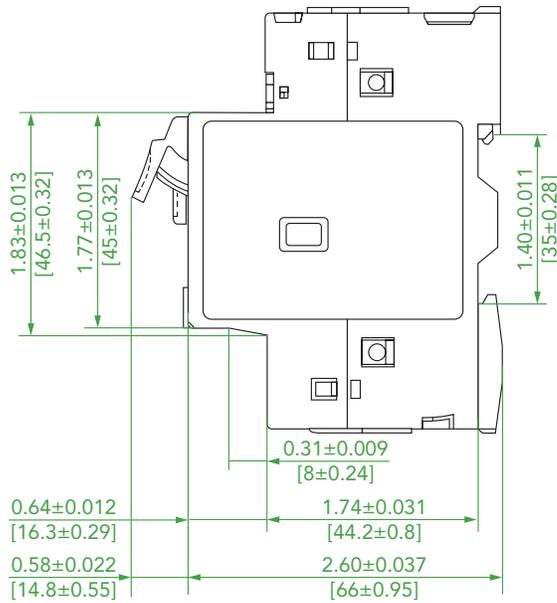


Ex9SN Manual Motor Starters

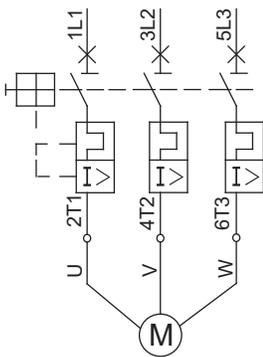
Ex9SN Dimensions and Wiring Diagrams

Ex9SN25B
Pushbutton

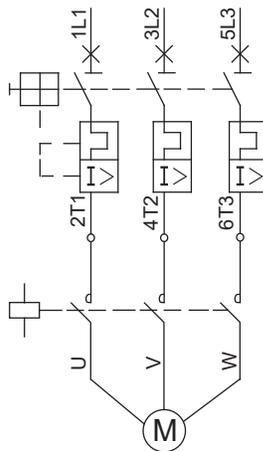
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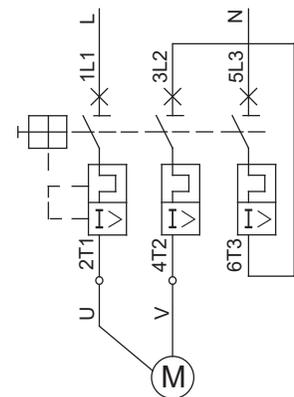
Wiring Diagrams



Operating principle diagram of starter



Principle connection diagram of starters and contactors



Principle connection diagram of single-phase or DC motor



Ex9SN Manual Motor Starters

Auxiliary Contact/Enclosure



ASNA

ASNB



ASNF

ASN	A	11
Description	Type	Auxiliary Contact
Manual Motor Starter Accessory	A: Auxiliary Contact Side Mount	11: 1NO+1NC
	B: Auxiliary Contact Front Mount	20: 2NO
	F: Auxiliary Contact with Fault Signal Contact	1001: 1NO (Fault)+1NC (Auxiliary)
		0101: 1NC (Fault)+1NC (Auxiliary)
		1010: 1NO (Fault)+1NO (Auxiliary)
		0110: 1NC (Fault)+1NO (Auxiliary)

Accessory Description	Type	Product	Item number
Auxiliary Contact	Side Mount	ASNA11	1600030
		ASNA20	1600029
	Front Mount	ASNB11	1600032
		ASNB20	1600031
	Fault Signal Contact	ASNF1001	1600039
		ASNF0101	1600040
		ASNF1010	1600041
		ASNF0110	1600042



ASNEA



ASNEC1 & ASNEC2



ASNEB

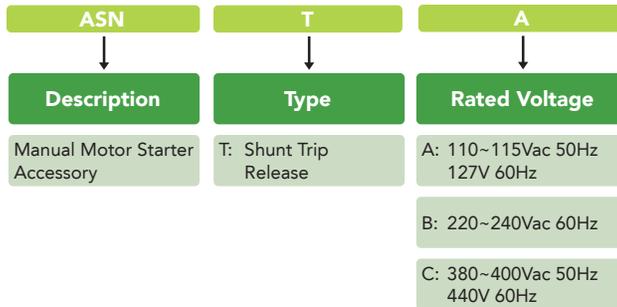
ASN	EA
Description	Type
Manual Motor Starter Accessory	EA: Enclosure with Actuating Diaphragm
	EB: Enclosure with Emergency Stop Pushbutton
	EC1: Enclosure with Rotary Handle (Black/Gray)
	EC2: Enclosure with Rotary Handle (Red./Yellow)

Accessory Description	Product	Item number
Enclosure	ASNEA	1600043
	ASNEB	1600044
	ASNEC1	1600045
	ASNEC2	1600081

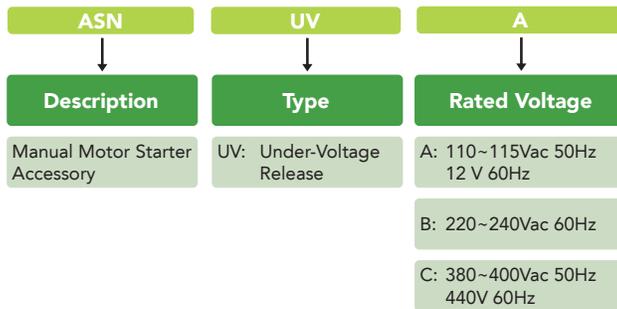


Ex9SN Manual Motor Starters

Shunt Trip Release/Under-Voltage Release



Accessory Description	Product	Item number
Shunt Trip Release (Side Mount)	ASNTA	1600036
	ASNTB	1600037
	ASNTC	1600038



Accessory Description	Product	Item number
Under-Voltage Release (Side Mount)	ASNUVA	1600033
	ASNUVB	1600034
	ASNUVC	1600035



Ex9SN Manual Motor Starters

Accessory Specifications

	Auxiliary Contact			Enclosure		Shunt Trip Release	Under-Voltage Release		
	Side Mount	Front Mount	Fault Signal Contact	Actuating Diaphragm	Emergency Stop Pushbutton				
	ASNA	ASNB	ASNF	ASNEA	ASNEB				
UL File Number	E467185								
UL Ratings									
Electrical Contact Type	B600	D300	Fault: D300 Auxiliary: B600			-			
Rated Insulation Voltage Ui (V)	690	250	690			690			
Voltage Range of Operation (Ue)	-					70~110%		35~70%	
Ue Max (V)	690	250	Fault: 240 Auxiliary: 690						
Conventional Heating Current Ith (A)	6	2.5	Fault: 2.5 Auxiliary: 6						
AC-15	720Vac 240V	120Vac 240V	Fault: 720Vac/240V Auxiliary: 720Vac/240V						
IEC File Number	IEC/EN 60947-5-1					IEC/EN 60947-2			
IEC Ratings									
Pick-Up Voltage (Un)	-			-		-	85~110%		
Drop-Off Voltage (Un)						70~110%	35~70%		
IP Class				IP 55		-			

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Ex9SN Manual Motor Starters

Accessory Specifications

		Auxiliary Contact			
		Side Mount	Front Mount	Fault Signal Contact	
		ASNA	ASNB	ASNF	
Utilization Category		AC-15		AC-14	
Rated Operational Current Ie (A)	24Vac	-	2	1.50	
	48Vac	6	1.25	1	
	110/127Vac	4.50	1	0.50	
	230/240Vac	3.30	0.50	0.30	
	380/415Vac	2.20	-	-	
	440Vac	1.50			
	500Vac	1			
	690Vac	0.60			
	DC-13				
		24Vdc	6	1	
		48Vdc	5	0.30	
		60Vdc	3	0.15	
		110Vdc	1.30	-	-
		220Vdc	0.50		
Normal Operational Power P (W)			AC-15	AC-14	
		24Vac	-	48	36
		48Vac	300	60	48
		110/127Vac	500	127	72
		230/240Vac	720	120	
		380/415Vac	850	-	-
		440Vac	650		
		500Vac	500		
		690Vac	400		
	DC-13				
		24Vdc	140	24	
		48Vdc	240	15	
		60Vdc	180	9	
		110Vdc	140	-	-
	220Vdc	120			
Operational Features (Times)		-		1,000	

		Auxiliary Contact		
		Fault Signal Contact		
		ASNF		
Utilization Category		AC-14	AC-15	DC-13
Connection	I/Ie	6	10	1.10
	U/Ue Cos ϕ or ± 0.95	0.70	0.30	
Disconnection	I/Ie	6	10	1.10
	U/Ue Cos ϕ or ± 0.95	0.70	0.30	6 Pe
Number of On/ Off Operation Cycles and Operation Frequency	Number of Operation Cycles	10		
	Number of Operation Cycles Per Minute	2		
	On Power Time	0.05		

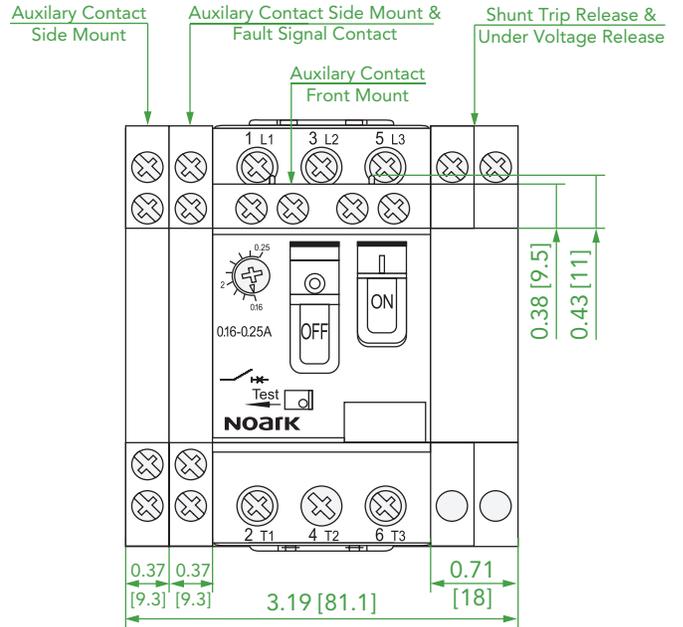
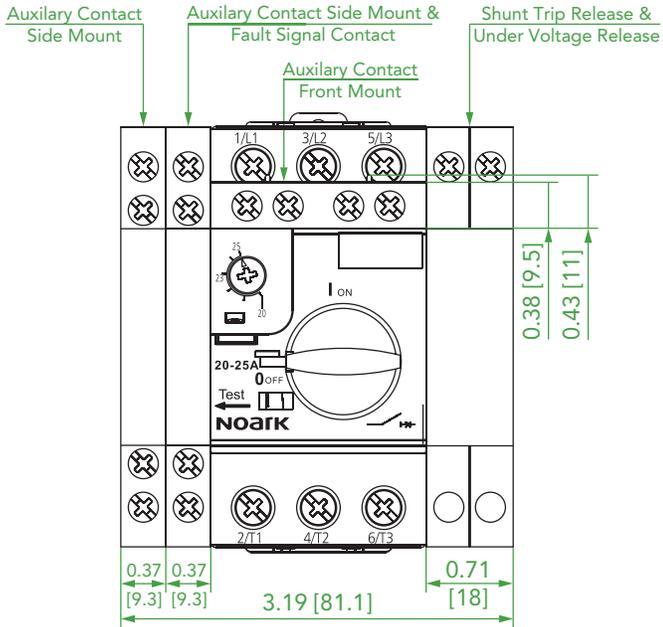


Ex9SN Manual Motor Starters

Accessory Dimensions

Manual Motor Starter with Accessories

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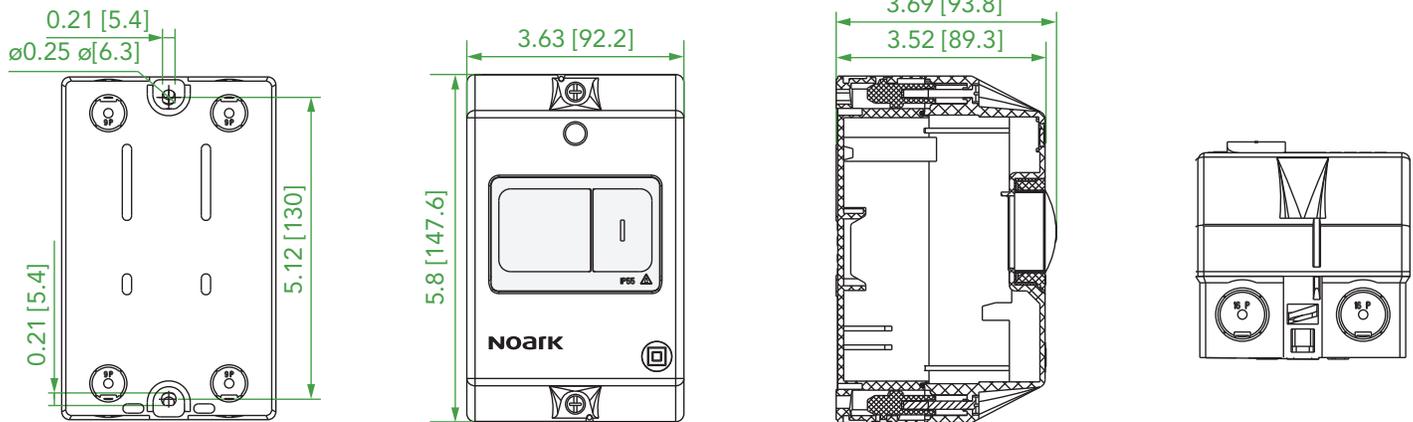


Ex9SN Manual Motor Starters

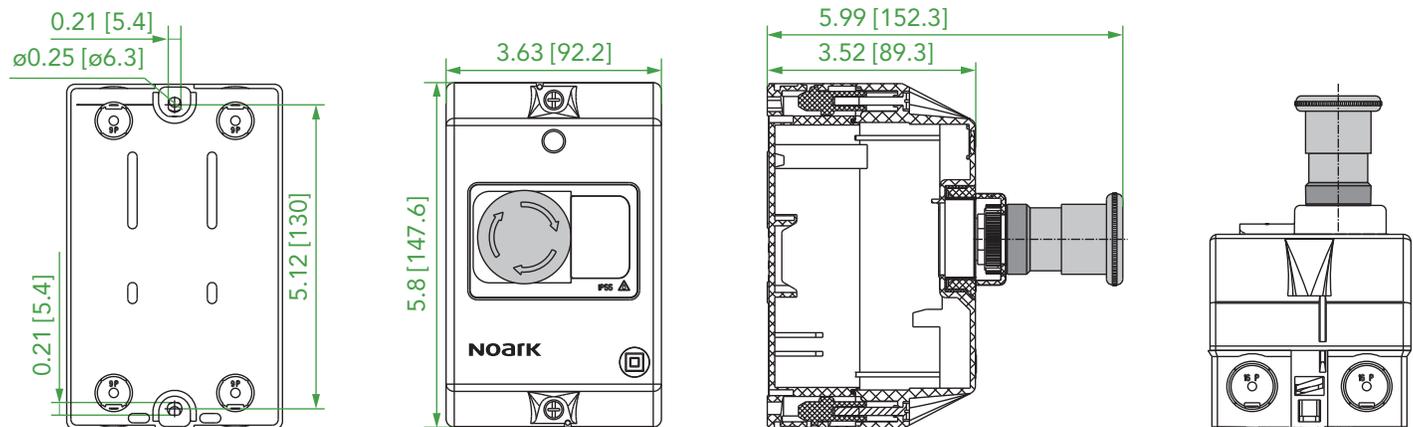
Accessory Dimensions

ASNEA Enclosure with Actuating Diaphragm

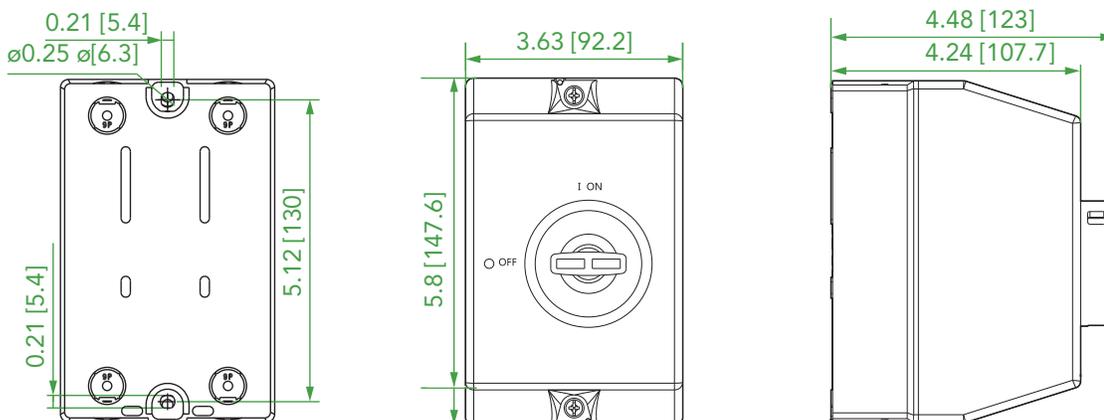
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ASNEB Enclosure with Emergency Stop Pushbutton



ASNEC Enclosure with Rotary Handle





Ex9QR5 Soft starter

Product Overview

Ex9QR5 is a solid-state reduced voltage (SSRV) motor starter used in the control and protection of 3-phase electric motors. Its multiple starting modes control the voltage and current applied to the motor to provide soft start, speed ramp and soft stop capability. The Ex9QR5 has built-in motor overload protection in class 10, 20 and 30, along with advanced protection such as phase loss/phase unbalance, undervoltage and more. It is the ideal solution for energy savings and torque control in applications like fans, blowers, pumps, compressors, ball mills, crushers and many other loads.

Design Features

- Seven unique starting modes
- Automatic light-load energy savings
- Low-speed forward and reverse
- Programmable kickstart mode
- Soft stop and braking
- Sequential, multiple motor starting
- Programmable digital inputs and analog output
- Built-in RS-485 communication interface and standard Modbus protocol
- Separately mountable LCD display with user-friendly interface

Ratings

- 200Vac to 690Vac
- Ampacity ratings from 15A through 1000A in five frame sizes
- Input frequency range from 35Hz to 60Hz

Motor Protection Functions

- Phase loss/phase unbalance
- Starting current limit timeout
- Undervoltage/Overvoltage
- Output phase loss
- Motor overload
- Load locked/short circuit
- Multi-start lockout



Ex9QR5 Soft starter

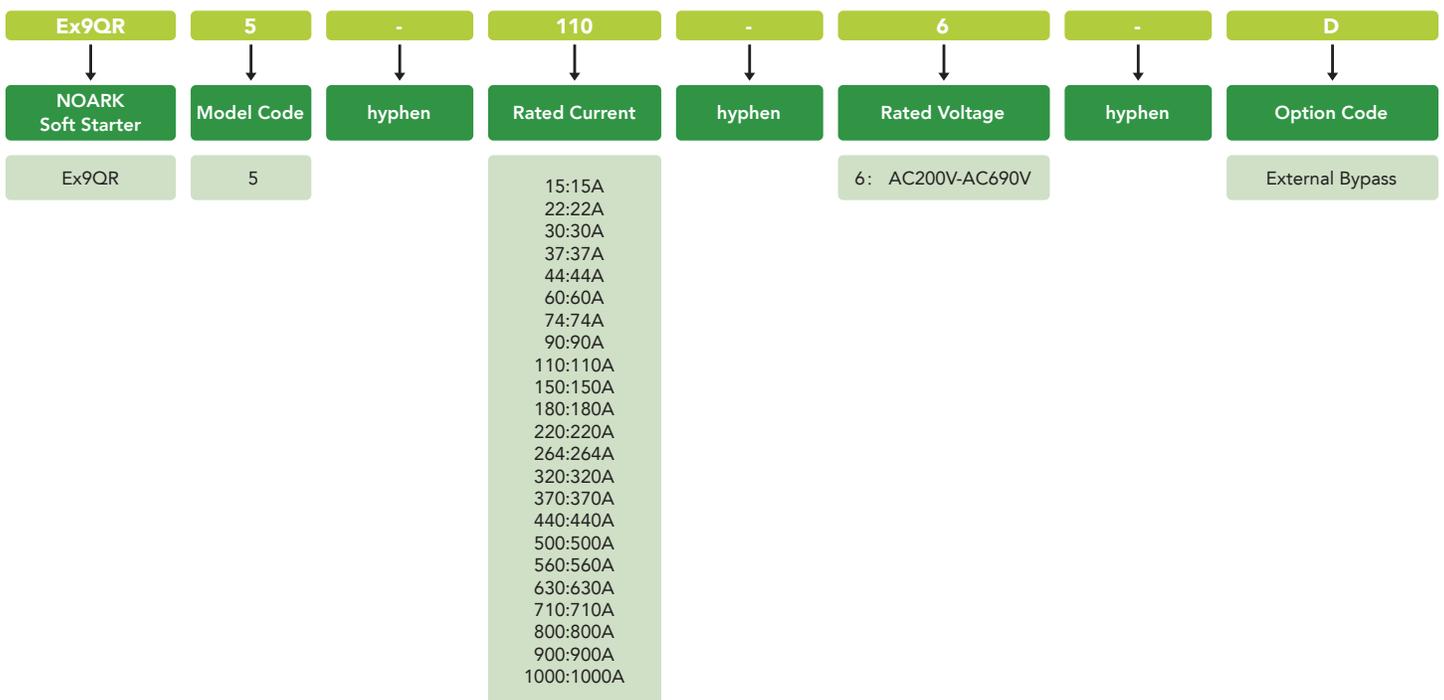
Product Label/Product Selection Guide

Ex9QR5 Product Label



- 1 Product Selection
- 2 Brand
- 3 Display screen
- 4 Operation panel
- 5 Control terminals
- 6 Main power terminals

Ex9QR5 Product Selection Guide





Ex9QR5 Soft starter Products



Rated Current	Product	Item number	Description
15A	Ex9QR50156D	1720000	Soft Starters, Ex9QR5, 15A, 200~690Vac, 100~240 Vac control, Non-Bypassed
22A	Ex9QR50226D	1720001	Soft Starters, Ex9QR5, 22A, 200~690Vac, 100~240 Vac control, Non-Bypassed
30A	Ex9QR50306D	1720002	Soft Starters, Ex9QR5, 30A, 200~690Vac, 100~240 Vac control, Non-Bypassed
37A	Ex9QR50376D	1720003	Soft Starters, Ex9QR5, 37A, 200~690Vac, 100~240 Vac control, Non-Bypassed
44A	Ex9QR50446D	1720004	Soft Starters, Ex9QR5, 44A, 200~690Vac, 100~240 Vac control, Non-Bypassed
60A	Ex9QR50606D	1720005	Soft Starters, Ex9QR5, 60A, 200~690Vac, 100~240 Vac control, Non-Bypassed
74A	Ex9QR50746D	1720006	Soft Starters, Ex9QR5, 74A, 200~690Vac, 100~240 Vac control, Non-Bypassed
90A	Ex9QR50906D	1720007	Soft Starters, Ex9QR5, 90A, 200~690Vac, 100~240 Vac control, Non-Bypassed
110A	Ex9QR51106D	1720008	Soft Starters, Ex9QR5, 110A, 200~690Vac, 100~240 Vac control, Non-Bypassed
150A	Ex9QR51506D	1720009	Soft Starters, Ex9QR5, 150A, 200~690Vac, 100~240 Vac control, Non-Bypassed
180A	Ex9QR51806D	1720010	Soft Starters, Ex9QR5, 180A, 200~690Vac, 100~240 Vac control, Non-Bypassed
220A	Ex9QR52206D	1720011	Soft Starters, Ex9QR5, 220A, 200~690Vac, 100~240 Vac control, Non-Bypassed
264A	Ex9QR52646D	1720012	Soft Starters, Ex9QR5, 264A, 200~690Vac, 100~240 Vac control, Non-Bypassed
320A	Ex9QR53206D	1720013	Soft Starters, Ex9QR5, 320A, 200~690Vac, 100~240 Vac control, Non-Bypassed
370A	Ex9QR53706D	1720014	Soft Starters, Ex9QR5, 370A, 200~690Vac, 100~240 Vac control, Non-Bypassed
440A	Ex9QR54406D	1720015	Soft Starters, Ex9QR5, 440A, 200~690Vac, 100~240 Vac control, Non-Bypassed
500A	Ex9QR55006D	1720016	Soft Starters, Ex9QR5, 500A, 200~690Vac, 100~240 Vac control, Non-Bypassed
560A	Ex9QR55606D	1720017	Soft Starters, Ex9QR5, 560A, 200~690Vac, 100~240 Vac control, Non-Bypassed
630A	Ex9QR56306D	1720018	Soft Starters, Ex9QR5, 630A, 200~690Vac, 100~240 Vac control, Non-Bypassed
710A	Ex9QR57106D	1720019	Soft Starters, Ex9QR5, 710A, 200~690Vac, 100~240 Vac control, Non-Bypassed
800A	Ex9QR58006D	1720020	Soft Starters, Ex9QR5, 800A, 200~690Vac, 100~240 Vac control, Non-Bypassed
900A	Ex9QR59006D	1720021	Soft Starters, Ex9QR5, 900A, 200~690Vac, 100~240 Vac control, Non-Bypassed
1000A	Ex9QR510006D	1720022	Soft Starters, Ex9QR5, 1000A, 200~690Vac, 100~240 Vac control, Non-Bypassed

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Ex9QR5 Soft starter Specifications

Technical data		
Rated Insulation Voltage Ui	800Vac	
Rated operational voltage Ue	200Vac~690Vac (-10%~+10%)	
Rated frequency	Current mode(suggested)	35Hz~60Hz
	Other starting mode	50Hz ± 2Hz and 60Hz ± 2Hz
Rated control supply voltage Us	100Vac-240Vac (-10%~+10%)	
Rated control frequency	50Hz ± 2Hz、60Hz ± 2Hz	
Rated Impulse Withstand Voltage Uimp (kV)	8kV	
Initial voltage	30%Ue~70%Ue	
Current Limitation	50%Ie~500%Ie	
General information		
Class of pollution	Level 3	
EMC equipment level	Class A (industrial grade) Level 3	
Shock resistance	Less than 0.5g	
Overload class	10A, 10, 20 and 30	
Main circuit		
Built-in bypass	No	
Cooling system	Fan cooled	
Ambient temperature		
Storage	-25°C to +70°C	
Working	-10°C to +40°C	full performance
	40°C to +50°C	the current derates 2% for every 1°C
Relative humidity	Not exceed 95% (+20°C to +65°C)	
Altitude ft (m)		
< 1,000m	Full performance	
1,000m - 3000m	The current derated 0.5% for every 100m	
> 3,000m	Contact Noark for customization	
Control I/O		
Signal relays		
K1	Bypass relay	
K2	Programmable status relay	
K3	Programmable fault relay	
Optional I/O		
IN1	Programmable input terminal	
IN2	Programmable input terminal	
Analog output	Four output types: 4mA~20mA, 0mA~20mA, 2mA~10mA and 0mA~10mA.	
Analog input	Motor Temperature Input (PTC Thermistor)	
Control Inputs		
RUN	Start Input (NO dry contact)	
STOP	Stop Input (NC dry contact)	
EMS	Emergency Stop (NC dry contact)	

* PTC: Positive Temperature Coefficient thermistor



Ex9QR5 Soft starter

Specifications

UL Motor Ratings

				Maximum Motor Ratings (UL)										Protection and Bypass Components		
SKU	Item Number	Rated Amps	Short Circuit Withstand (kA)	200Vac		208Vac		240Vac		480Vac		600Vac		Circuit Protection		Bypass Contactor
				FLA	HP	FLA	HP	FLA	HP	FLA	HP	FLA	HP	MCCB	Fuse	
Ex9QR5-15-6-D	1720000	15	5	11	3	11	3	9.6	3	14	10	10	11	M1S40T3L	60A,600V, K5	Ex9C18F11K
Ex9QR5-22-6-D	1720001	22	5	18	5	17	5	22	7.5	21	15	20	22	M1S60T3L	80A,600V, K5	Ex9C25F11K
Ex9QR5-30-6-D	1720002	30	5	25	7.5	24	7.5	28	10	27	20	25	27	M1S80T3L	100A,600V, K5	Ex9C32F11K
Ex9QR5-37-6-D	1720003	37	5	32	10	31	10	28	10	34	25	30	32	M1S100T3L	125A,600V, K5	Ex9C40F11K
Ex9QR5-44-6-D	1720004	44	5	32	10	31	10	42	15	40	30	40	41	M1S125T3L	150A,600V, K5	Ex9C50F11K
Ex9QR5-60-6-D	1720005	60	5	48	15	59	20	54	20	52	40	50	52	M1S150T3L	150A,600V, K5	Ex9C65F11K
Ex9QR5-74-6-D	1720006	74	10	62	20	59	20	68	25	65	50	60	62	M2S250T3L	250A,600V, K5	Ex9C80F11K
Ex9QR5-90-6-D	1720007	90	10	78	25	88	30	80	30	77	60	75	77	M2S250T3L	250A,600V, K5	Ex9C115F22K
Ex9QR5-110-6-D	1720008	110	10	92	30	88	30	104	40	96	75	100	99	M2S250T3L	350A,600V, K5	Ex9C115F22K
Ex9QR5-150-6-D	1720009	150	10	150	50	143	50	130	50	124	100	150	144	M2S250T3L	350A,600V, K5	Ex9C150F22K
Ex9QR5-180-6-D	1720010	180	10	177	60	169	60	154	60	180	150	150	144	M3S400T3L	400A,600V, K5	Ex9C185F22K
Ex9QR5-220-6-D	1720011	220	10	177	60	169	60	192	75	180	150	200	192	M3S400T3L	400A,600V, K5	Ex9C225F22K
Ex9QR5-264-6-D	1720012	264	18	221	75	211	75	248	100	240	200	250	242	M3S400T3L	A4BQ601	Ex9C265F22K
Ex9QR5-320-6-D	1720013	320	18	285	100	273	100	312	125	302	250	300	289	M4S600T3L	A4BQ750	Ex9C300F22K
Ex9QR5-370-6-D	1720014	370	18	359	125	343	125	360	150	361	300	350	336	M4S600T3L	A4BQ800	Ex9C400F22K
Ex9QR5-440-6-D	1720015	440	18	414	150	396	150	360	150	414	350	450	412	M5S800T3L	A4BQ1000	Ex9C500F22K
Ex9QR5-500-6-D	1720016	500	30	414	150	396	150	480	200	477	400	500	472	M5S800T3L	A4BQ1200	Ex9C500F22K
Ex9QR5-560-6-D	1720017	560	30	552	200	528	200	480	200	515	450	550	529	M6N1200E3L	A4BQ1400	Ex9C630F22K
Ex9QR5-630-6-D	1720018	630	30	552	200	528	200	604	250	590	500	600	577	M6N1200E3L	A4BQ1600	Ex9C630F22K
Ex9QR5-710-6-D	1720019	710	42	690	250	667	250	604	250	660	550	650	625	M6N1200E3L	A4BQ1600	Ex9C800F22K
Ex9QR5-800-6-D	1720020	800	42	794	300	766	300	722	300	780	650	750	722	M6N1200E3L	A4BQ2000	Ex9C1000F22K
Ex9QR5-900-6-D	1720021	900	42	892	350	866	350	828	350	900	750	850	817	M6N1200E3L	A4BQ2000	2*Ex9C1000F22K
Ex9QR5-1000-6-D	1720022	1000	42	892	350	866	350	954	400	960	800	900	866	M6N1200E3L	A4BQ2000	2*Ex9C1000F22K

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Ex9QR5 Soft starter

Specifications

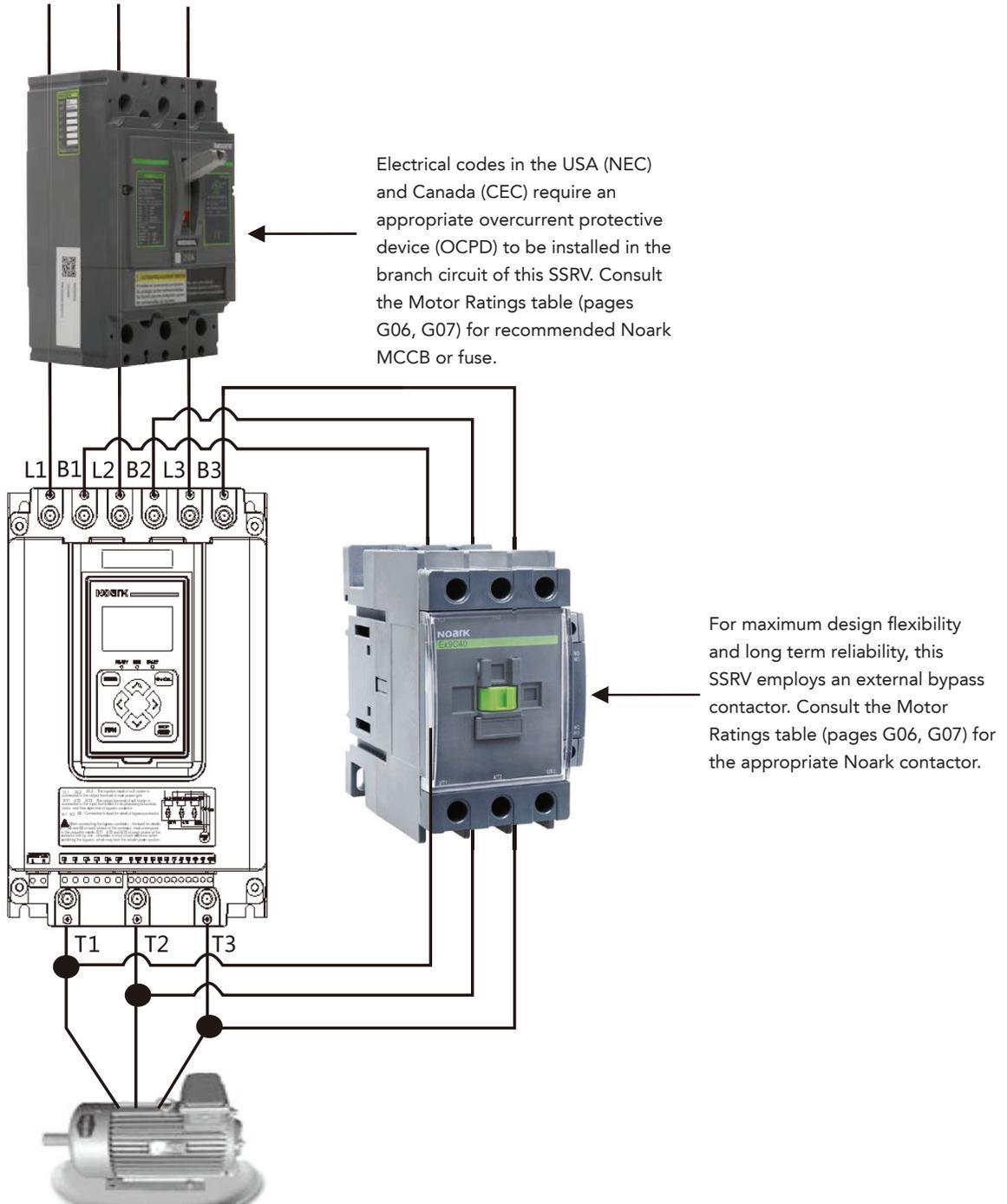
IEC Motor Ratings

				Maximum Motor Ratings (IEC)										Protection and Bypass Components		
SKU	Item Number	Rated Amps	Short Circuit Withstand (kA)	220Vac		380Vac		460Vac		575Vac		690Vac		Circuit Protection		Bypass Contactor
				FLA	kW	FLA	kW	FLA	kW	FLA	kW	FLA	kW	MCCB	Fuse	
Ex9QR5-15-6-D	1720000	15	5	15	4	15	7.5	15	9	15	11	15	11	M1S40T3L	60A,600V, K5	Ex9C18F11K
Ex9QR5-22-6-D	1720001	22	5	22	5.5	22	11	22	15	22	18.5	22	18.5	M1S60T3L	80A,600V, K5	Ex9C25F11K
Ex9QR5-30-6-D	1720002	30	5	29	7.5	29	15	29	18.5	29	22	29	22	M1S80T3L	100A,600V, K5	Ex9C32F11K
Ex9QR5-37-6-D	1720003	37	5	36	11	36	18.5	36	22	36	30	36	30	M1S100T3L	125A,600V, K5	Ex9C40F11K
Ex9QR5-44-6-D	1720004	44	5	42	11	42	22	42	30	42	30	42	37	M1S125T3L	150A,600V, K5	Ex9C50F11K
Ex9QR5-60-6-D	1720005	60	5	57	15	57	30	57	37	57	45	57	55	M1S150T3L	150A,600V, K5	Ex9C65F11K
Ex9QR5-74-6-D	1720006	74	10	70	18.5	70	37	70	45	70	55	70	75	M2S250T3L	250A,600V, K5	Ex9C80F11K
Ex9QR5-90-6-D	1720007	90	10	84	22	84	45	84	55	84	75	84	90	M2S250T3L	250A,600V, K5	Ex9C115F22K
Ex9QR5-110-6-D	1720008	110	10	103	30	103	55	103	75	103	75	103	110	M2S250T3L	350A,600V, K5	Ex9C115F22K
Ex9QR5-150-6-D	1720009	150	10	140	37	140	75	140	90	140	110	140	132	M2S250T3L	350A,600V, K5	Ex9C150F22K
Ex9QR5-180-6-D	1720010	180	10	167	45	167	90	167	110	167	132	167	160	M3S400T3L	400A,600V, K5	Ex9C185F22K
Ex9QR5-220-6-D	1720011	220	10	207	55	207	110	207	132	207	160	207	200	M3S400T3L	400A,600V, K5	Ex9C225F22K
Ex9QR5-264-6-D	1720012	264	18	248	75	248	132	248	150	248	185	248	250	M3S400T3L	A4BQ601	Ex9C265F22K
Ex9QR5-320-6-D	1720013	320	18	300	90	300	160	300	185	300	250	300	315	M4S600T3L	A4BQ750	Ex9C300F22K
Ex9QR5-370-6-D	1720014	370	18	349	110	349	185	349	220	349	280	349	355	M4S600T3L	A4BQ800	Ex9C400F22K
Ex9QR5-440-6-D	1720015	440	18	404	110	404	220	404	250	404	315	404	400	M5S800T3L	A4BQ1000	Ex9C500F22K
Ex9QR5-500-6-D	1720016	500	30	459	132	459	250	459	280	459	355	459	400	M5S800T3L	A4BQ1200	Ex9C500F22K
Ex9QR5-560-6-D	1720017	560	30	514	160	514	280	514	315	514	400	514	500	M6N1200E3L	A4BQ1400	Ex9C630F22K
Ex9QR5-630-6-D	1720018	630	30	579	160	579	315	579	355	579	450	579	560	M6N1200E3L	A4BQ1600	Ex9C630F22K
Ex9QR5-710-6-D	1720019	710	42	634	200	634	355	634	400	634	500	634	630	M6N1200E3L	A4BQ1600	Ex9C800F22K
Ex9QR5-800-6-D	1720020	800	42	720	200	720	400	720	450	720	560	720	710	M6N1200E3L	A4BQ2000	Ex9C1000F22K
Ex9QR5-900-6-D	1720021	900	42	810	250	810	450	810	560	810	630	810	800	M6N1200E3L	A4BQ2000	2*Ex9C1000F22K
Ex9QR5-1000-6-D	1720022	1000	42	900	250	900	500	900	560	900	800	900	900	M6N1200E3L	A4BQ2000	2*Ex9C1000F22K



Ex9QR5 Soft starter

Application



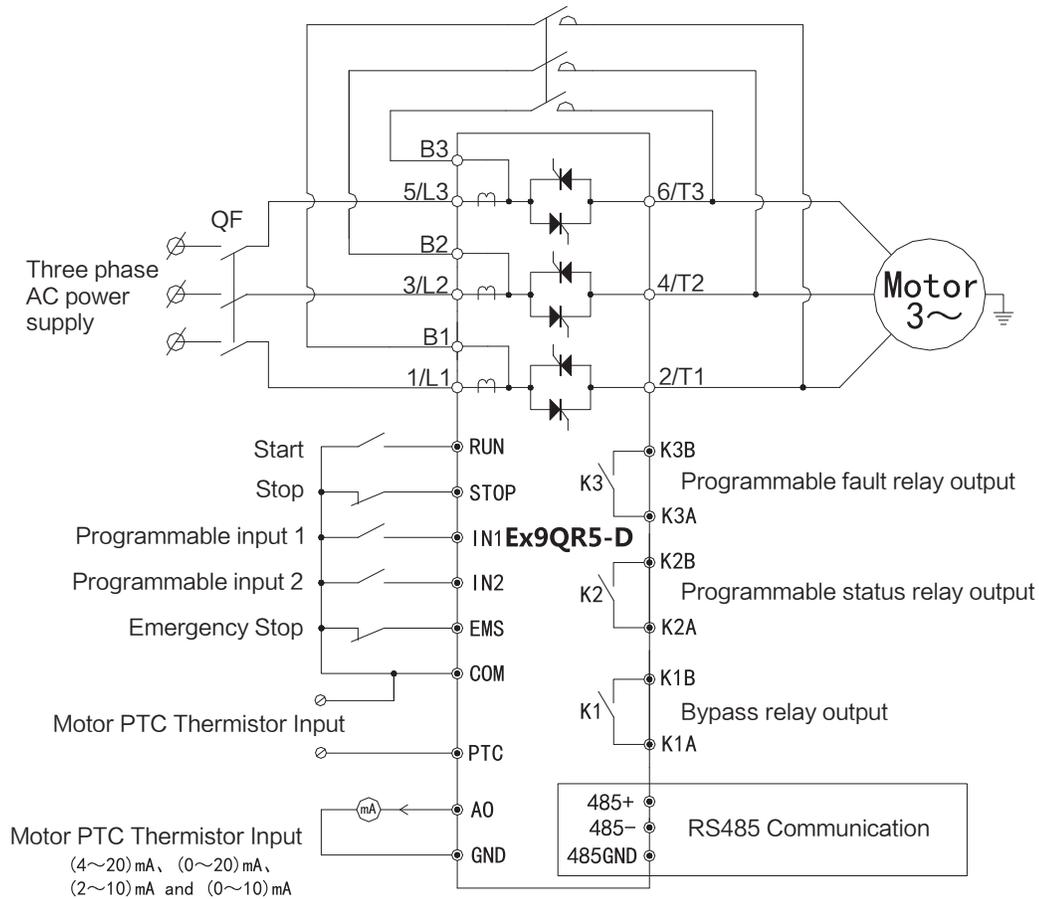
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Ex9QR5 Soft starter

Basic Wiring

Wiring and Terminal Function



Terminal Number	Function
L	Control power input L
N	Control power input N
K1A, K1B	Bypass relay K1 Normally Open (5A max)
K2A, K2B	Programmable state relay K2 Normally Open
K3A, K3B	Programmable fault relay K3 Normally Open
RUN	Start Input (NO dry contact only)
STOP	Stop Input (NC dry contact only)
IN1	Programmable Input (dry contact only)
IN2	Programmable Input (dry contact only)

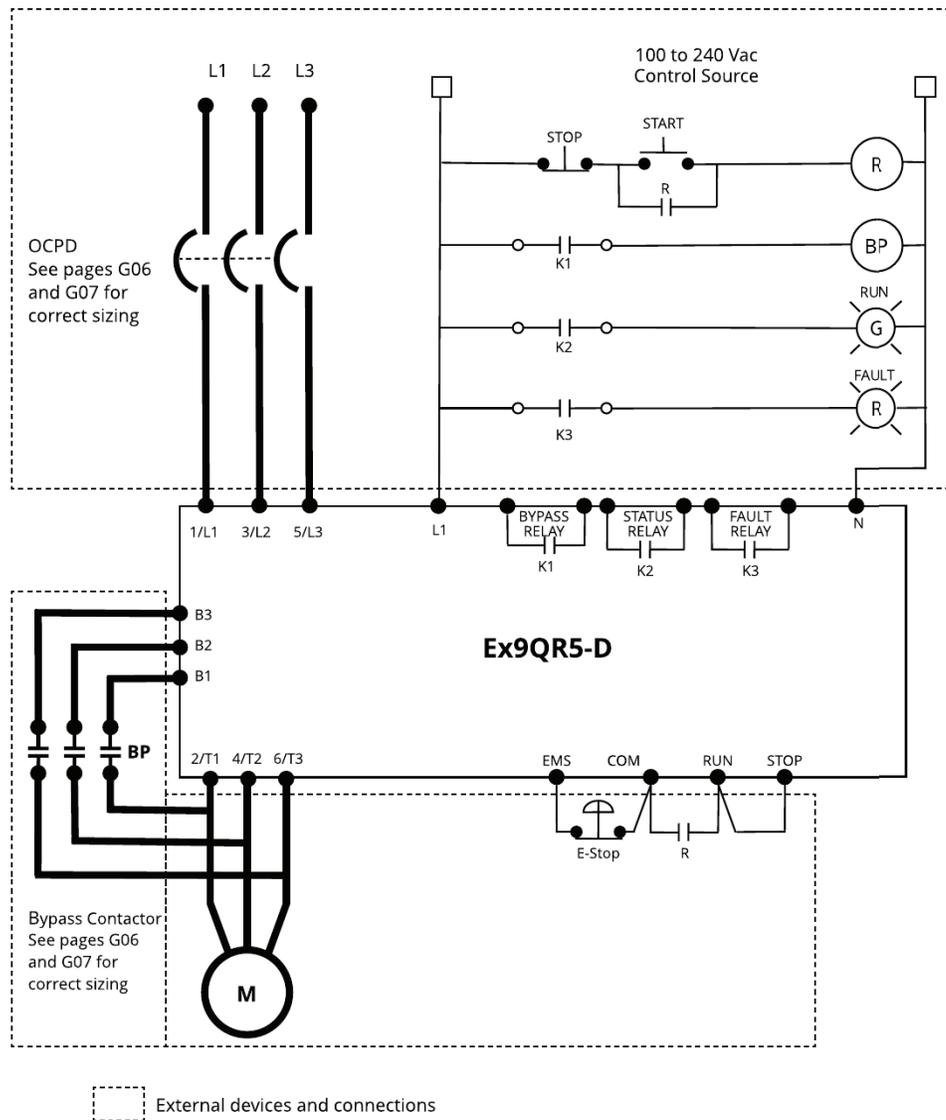
Terminal Number	Function
EMS	Emergency Stop Input (NC dry contact only)
COM	Common
PTC	Motor Temperature Sensor Input (PTC Thermistor)
AO	Analog Output
GND	Analog Output Ground
485+	RS485 Plus
485-	RS485 Minus
485GND	RS485 Communications Ground



Ex9QR5 Soft starter

Wiring Diagram

Typical Wiring for Start/Stop Control



Note 1: Bypass Relay has a maximum rating of 5A at 120Vac.

Note 2: An external Overload Relay is not required in a single motor application. The Ex9QR5 provides electronic overload protection, Class 10A, 10, 20, 30.

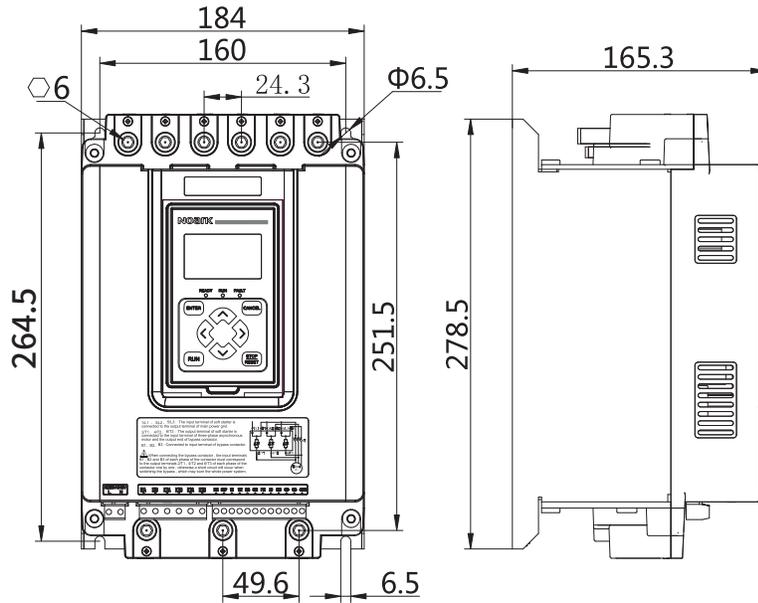


Ex9QR5 Soft starter

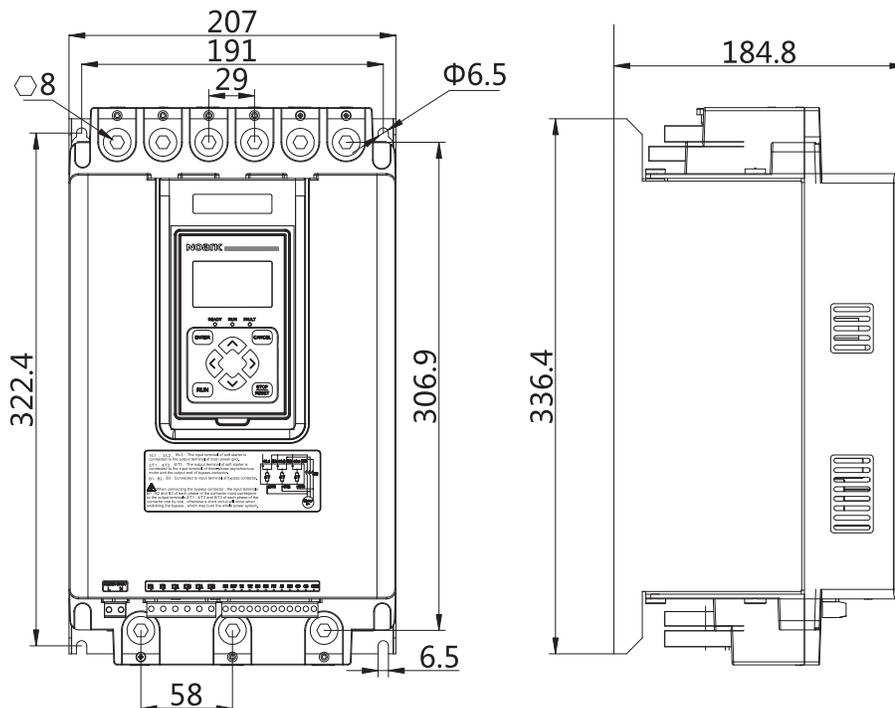
Dimensions

15A-90A

mm



110A-150A



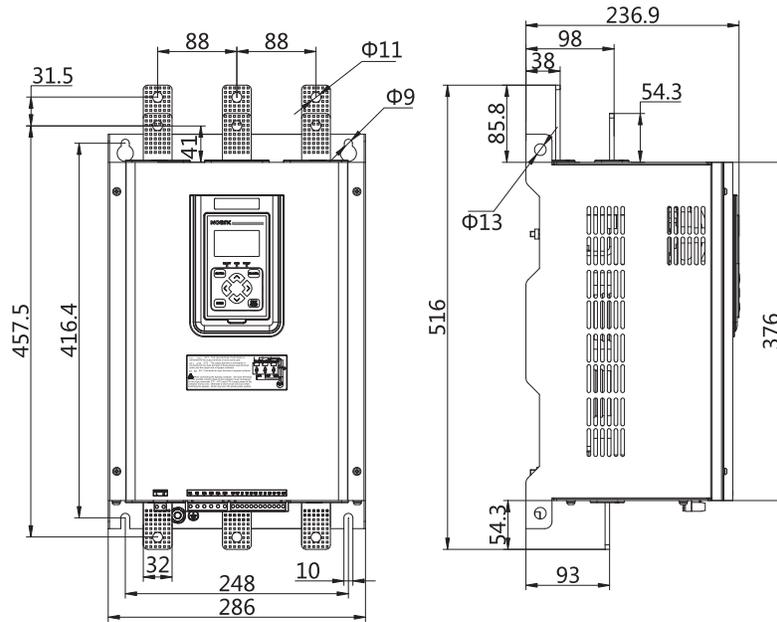


Ex9QR5 Soft starter

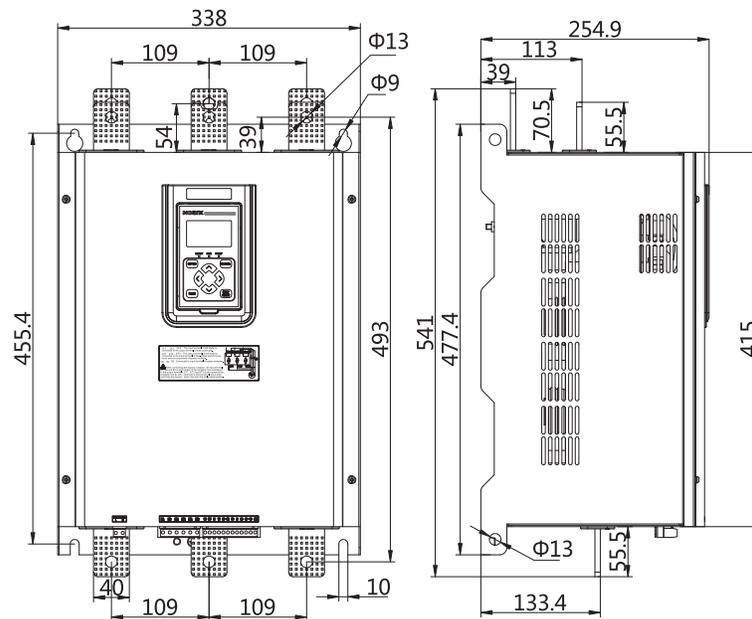
Dimensions

180A-370A

mm



440A-630A



K

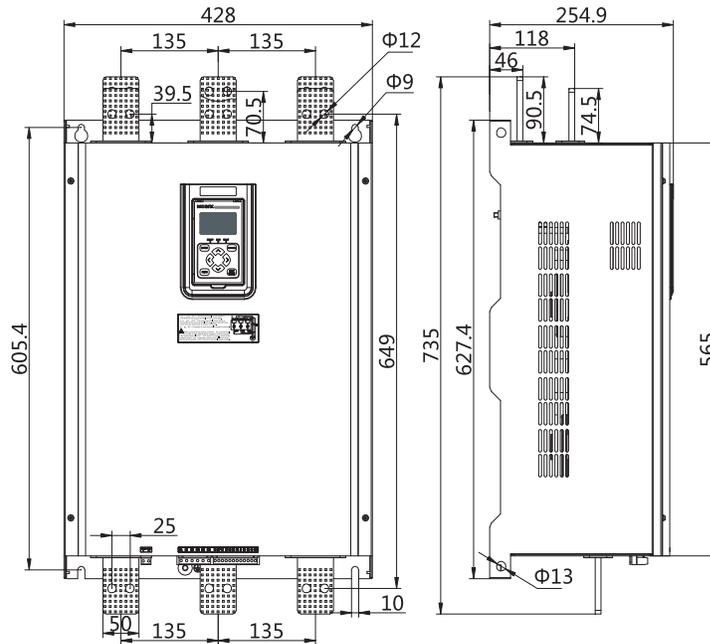


Ex9QR5 Soft starter

Dimensions

710A-1000A

mm



Weight and Dimensions

Catalog Number	Rated Current Range (A)	Net weight (kg)	Dimension (mm)
Ex9QR50156D~Ex9QR50906D	15~90	6	145×268×190
Ex9QR51106D~Ex9QR51506D	110~150	11	210×310×215
Ex9QR51806D~Ex9QR53706D	180~370	23	253×529×241
Ex9QR54406D~Ex9QR56306D	440~630	32	300×564×253
Ex9QR57106D~Ex9QR510006D	710~1000	52	444×752×250

Installation Specification

SKU	Lugs / Lug Pad Dimensions	Connection Type screw size	Lug / Screw Torque (N·m)	Control Circuit wire size (AWG)	Control Circuit screw size	Control Circuit torque specs (N·m)
Ex9QR50156D~Ex9QR50906D	14-6 AWG	Built In Lugs	5	13	M3	0.5
Ex9QR51106D~Ex9QR51506D	4-3/0 AWG	Built In Lugs	10			
Ex9QR51806D~Ex9QR53706D	3 AWG-300 Kcmil	Built In Lugs	26	13	M3	0.5
Ex9QR54406D~Ex9QR56306D	32mm × 5mm	M10 *	26	13	M3	0.5
Ex9QR57106D~Ex9QR510006D	40mm × 6mm	M12*	45	13	M3	0.5
Ex9QR510006D~Ex9QR510006D	50mm × 8mm	M10 x 2 *	26	13	M3	0.5

* Cable lugs not included.

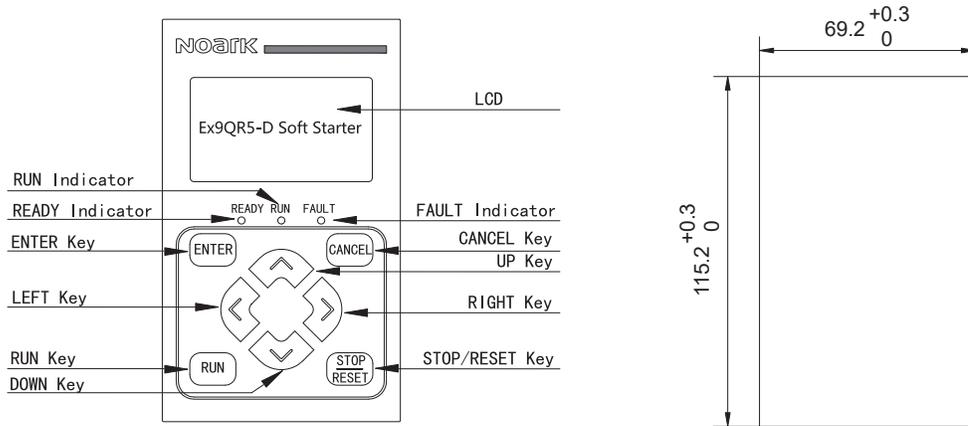


Ex9QR5 Soft starter

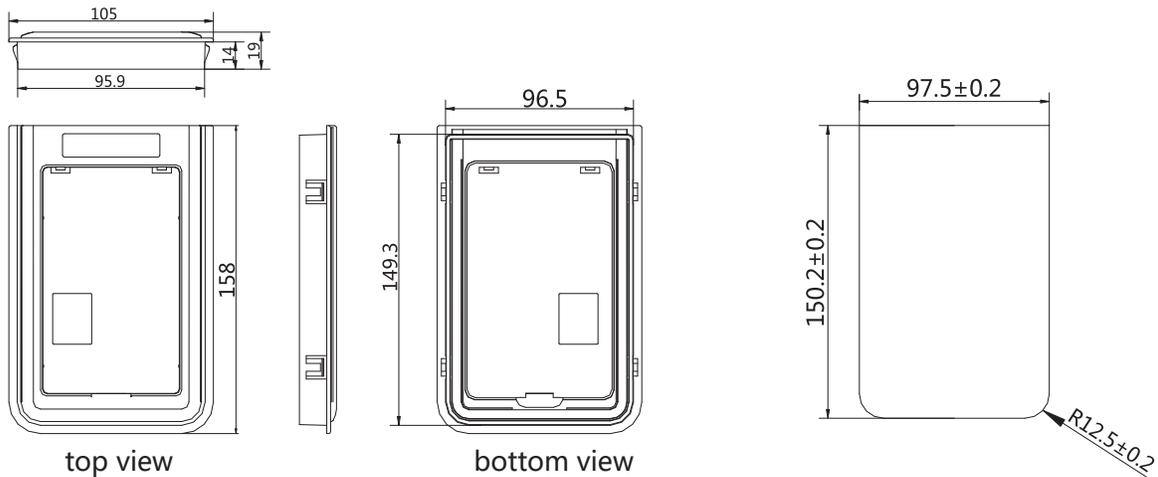
Dimensions

Keypad Controls

mm



Remote Keypad Mounting Adapter



K



Ex9IL 22mm Indicator Lights

Product Overview

Features

- Metal construction for superior durability and visual appeal
- UL listed and IP 65* (front) available for protection against dust and water
- Low behind the panel depth
- Operators mount in a round 7/8in (22.5mm) hole that is interchangeable with competitor's products
- Field convertible from maintained to momentary (available on maintained pushbuttons only)
- Modular construction makes assembly fast and simplifies stocking of components and complete devices

* Indicator lights available up to IP 65. Contact a NOARK representative for more information.

Certifications

- Certified for Canada according to CSA standards
- IEC/EN 60947
- CE Approved





Ex9IL 22mm Indicator Lights

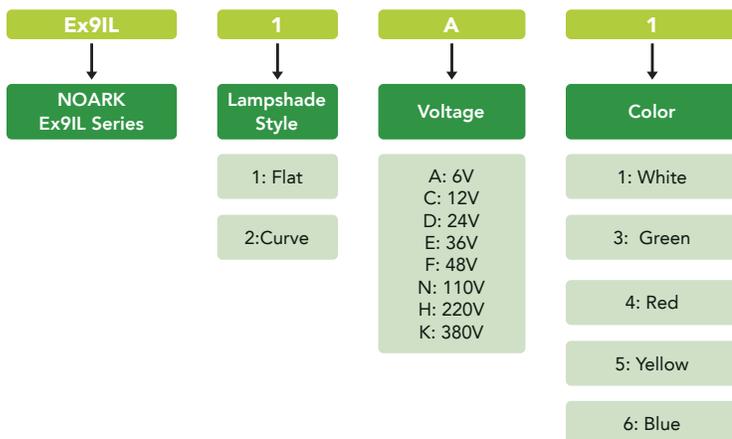
Product Label/Product Selection Guide

Ex9IL Product Label



1	Head
2	Base
3	LED Lamp Data
4	IEC Standard
5	CE Mark
6	UL Listed Mark

Ex9IL Product Selection Guide





Ex9IL 22mm Indicator Lights

Ex9IL1 Compacted Flat Lampshade



Resistance Type			
Color	LED Lamp Voltage (Vac/dc)	Product	Part Number
⊘	6	Ex9IL1A1	1200665
●		Ex9IL1A3	1200666
●		Ex9IL1A4	1200667
●		Ex9IL1A5	1200668
●		Ex9IL1A6	1200669
⊘		12	Ex9IL1C1
●	Ex9IL1C3		1200671
●	Ex9IL1C4		1200672
●	Ex9IL1C5		1200673
●	Ex9IL1C6		1200674
⊘	24		Ex9IL1D1
●		Ex9IL1D3	1200676
●		Ex9IL1D4	1200677
●		Ex9IL1D5	1200678
●		Ex9IL1D6	1200679
⊘		36	Ex9IL1E1
●	Ex9IL1E3		1200681
●	Ex9IL1E4		1200682
●	Ex9IL1E5		1200683
●	Ex9IL1E6		1200684
⊘	48		Ex9IL1F1
●		Ex9IL1F3	1200686
●		Ex9IL1F4	1200687
●		Ex9IL1F5	1200688
●		Ex9IL1F6	1200689

Capacitance Type			
Color	LED Lamp Voltage (Vac/dc)	Product	Part Number
⊘	110	Ex9IL1N1	1200690
●		Ex9IL1N3	1200691
●		Ex9IL1N4	1200692
●		Ex9IL1N5	1200693
●		Ex9IL1N6	1200694
⊘		220	Ex9IL1H1
●	Ex9IL1H3		1200696
●	Ex9IL1H4		1200697
●	Ex9IL1H5		1200698
●	Ex9IL1H6		1200699
⊘	380		Ex9IL1K1
●		Ex9IL1K3	1200701
●		Ex9IL1K4	1200702
●		Ex9IL1K5	1200703
●		Ex9IL1K6	1200704



Ex9IL 22mm Indicator Lights

Ex9IL2 Compacted Curve Lampshade



Resistance Type			
Color	LED Lamp Voltage (Vac/dc)	Product	Part Number
White	6	Ex9IL2A1	1200705
Green		Ex9IL2A3	1200706
Red		Ex9IL2A4	1200707
Yellow		Ex9IL2A5	1200708
Blue		Ex9IL2A6	1200709
White		12	Ex9IL2C1
Green	Ex9IL2C3		1200711
Red	Ex9IL2C4		1200712
Yellow	Ex9IL2C5		1200713
Blue	Ex9IL2C6		1200714
White	24		Ex9IL2D1
Green		Ex9IL2D3	1200716
Red		Ex9IL2D4	1200717
Yellow		Ex9IL2D5	1200718
Blue		Ex9IL2D6	1200719
White		36	Ex9IL2E1
Green	Ex9IL2E3		1200721
Red	Ex9IL2E4		1200722
Yellow	Ex9IL2E5		1200723
Blue	Ex9IL2E6		1200724
White	48		Ex9IL2F1
Green		Ex9IL2F3	1200726
Red		Ex9IL2F4	1200727
Yellow		Ex9IL2F5	1200728
Blue		Ex9IL2F6	1200729

Capacitance Type			
Color	LED Lamp Voltage (Vac/dc)	Product	Part Number
White	110	Ex9IL2N1	1200730
Green		Ex9IL2N3	1200731
Red		Ex9IL2N4	1200732
Yellow		Ex9IL2N5	1200733
Blue		Ex9IL2N6	1200734
White		220	Ex9IL2H1
Green	Ex9IL2H3		1200736
Red	Ex9IL2H4		1200737
Yellow	Ex9IL2H5		1200738
Blue	Ex9IL2H6		1200739
White	380		Ex9IL2K1
Green		Ex9IL2K3	1200741
Red		Ex9IL2K4	1200742
Yellow		Ex9IL2K5	1200743
Blue		Ex9IL2K6	1200744





Ex9IL 22mm Indicator Lights Specifications

		Ex9IL
Rated Operational Voltage U_e (V)	Vac	110~380
	Vac/dc	6~48
Rated Operational Current (mA)		$I_e \leq 20$
Service Life (h)		$\geq 30,000$
Brightness (cd/m^2)		≥ 60
Basic Colors		○ ● ● ● ● ●

Note: For AC power supply, the limit voltage range is $0.85U_e \sim 1.1U_e$ between terminals.



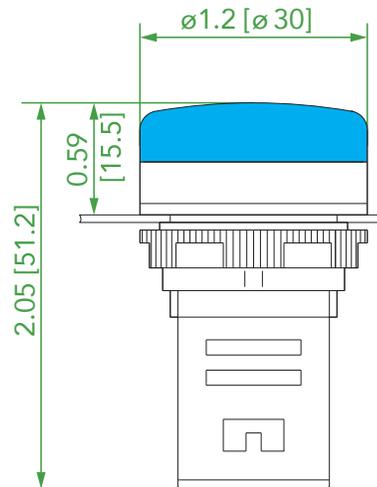
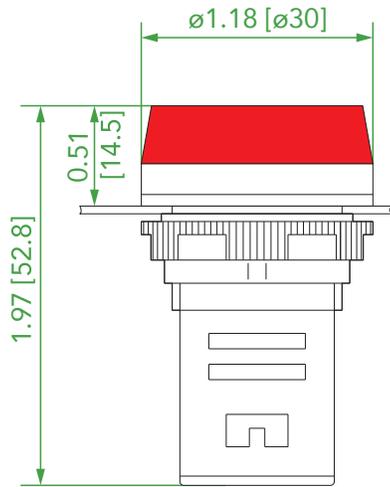
Ex9IL 22mm Indicator Lights

Dimensions

Ex9IL1

Ex9IL2

mm





Ex9PB 22mm Pushbuttons

Product Overview

Features

- Metal construction for superior durability and visual appeal
- UL recognized component and labeled IP 65* (front) for protection against dust and water
- LED replaceable lamps are standard
- Low behind the panel depth
- Operators mount in a round 7/8in (22.5mm) hole that is interchangeable with competitor's products
- Field convertible from maintained to momentary (available on maintained pushbuttons only)
- More than one million mechanical operations on momentary and half million on maintained pushbuttons
- Modular construction makes assembly fast and simplifies stocking of components and complete devices

* Ex9PBA momentary flush pushbuttons available up to IP 65. Contact a NOARK representative for more information.

Certifications

- UL Recognized Component, File Number E353865
- Certified for Canada according to CSA standards
- IEC/EN 60947
- CE Approved

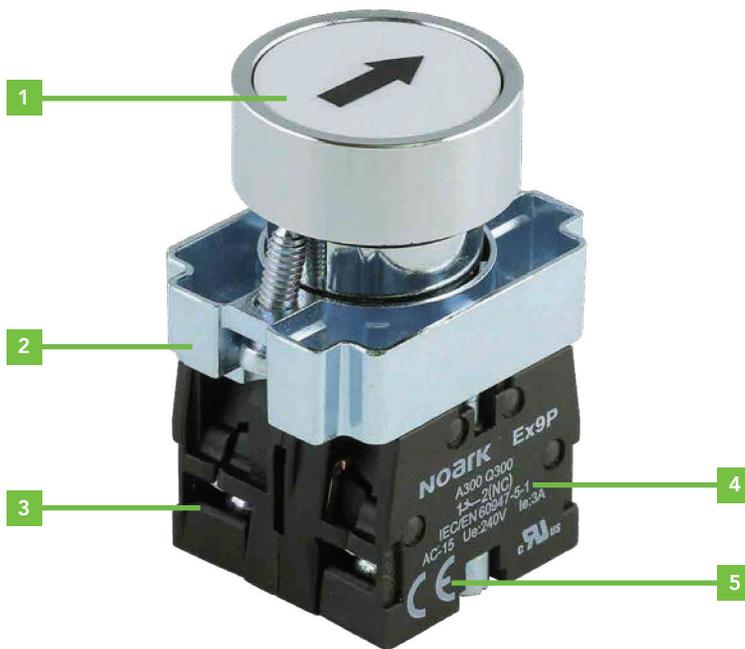




Ex9PB 22mm Pushbuttons

Product Label/Specifications

Ex9PB Product Label



- | | |
|---|-------------------------------------|
| 1 | Head |
| 2 | Middle Adapter |
| 3 | Base |
| 4 | IEC Standard |
| 5 | UL Recognized Component and CE Mark |

Ex9PB Specifications

		Ex9PB		
Rated Operational Voltage Ue (V)		125	240	415
Rated Operational Current (mA)	15Vac	-	3	1.9
	13Vdc	0.55	-	-
Illuminated Button Lamp Parameters		Direct Type LED Lamp		RC Type 24V LED Lamp
Rated Operational Current Ie (mA)		Ie≤20		Ie≤20
Rated Operational Voltage (V)		6~220Vac/dc		RC type/380Vac

Note: 1) Rated insulation voltage Ui: 415V
 2) Conventional thermal current Ith: 10A



Ex9PB 22mm Pushbuttons

Product Guide



Non-Illuminated
Momentary Flush
L247



Non-Illuminated
Momentary Flush+Symbol
L247



Non-Illuminated
Momentary Extended
L247



Non-Illuminated Momentary
ø40mm Mushroom Head
L248



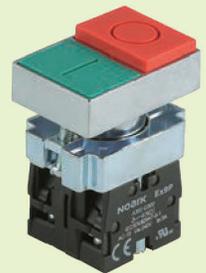
Non-Illuminated Momentary
ø60mm Mushroom Head
L248



Non-Illuminated Push On/Twist Off
ø30-60mm Mushroom Head
L249



Non-Illuminated Momentary
Double Head - Flush
L249



Non-Illuminated Momentary
Double Head - Extended
L249



Non-Illuminated
Selector Switch - Rotary Knob
L250



Non-Illuminated
Selector Switch - Rotary Handle
L250



Non-Illuminated
Selector Switch - Key
L251



Illuminated
Momentary Flush with Guard
L252



Illuminated
Indicator Light
L253



Illuminated
Momentary Double Head Flush+Projecting
L253



Ex9PB 22mm Pushbuttons

Ex9PBA, Ex9PBA+Symbol and Ex9PBL Non-Illuminated



Momentary Flush*			
Color	Contacts	Catalog number	Item number
○	1NO	Ex9PBA11	1200000
●		Ex9PBA21	1200001
●		Ex9PBA31	1200002
●		Ex9PBA41	1200003
●		Ex9PBA51	1200004
●		Ex9PBA61	1200005
○	1NC	Ex9PBA12	1200006
●		Ex9PBA22	1200007
●		Ex9PBA32	1200008
●		Ex9PBA42	1200009
●		Ex9PBA52	1200010
●		Ex9PBA62	1200011
○	2NO	Ex9PBA13	1200012
●		Ex9PBA23	1200013
●		Ex9PBA33	1200014
●		Ex9PBA43	1200015
●		Ex9PBA53	1200016
●		Ex9PBA63	1200017
○	2NC	Ex9PBA14	1200018
●		Ex9PBA24	1200019
●		Ex9PBA34	1200020
●		Ex9PBA44	1200021
●		Ex9PBA54	1200022
●		Ex9PBA64	1200023
○	1NO+1NC	Ex9PBA15	1200024
●		Ex9PBA25	1200025
●		Ex9PBA35	1200026
●		Ex9PBA45	1200027
●		Ex9PBA55	1200028
●		Ex9PBA65	1200029

Momentary Flush+Symbol*			
Color	Contacts	Catalog number	Item number
①	1NO	Ex9PBA3311	1200030
②	1NO+1NC	Ex9PBA2365	1200031
③	1NC	Ex9PBA4322	1200032
④	1NO	Ex9PBA2351	1200033
⑤	1NO+1NC	Ex9PBA1345	1200034



Momentary Extended			
Color	Contacts	Catalog number	Item number
○	1NO+1NC	Ex9PBL15	1200039
●	1NO	Ex9PBL21	1200040
●	1NO	Ex9PBL31	1200036
●	1NC	Ex9PBL42	1200035
●	1NO+1NC	Ex9PBL55	1200037
●	1NO+1NC	Ex9PBL65	1200038

* Ex9PBA momentary flush pushbuttons available up to IP 65. Contact a NOARK representative for more information.



Ex9PB 22mm Pushbuttons

Ex9PBC and Ex9PBR Non-Illuminated



Momentary ø40mm Mushroom Head			
Color	Contacts	Catalog number	Item number
○	1NO	Ex9PBC11	1200378
●		Ex9PBC21	1200379
●		Ex9PBC31	1200380
●		Ex9PBC41	1200381
●		Ex9PBC51	1200382
●		Ex9PBC61	1200383
○	1NC	Ex9PBC12	1200384
●		Ex9PBC22	1200385
●		Ex9PBC32	1200386
●		Ex9PBC42	1200387
●		Ex9PBC52	1200388
●		Ex9PBC62	1200389
○	2NO	Ex9PBC13	1200390
●		Ex9PBC23	1200391
●		Ex9PBC33	1200392
●		Ex9PBC43	1200393
●		Ex9PBC53	1200394
●		Ex9PBC63	1200395
○	2NC	Ex9PBC14	1200396
●		Ex9PBC24	1200387
●		Ex9PBC34	1200398
●		Ex9PBC44	1200399
●		Ex9PBC54	1200400
●		Ex9PBC64	1200401
○	1NO+1NC	Ex9PBC15	1200402
●		Ex9PBC25	1200403
●		Ex9PBC35	1200404
●		Ex9PBC45	1200405
●		Ex9PBC55	1200406
●		Ex9PBC65	1200407

Momentary ø60mm Mushroom Head			
Color	Contacts	Catalog number	Item number
○	1NO	Ex9PBR11	1200408
●		Ex9PBR21	1200409
●		Ex9PBR31	1200410
●		Ex9PBR41	1200411
●		Ex9PBR51	1200412
●		Ex9PBR61	1200413
○	1NC	Ex9PBR12	1200414
●		Ex9PBR22	1200415
●		Ex9PBR32	1200416
●		Ex9PBR42	1200417
●		Ex9PBR52	1200418
●		Ex9PBR62	1200419
○	2NO	Ex9PBR13	1200420
●		Ex9PBR23	1200421
●		Ex9PBR33	1200422
●		Ex9PBR43	1200423
●		Ex9PBR53	1200424
●		Ex9PBR63	1200425
○	2NC	Ex9PBR14	1200426
●		Ex9PBR24	1200427
●		Ex9PBR34	1200428
●		Ex9PBR44	1200429
●		Ex9PBR54	1200430
●		Ex9PBR64	1200431
○	1NO+1NC	Ex9PBR15	1200432
●		Ex9PBR25	1200433
●		Ex9PBR35	1200434
●		Ex9PBR45	1200435
●		Ex9PBR55	1200436
●		Ex9PBR65	1200437



Ex9PB 22mm Pushbuttons

Ex9PBS and Ex9PBL8 Non-Illuminated



Push On/Twist Off ø30mm Mushroom Head			
Color	Contacts	Catalog number	Item number
●	1NO	Ex9PBS441	1200448
	1NC	Ex9PBS442	1200449
	2NO	Ex9PBS443	1200450
	2NC	Ex9PBS444	1200451
	1NO+1NC	Ex9PBS445	1200452

Momentary Double Head - Flush			
Color	Contacts	Catalog number	Item number
●+●	1NO+1NC	Ex9PBL8325	1200438

Push On/Twist Off ø40 Mushroom Head			
Color	Contacts	Catalog number	Item number
●	1NO	Ex9PBS541	1200453
	1NC	Ex9PBS542	1200454
	2NO	Ex9PBS543	1200455
	2NC	Ex9PBS544	1200456
	1NO+1NC	Ex9PBS545	1200457



Push On/Twist Off ø60 Mushroom Head			
Color	Contacts	Catalog number	Item number
●	1NO	Ex9PBS641	1200458
	1NC	Ex9PBS642	1200459
	2NO	Ex9PBS643	1200460
	2NC	Ex9PBS644	1200461
	1NO+1NC	Ex9PBS645	1200462

Momentary Double Head - Extended			
Color	Contacts	Catalog number	Item number
●+●	1NO+1NC	Ex9PBL8425	1200439

* Ex9PBA momentary flush pushbuttons available up to IP 65. Contact a NOARK representative for more information.



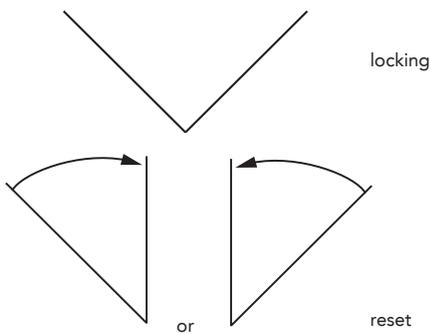
Ex9PB 22mm Pushbuttons

Ex9PBD and Ex9PBJ Non-Illuminated



Selector Switch - Rotary Knob			
Positions	Contacts	Catalog number	Item number
		2-Position	
	1NO	Ex9PBD21	1200503
	1NC	Ex9PBD22	1200504
	2NO	Ex9PBD23	1200505
	2NC	Ex9PBD24	1200506
	1NO+1NC	Ex9PBD25	1200507
	1NO	Ex9PBD41	1200508
	1NC	Ex9PBD42	1200509
	2NO	Ex9PBD43	1200510
	2NC	Ex9PBD44	1200511
	1NO+1NC	Ex9PBD45	1200512
3-Position			
	2NO	Ex9PBD33	1200538
	2NC	Ex9PBD34	1200539
	1NO+1NC	Ex9PBD35	1200540
	2NO	Ex9PBD53	1200541
	2NC	Ex9PBD54	1200542
	1NO+1NC	Ex9PBD55	1200543

Selector Switch - Rotary Handle			
Positions	Contacts	Catalog number	Item number
		2-Position	
	1NO	Ex9PBJ21	1200513
	1NC	Ex9PBJ22	1200514
	2NO	Ex9PBJ23	1200515
	2NC	Ex9PBJ24	1200516
	1NO+1NC	Ex9PBJ25	1200517
	1NO	Ex9PBJ41	1200518
	1NC	Ex9PBJ42	1200519
	2NO	Ex9PBJ43	1200520
	2NC	Ex9PBJ44	1200521
	1NO+1NC	Ex9PBJ45	1200522
3-Position			
	2NO	Ex9PBJ33	1200544
	2NC	Ex9PBJ34	1200545
	1NO+1NC	Ex9PBJ35	1200546
	2NO	Ex9PBJ53	1200547
	2NC	Ex9PBJ54	1200548
	1NO+1NC	Ex9PBJ55	1200549



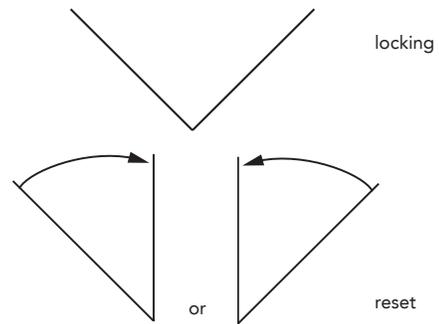


Ex9PB 22mm Pushbuttons

Ex9PBG Non-Illuminated



Selector Switch - Key				
Positions	Contacts	Catalog number	Item number	
		2-Position		
	1NO	Ex9PBG21	1200523	
	1NC	Ex9PBG22	1200524	
	2NO	Ex9PBG23	1200525	
	2NC	Ex9PBG24	1200526	
	1NO+1NC	Ex9PBG25	1200527	
	1NO	Ex9PBG41	1200533	
	1NC	Ex9PBG42	1200534	
	2NO	Ex9PBG43	1200535	
	2NC	Ex9PBG44	1200536	
	1NO+1NC	Ex9PBG45	1200537	
	1NO	Ex9PBG21B	1200528	
	1NC	Ex9PBG22B	1200529	
	2NO	Ex9PBG23B	1200530	
	2NC	Ex9PBG24B	1200531	
	1NO+1NC	Ex9PBG25B	1200532	
	3-Position			
		2NO	Ex9PBG33	1200550
2NC		Ex9PBG34	1200551	
1NO+1NC		Ex9PBG35	1200552	
	2NO	Ex9PBG53	1200553	
	2NC	Ex9PBG54	1200554	
	1NO+1NC	Ex9PBG55	1200555	
	2NO	Ex9PBG33D	1200556	
	2NC	Ex9PBG34D	1200557	
	1NO+1NC	Ex9PBG35D	1200558	



= Key removed at this position only.



Ex9PB 22mm Pushbuttons

Ex9PBW3 Illuminated



Momentary Flush with Guard											
Color	LED Lamp Voltage Vac/dc	Catalog number	Item number								
		1NO		1NC		2NO		2NC		1NO+1NC	
○	6	Ex9PBW3161A	1200153	Ex9PBW3162A	1200193	Ex9PBW3163A	1200233	Ex9PBW3164A	1200273	Ex9PBW3165A	1200313
●		Ex9PBW3361A	1200154	Ex9PBW3362A	1200194	Ex9PBW3363A	1200234	Ex9PBW3364A	1200274	Ex9PBW3365A	1200314
●		Ex9PBW3461A	1200155	Ex9PBW3462A	1200195	Ex9PBW3463A	1200235	Ex9PBW3464A	1200275	Ex9PBW3465A	1200315
●		Ex9PBW3561A	1200156	Ex9PBW3562A	1200196	Ex9PBW3563A	1200236	Ex9PBW3564A	1200276	Ex9PBW3565A	1200316
●		Ex9PBW3661A	1200157	Ex9PBW3662A	1200197	Ex9PBW3663A	1200237	Ex9PBW3664A	1200277	Ex9PBW3665A	1200317
○	12	Ex9PBW3161C	1200158	Ex9PBW3162C	1200198	Ex9PBW3163C	1200238	Ex9PBW3164C	1200278	Ex9PBW3165C	1200318
●		Ex9PBW3361C	1200159	Ex9PBW3362C	1200199	Ex9PBW3363C	1200239	Ex9PBW3364C	1200279	Ex9PBW3365C	1200319
●		Ex9PBW3461C	1200160	Ex9PBW3462C	1200200	Ex9PBW3463C	1200240	Ex9PBW3464C	1200280	Ex9PBW3465C	1200320
●		Ex9PBW3561C	1200161	Ex9PBW3562C	1200201	Ex9PBW3563C	1200241	Ex9PBW3564C	1200281	Ex9PBW3565C	1200321
●		Ex9PBW3661C	1200162	Ex9PBW3662C	1200202	Ex9PBW3663C	1200242	Ex9PBW3664C	1200282	Ex9PBW3665C	1200322
○	24	Ex9PBW3161D	1200163	Ex9PBW3162D	1200203	Ex9PBW3163D	1200243	Ex9PBW3164D	1200283	Ex9PBW3165D	1200323
●		Ex9PBW3361D	1200164	Ex9PBW3362D	1200204	Ex9PBW3363D	1200244	Ex9PBW3364D	1200284	Ex9PBW3365D	1200324
●		Ex9PBW3461D	1200165	Ex9PBW3462D	1200205	Ex9PBW3463D	1200245	Ex9PBW3464D	1200285	Ex9PBW3465D	1200325
●		Ex9PBW3561D	1200166	Ex9PBW3562D	1200206	Ex9PBW3563D	1200246	Ex9PBW3564D	1200286	Ex9PBW3565D	1200326
●		Ex9PBW3661D	1200167	Ex9PBW3662D	1200207	Ex9PBW3663D	1200247	Ex9PBW3664D	1200287	Ex9PBW3665D	1200327
○	36	Ex9PBW3161E	1200168	Ex9PBW3162E	1200208	Ex9PBW3163E	1200248	Ex9PBW3164E	1200288	Ex9PBW3165E	1200328
●		Ex9PBW3361E	1200169	Ex9PBW3362E	1200209	Ex9PBW3363E	1200249	Ex9PBW3364E	1200289	Ex9PBW3365E	1200329
●		Ex9PBW3461E	1200170	Ex9PBW3462E	1200210	Ex9PBW3463E	1200250	Ex9PBW3464E	1200290	Ex9PBW3465E	1200330
●		Ex9PBW3561E	1200171	Ex9PBW3562E	1200211	Ex9PBW3563E	1200251	Ex9PBW3564E	1200291	Ex9PBW3565E	1200331
●		Ex9PBW3661E	1200172	Ex9PBW3662E	1200212	Ex9PBW3663E	1200252	Ex9PBW3664E	1200292	Ex9PBW3665E	1200332
○	48	Ex9PBW3161F	1200173	Ex9PBW3162F	1200213	Ex9PBW3163F	1200253	Ex9PBW3164F	1200293	Ex9PBW3165F	1200333
●		Ex9PBW3361F	1200174	Ex9PBW3362F	1200214	Ex9PBW3363F	1200254	Ex9PBW3364F	1200294	Ex9PBW3365F	1200334
●		Ex9PBW3461F	1200175	Ex9PBW3462F	1200215	Ex9PBW3463F	1200255	Ex9PBW3464F	1200295	Ex9PBW3465F	1200335
●		Ex9PBW3561F	1200176	Ex9PBW3562F	1200216	Ex9PBW3563F	1200256	Ex9PBW3564F	1200296	Ex9PBW3565F	1200336
●		Ex9PBW3661F	1200177	Ex9PBW3662F	1200217	Ex9PBW3663F	1200257	Ex9PBW3664F	1200297	Ex9PBW3665F	1200337
○	110	Ex9PBW3161N	1200178	Ex9PBW3162N	1200218	Ex9PBW3163N	1200258	Ex9PBW3164N	1200298	Ex9PBW3165N	1200338
●		Ex9PBW3361N	1200179	Ex9PBW3362N	1200219	Ex9PBW3363N	1200259	Ex9PBW3364N	1200299	Ex9PBW3365N	1200339
●		Ex9PBW3461N	1200180	Ex9PBW3462N	1200220	Ex9PBW3463N	1200260	Ex9PBW3464N	1200300	Ex9PBW3465N	1200340
●		Ex9PBW3561N	1200181	Ex9PBW3562N	1200221	Ex9PBW3563N	1200261	Ex9PBW3564N	1200301	Ex9PBW3565N	1200341
●		Ex9PBW3661N	1200182	Ex9PBW3662N	1200222	Ex9PBW3663N	1200262	Ex9PBW3664N	1200302	Ex9PBW3665N	1200342
○	220	Ex9PBW3161H	1200183	Ex9PBW3162H	1200223	Ex9PBW3163H	1200263	Ex9PBW3164H	1200303	Ex9PBW3165H	1200343
●		Ex9PBW3361H	1200184	Ex9PBW3362H	1200224	Ex9PBW3363H	1200264	Ex9PBW3364H	1200304	Ex9PBW3365H	1200344
●		Ex9PBW3461H	1200185	Ex9PBW3462H	1200225	Ex9PBW3463H	1200265	Ex9PBW3464H	1200305	Ex9PBW3465H	1200345
●		Ex9PBW3561H	1200186	Ex9PBW3562H	1200226	Ex9PBW3563H	1200266	Ex9PBW3564H	1200306	Ex9PBW3565H	1200346
●		Ex9PBW3661H	1200187	Ex9PBW3662H	1200227	Ex9PBW3663H	1200267	Ex9PBW3664H	1200307	Ex9PBW3665H	1200347



Ex9PB 22mm Pushbuttons

Ex9PBV6 and Ex9PBW8 Illuminated



Indicator Light			
Color	LED Lamp Voltage Vac/dc	Catalog number	Item number
1NO+1NC			
○	6	Ex9PBV61A	1200463
●		Ex9PBV63A	1200464
●		Ex9PBV64A	1200465
●		Ex9PBV65A	1200466
●		Ex9PBV66A	1200467
○	12	Ex9PBV61C	1200468
●		Ex9PBV63C	1200469
●		Ex9PBV64C	1200470
●		Ex9PBV65C	1200471
●		Ex9PBV66C	1200472
○	24	Ex9PBV61D	1200473
●		Ex9PBV63D	1200474
●		Ex9PBV64D	1200475
●		Ex9PBV65D	1200476
●		Ex9PBV66D	1200477
○	36	Ex9PBV61E	1200478
●		Ex9PBV63E	1200479
●		Ex9PBV64E	1200480
●		Ex9PBV65E	1200481
●		Ex9PBV66E	1200482
○	48	Ex9PBV61F	1200483
●		Ex9PBV63F	1200484
●		Ex9PBV64F	1200485
●		Ex9PBV65F	1200486
●		Ex9PBV66F	1200487
○	110	Ex9PBV61N	1200488
●		Ex9PBV63N	1200489
●		Ex9PBV64N	1200490
●		Ex9PBV65N	1200491
●		Ex9PBV66N	1200492
○	230	Ex9PBV61H	1200493
●		Ex9PBV63H	1200494
●		Ex9PBV64H	1200495
●		Ex9PBV65H	1200496
●		Ex9PBV66H	1200497

Momentary Double Head - Flush+Projecting			
Color	LED Lamp Voltage Vac/dc	Catalog number	Item number
1NO+1NC			
●+●	6	Ex9PBW8465A	1200441
	12	Ex9PBW8465C	1200442
	23	Ex9PBW8465D	1200443
	36	Ex9PBW8465E	1200444
	48	Ex9PBW8465F	1200445
	110	Ex9PBW8465N	1200446
	230	Ex9PBW8465H	1200447



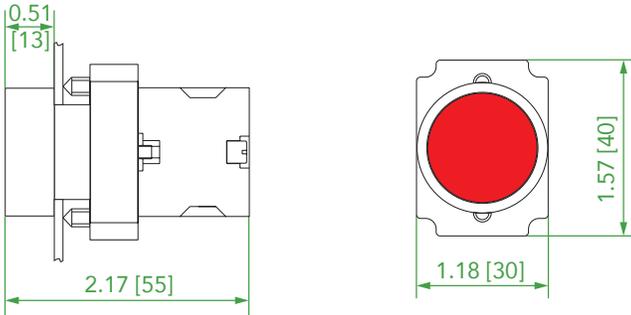


Ex9PB 22mm Pushbuttons

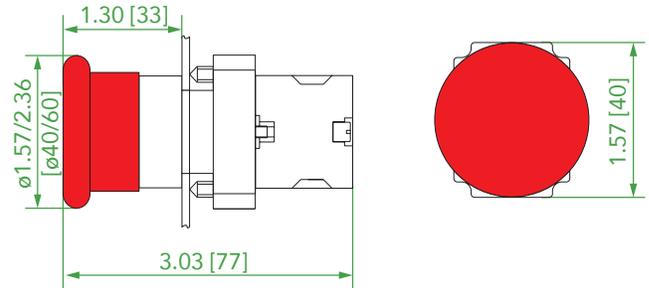
Dimensions

in [mm]

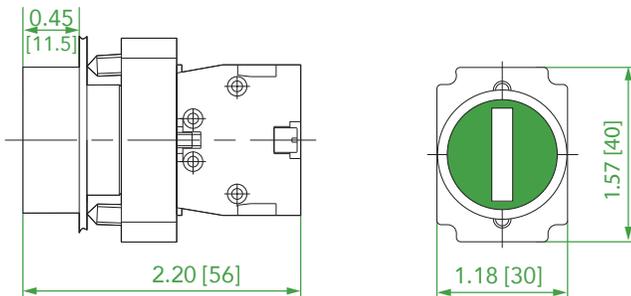
Ex9PBA
Momentary Flush



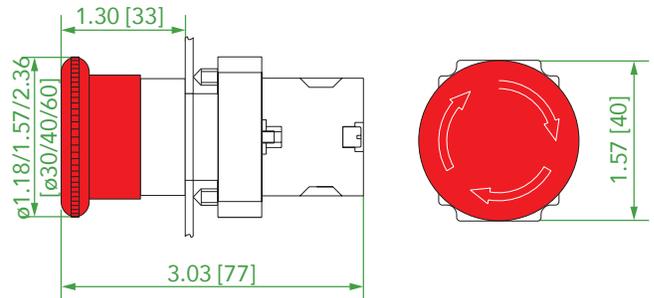
Ex9PBC/Ex9PBR
Momentary $\varnothing 40$ or $\varnothing 60$ mm Mushroom Head



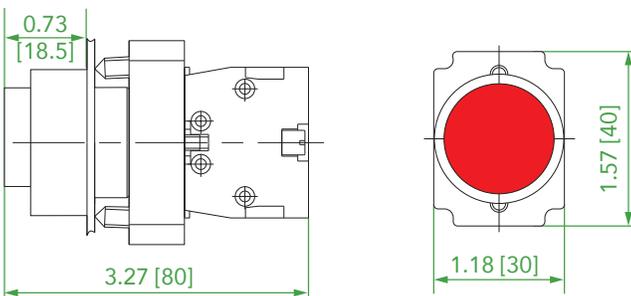
Ex9PBA+Symbol
Momentary Flush+Symbol



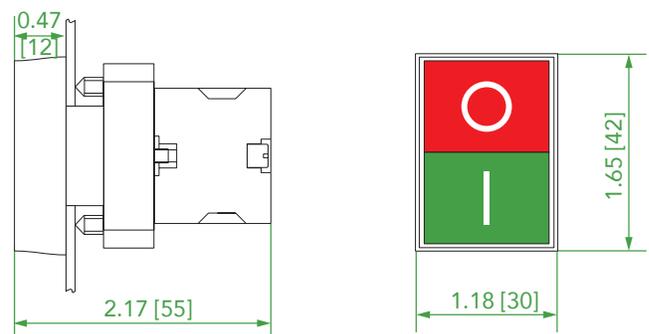
Ex9PBS
Push On/TwTwist Off $\varnothing 30$ mm Mushroom Head



Ex9PBL
Momentary Extended



Ex9PBL8
Momentary Double Head Flush or Extended



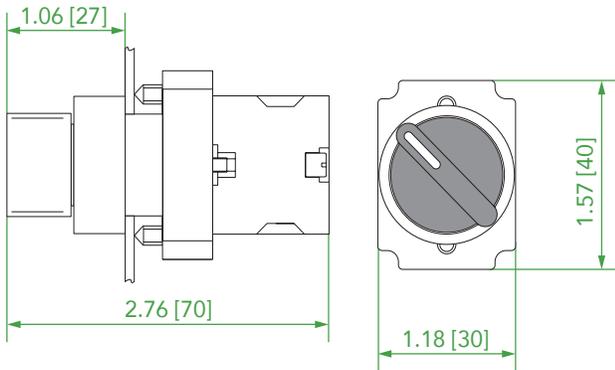


Ex9PB 22mm Pushbuttons

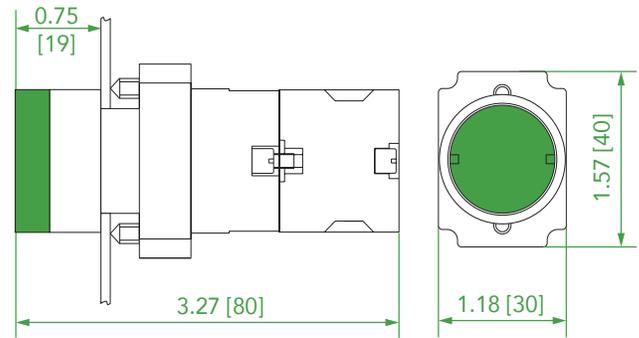
Dimensions

in [mm]

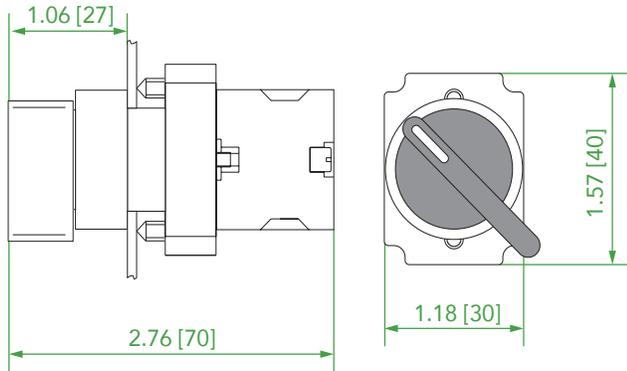
Ex9PBD
Selector Switch - Rotary Knob



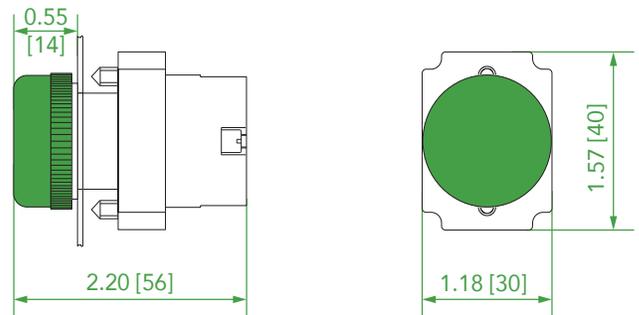
Ex9PBW3
Momentary Flush with Guard



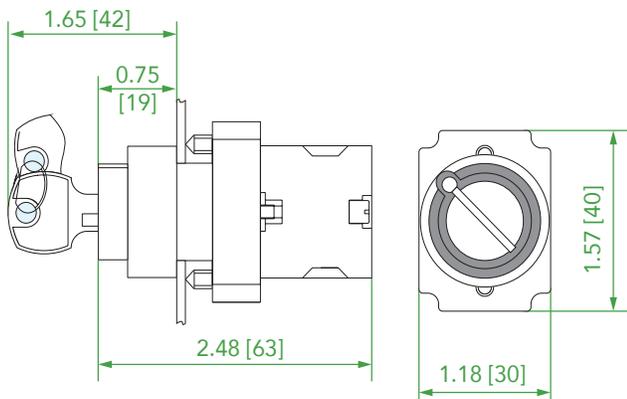
Ex9PBJ
Selector Switch - Rotary Handle



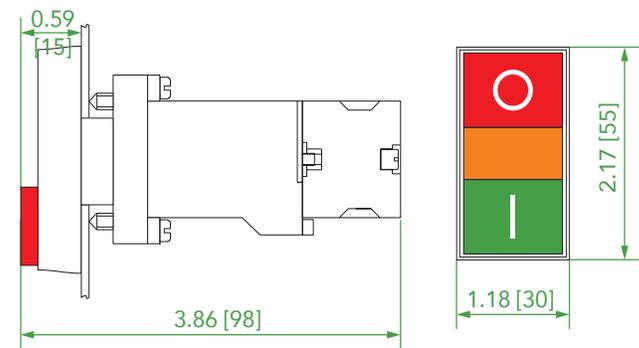
Ex9PBV6
Indicator Light



Ex9PBG
Selector Switch - Key



Ex9PBW8
Momentary Double Head - Flush+Projecting





Ex9PB 22mm Pushbuttons

Ex9PB Contact Blocks and LED Lamp Replacements



Accessory Description	Poles	Catalog number	Item number
Contact Block	NO	Ex9PBE101	1200598



Accessory Description	Poles	Catalog number	Item number
Contact Block	NC	Ex9PBE102	1200599



Accessory Description	Color	Voltage Vac/dc	Catalog number	Item number
LED Lamp Replacement	○	6	Ex9PBS1A	1200600
	●		Ex9PBS3A	1200601
	●		Ex9PBS4A	1200602
	●		Ex9PBS5A	1200603
	●		Ex9PBS6A	1200604
	○		12	Ex9PBS1C
	●	Ex9PBS3C		1200606
	●	Ex9PBS4C		1200607
	●	Ex9PBS5C		1200608
	●	Ex9PBS6C		1200609
	○	24		Ex9PBS1D
	●		Ex9PBS3D	1200611
	●		Ex9PBS4D	1200612
	●		Ex9PBS5D	1200613
	●		Ex9PBS6D	1200614
	○		36	Ex9PBS1E
	●	Ex9PBS3E		1200616
	●	Ex9PBS4E		1200617
	●	Ex9PBS5E		1200618
	●	Ex9PBS6E		1200619
	○	48		Ex9PBS1F
	●		Ex9PBS3F	1200621
	●		Ex9PBS4F	1200622
	●		Ex9PBS5F	1200623
●	Ex9PBS6F		1200624	
○	110		Ex9PBS1N	1200625
●		Ex9PBS3N	1200626	
●		Ex9PBS4N	1200627	
●		Ex9PBS5N	1200628	
●		Ex9PBS6N	1200629	
○		220	Ex9PBS1H	1200630
●	Ex9PBS3H		1200631	
●	Ex9PBS4H		1200632	
●	Ex9PBS5H		1200633	
●	Ex9PBS6H		1200634	