



## NOARK Electric

### Electrical Equipment Manufacturer for Distribution and Control



NOARK Electric is a global manufacturer of electrical distribution and control products that address a variety of customer needs, ranging from components to intelligent system solutions. Our global product lines include: circuit breakers, contactors, relays and intelligent control. Based in Shanghai, China, NOARK Electric was established in 2007 and covers the globe with regional headquarters in North America, Latin America, Europe and Middle East/Africa.

Globally, NOARK Electric serves the industrial, commercial, utility and residential markets. In North America, NOARK Electric focuses primarily on industrial OEMs, users and associated channel partners. Our motto is “Excellent Product...Exceptional Value,” which NOARK Electric delivers to our customer by maintaining local inventory, providing local sales, customer service and support and manufacturing quality, aggressively priced products backed by a five-year limited warranty.

#### Quality Product

- Backed by a five-year limited warranty\*



#### Exceptional Value

- Reduce the cost of products
- Improve profitability
- Increase margins

#### Local Support and Local Inventory

- Superb customer service
- Knowledgeable technical support
- Dedicated sales force
- Well-stocked inventory
- North American headquarters

\*Contact NOARK Electric for complete details.

## NOARK Electric

### International Headquarter Locations



**Global reach. Local resources.**

The best of both worlds come together when customers count on NOARK as their electrical product manufacturer.

## Molded Case Circuit Breakers/Motor Circuit Protection and Switches M1-M6 Product Accessories Lineup



**Alarm Switch (AL)/  
Auxiliary Contact (AX)**  
(D106)



**Handle Lock (KLK)**  
(D109)



**Mechanical Interlock (MIT)**  
(D109)



**Motor Operator (MOD)**  
(D110)



**Rotary Handle (RHD)  
Close Coupled (D111)**



**Under-Voltage Trip (UVT)**  
(D108)



**Molded Case Circuit Breaker (A4-58)  
Molded Case Motor Circuit Protectors (B63-83)  
Molded Case Switch (C91-100)**



**Flange Handle Assembly**  
(D115)



**Shunt Trip (SHT)**  
(D107)



**NEMA Extended Rotary Handle**  
(D114)



**Plug-In Base (PIA)**  
(D121)



**Terminal Lugs (LTC)**  
(D122)



**Rear Connection Kit (RCP)**  
(D122)



**DIN Rail Plate (DRP)**  
(D111)

# NOARK Electric

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\*Note that Molded Case Motor Circuit Protectors Dimensions and Mounting Positions are the same as those of the Molded Case Circuit Breakers.

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\*Note that Molded Case Motor Circuit Protectors Dimensions and Mounting Positions are the same as those of the Molded Case Circuit Breakers.

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# MOLDED CASE CIRCUIT BREAKERS



# M1 ~ M6

## Molded Case Circuit Breakers

### M1-M6 Product Overview

# Features

#### Ex9 Series - M Molded Case Circuit Breakers, 15~1200 A

NOARK Electric offers a complete range of Molded Case Circuit Breakers in six frame sizes: M1 - 150 A, M2 - 250 A, M3 - 400 A, M4 - 600 A, M5 - 800 A, and M6 - 1,200 A. Each frame size offers a range of interrupting voltage ratings from 240-600 Vac and 250-600Vdc/1000Vdc. The M series conforms to global standards that include UL 489, UL 489B, CSA C22.2 No 5 and IEC 60947-2.

#### The Ex9 Series - M offers:

- High-breaking capacity and a patented arc extinguishing design
- Bearing-type spindle reduces the manual operating force required
- High quality compact modular design, energy saving and environmentally friendly
- Installation flexibility:
  - ✓ Bus Bar Connection
  - ✓ Lug Line/Load Side Connection
  - ✓ Plug-In
  - ✓ Rear Connection
- Fixed and adjustable trip setting units
- Wide range of accessories:
  - ✓ Alarm Switch and Auxiliary Contact
  - ✓ Shunt and Under-Voltage Trip
  - ✓ Interlock
  - ✓ NEMA Rotary Handle
  - ✓ NEMA Type Flange Handle
  - ✓ Motor Operator

# Molded Case Circuit Breakers

## M1-M6 National and International Standards

### Certifications

- UL 489 Listed, File Number E355392  
(Standard for connection terminals which allows the user to apply field wiring directly to the breaker)
- UL489B, File Number E513573 (M1PVS)
- Certified for Canada according to CSA standards 22.2 No. 5
- IEC/EN 60947-2
- CE Compliant
- RoHS Compliant



## Molded Case Circuit Breakers M1-M6 Product Selection Guide

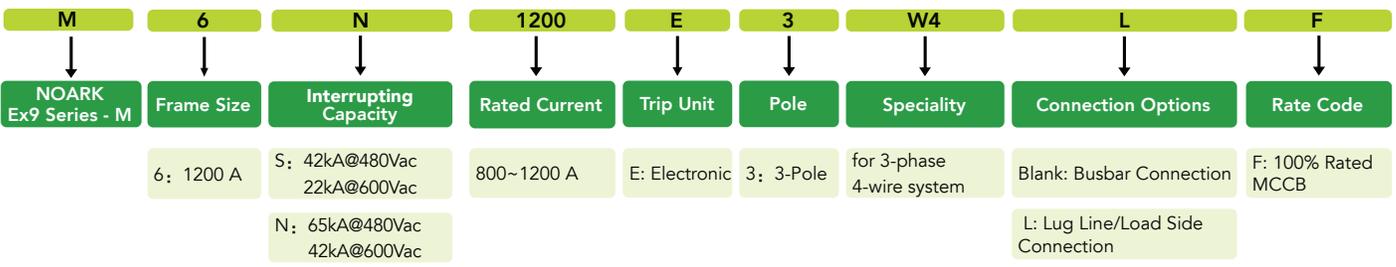
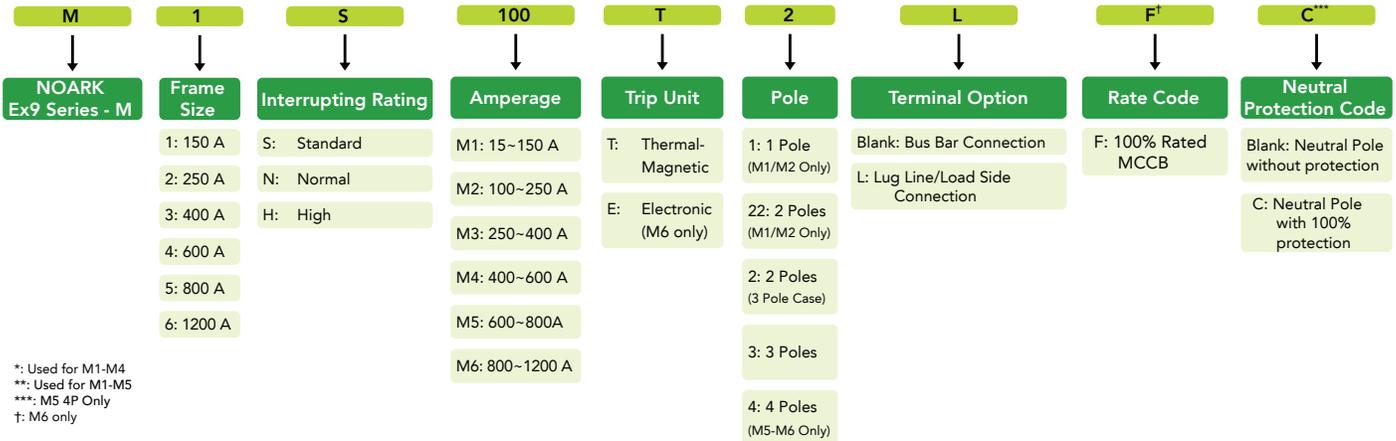
### Label



1. Handle
2. Product Series
3. Product Selection
4. Test Button
5. Adjustable Current Setting (M1) or Adjustable Current and Magnetic Setting (M2~M4)

6. Brand
7. UL Listed Mark
8. CE Mark
9. Rated Current

### Product Selection Guides



# Molded Case Circuit Breakers

## M23HV Product Selection Guide

### Label



1. Product Series
2. Handle
3. SKU
4. Test Button
5. Adjustable Thermal Protection Current Setting

6. NOARK Brand
7. UL Listed Mark
8. CE Mark
9. Rated Current
10. Adjustable Magnetic Protection Current Setting

### Product Selection Guides

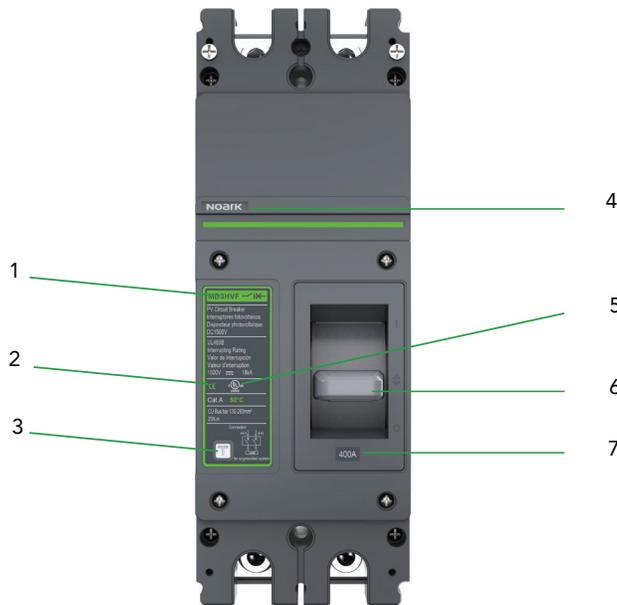
M	1	PV	S	100	T	3	L	Att
NOARK Ex9 Series - M	Frame Size	Code	Interrupting Rating	Amperage	Trip Unit	Pole	Terminal Option	Jumper Connection Type
	1: 100 A 2: 250 A 3: 400 A	PV: 1000Vdc Photovoltaic type, UL 489B  HV: 800Vac special design for new energy application, UL 489	(M1PV):S: 10kA@1000Vdc  S: 50kA@600Vac, 35kA@800Vac  N: 85kA@600Vac, 50kA@800Vac	15~100 A  M2HV: 60~250 A  M3HV: 250~400 A	T: Thermal-Magnetic	3: 3 Poles	Blank: Bus Bar Connection  L: Lug Line/Load Side Connection	A: Jumper Connection A B: Jumper Connection B C: Jumper Connection C D: Jumper Connection D

†† Product equipped with factory installed jumpers  
NOARK takes no responsibility if the customer changes the jumper configuration in the field.

## Molded Case Circuit Breakers

### MD3HVF Product Selection Guide

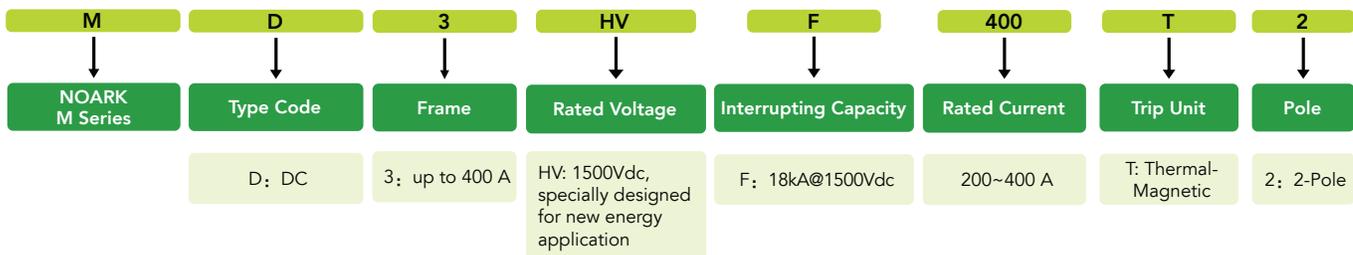
## Label



- 1. Product Series
- 2. CE Mark
- 3. Test Button

- 4. NOARK Brand
- 5. UL Listed Mark
- 6. Handle
- 7. Current Label

## Product Selection Guides



Notice: For MD3HVF products, there is only busbar connection.

# Molded Case Circuit Breakers

## M1PVS 15~100A (1000 VDC)



A

Rated Amperage(A)	Connection A - 3 Poles			
	Fixed Thermal • Fixed Magnetic			
	Product	Part Number	Product	Part Number
	Bus Bar Connection		Lug Line/Load Side Connection	
15	M1PVS15T3A	1102427	M1PVS15T3LA	1102471
20	M1PVS20T3A	1102431	M1PVS20T3LA	1102475
25	M1PVS25T3A	1102435	M1PVS25T3LA	1102479
30	M1PVS30T3A	1102439	M1PVS30T3LA	1102483
35	M1PVS35T3A	1102443	M1PVS35T3LA	1102487
40	M1PVS40T3A	1102447	M1PVS40T3LA	1102491
45	M1PVS45T3A	1102451	M1PVS45T3LA	1102495
	Adjustable Thermal • Fixed Magnetic			
50	M1PVS50T3A	1102455	M1PVS50T3LA	1102499
60	M1PVS60T3A	1102459	M1PVS60T3LA	1102503
70	M1PVS70T3A	1102463	M1PVS70T3LA	1102507
80	M1PVS80T3A	1102467	M1PVS80T3LA	1102511
100	M1PVS100T3A	1102940		

Rated Amperage(A)	Connection B - 3 Poles			
	Fixed Thermal • Fixed Magnetic			
	Product	Part Number	Product	Part Number
	Bus Bar Connection		Lug Line/Load Side Connection	
15	M1PVS15T3B	1102428	M1PVS15T3LB	1102472
20	M1PVS20T3B	1102432	M1PVS20T3LB	1102476
25	M1PVS25T3B	1102436	M1PVS25T3LB	1102480
30	M1PVS30T3B	1102440	M1PVS30T3LB	1102484
35	M1PVS35T3B	1102444	M1PVS35T3LB	1102488
40	M1PVS40T3B	1102448	M1PVS40T3LB	1102492
45	M1PVS45T3B	1102452	M1PVS45T3LB	1102496
	Adjustable Thermal • Fixed Magnetic			
50	M1PVS50T3B	1102456	M1PVS50T3LB	1102500
60	M1PVS60T3B	1102460	M1PVS60T3LB	1102504
70	M1PVS70T3B	1102464	M1PVS70T3LB	1102508
80	M1PVS80T3B	1102468	M1PVS80T3LB	1102512
100	M1PVS100T3B	1102941		

## Molded Case Circuit Breakers

### M1PVS 15~80A (1000 VDC)



Rated Amperage(A)	Connection C - 3 Poles			
	Fixed Thermal • Fixed Magnetic			
	Product	Part Number	Product	Part Number
	Bus Bar Connection		Lug Line/Load Side Connection	
15	M1PVS15T3C	1102429	M1PVS15T3LC	1102473
20	M1PVS20T3C	1102433	M1PVS20T3LC	1102477
25	M1PVS25T3C	1102437	M1PVS25T3LC	1102481
30	M1PVS30T3C	1102441	M1PVS30T3LC	1102485
35	M1PVS35T3C	1102445	M1PVS35T3LC	1102489
40	M1PVS40T3C	1102449	M1PVS40T3LC	1102493
45	M1PVS45T3C	1102453	M1PVS45T3LC	1102497
	Adjustable Thermal • Fixed Magnetic			
50	M1PVS50T3C	1102457	M1PVS50T3LC	1102501
60	M1PVS60T3C	1102461	M1PVS60T3LC	1102505
70	M1PVS70T3C	1102465	M1PVS70T3LC	1102509
80	M1PVS80T3C	1102469	M1PVS80T3LC	1102513

Rated Amperage(A)	Connection D - 3 Poles			
	Fixed Thermal • Fixed Magnetic			
	Product	Part Number	Product	Part Number
	Bus Bar Connection		Lug Line/Load Side Connection	
15	M1PVS15T3D	1102430	M1PVS15T3LD	1102474
20	M1PVS20T3D	1102434	M1PVS20T3LD	1102478
25	M1PVS25T3D	1102438	M1PVS25T3LD	1102482
30	M1PVS30T3D	1102442	M1PVS30T3LD	1102486
35	M1PVS35T3D	1102446	M1PVS35T3LD	1102490
40	M1PVS40T3D	1102450	M1PVS40T3LD	1102494
45	M1PVS45T3D	1102454	M1PVS45T3LD	1102498
	Adjustable Thermal • Fixed Magnetic			
50	M1PVS50T3D	1102458	M1PVS50T3LD	1102502
60	M1PVS60T3D	1102462	M1PVS60T3LD	1102506
70	M1PVS70T3D	1102466	M1PVS70T3LD	1102510
80	M1PVS80T3D	1102470	M1PVS80T3LD	1102514

# Molded Case Circuit Breakers

## M1 Bus Bar Connection

- Bus Bar Connection MCCB not sold with Bus Bar\* or Terminal Lugs



Rated Amperage(A)	1 Pole		2 Poles		
	Fixed Thermal • Fixed Magnetic**		Adjustable Thermal • Fixed Magnetic**		
	Product	Part Number	Product	Part Number	
	Bus Bar Connection		Bus Bar Connection		
M1S	15		M1S15T22	1102238	
	20		M1S20T22	1102239	
	25		M1S25T22	1102240	
	30		M1S30T22	1102241	
	35		M1S35T22	1102242	
	40		M1S40T22	1102243	
	45		M1S45T22	1102244	
	50		M1S50T22	1102245	
	60		M1S60T22	1102246	
	70		M1S70T22	1102247	
	80		M1S80T22	1102248	
	90		M1S90T22	1102249	
	100		M1S100T22	1102250	
125		M1S125T22	1102152		
150		M1S150T22	1102153		
M1N	15	M1N15T1	1102208	M1N15T22	1102251
	20	M1N20T1	1102209	M1N20T22	1102252
	25	M1N25T1	1102210	M1N25T22	1102253
	30	M1N30T1	1102211	M1N30T22	1102254
	35	M1N35T1	1102212	M1N35T22	1102255
	40	M1N40T1	1102213	M1N40T22	1102256
	45	M1N45T1	1102214	M1N45T22	1102257
	50	M1N50T1	1102215	M1N50T22	1102258
	60	M1N60T1	1102216	M1N60T22	1102259
	70	M1N70T1	1102217	M1N70T22	1102260
	80	M1N80T1	1102218	M1N80T22	1102261
	90	M1N90T1	1102219	M1N90T22	1102262
	100	M1N100T1	1102220	M1N100T22	1102263
125	M1N125T1	1102221	M1N125T22	1102154	
150	M1N150T1	1102222	M1N150T22	1102155	
M1H	15		M1H15T22	1102264	
	20		M1H20T22	1102265	
	25		M1H25T22	1102266	
	30		M1H30T22	1102267	
	35		M1H35T22	1102268	
	40		M1H40T22	1102269	
	45		M1H45T22	1102270	
	50		M1H50T22	1102271	
	60		M1H60T22	1102272	
	70		M1H70T22	1102273	
	80		M1H80T22	1102274	
	90		M1H90T22	1102275	
	100		M1H100T22	1102276	
125		M1H125T22	1102156		
150		M1H150T22	1102157		

\*\* NOTE: Breakers Amp rating below 50A are Fixed Thermal • Fixed Magnetic.

## Molded Case Circuit Breakers

### M1 Lug Line/Load Side Connection

- Bus Bar Connection MCCB not sold with Bus Bar\* or Terminal Lugs



Rated Amperage(A)	1 Pole		2 Poles		
	Fixed Thermal • Fixed Magnetic**		Adjustable Thermal • Fixed Magnetic**		
	Product	Part Number	Product	Part Number	
	Lug Line/Load Side Connection		Lug Line/Load Side Connection		
M1S	15		M1S15T22L	1102277	
	20		M1S20T22L	1102278	
	25		M1S25T22L	1102279	
	30		M1S30T22L	1102280	
	35		M1S35T22L	1102281	
	40		M1S40T22L	1102282	
	45		M1S45T22L	1102283	
	50		M1S50T22L	1102284	
	60		M1S60T22L	1102285	
	70		M1S70T22L	1102286	
	80		M1S80T22L	1102287	
	90		M1S90T22L	1102288	
	100		M1S100T22L	1102289	
	125		M1S125T22L	1102164	
150		M1S150T22L	1102165		
M1N	15	M1N15T1L	1102223	M1N15T22L	1102290
	20	M1N20T1L	1102224	M1N20T22L	1102291
	25	M1N25T1L	1102225	M1N25T22L	1102292
	30	M1N30T1L	1102226	M1N30T22L	1102293
	35	M1N35T1L	1102227	M1N35T22L	1102294
	40	M1N40T1L	1102228	M1N40T22L	1102295
	45	M1N45T1L	1102229	M1N45T22L	1102296
	50	M1N50T1L	1102230	M1N50T22L	1102297
	60	M1N60T1L	1102231	M1N60T22L	1102298
	70	M1N70T1L	1102232	M1N70T22L	1102299
	80	M1N80T1L	1102233	M1N80T22L	1102300
	90	M1N90T1L	1102234	M1N90T22L	1102301
	100	M1N100T1L	1102235	M1N100T22L	1102302
	125	M1N125T1L	1102236	M1N125T22L	1102166
150	M1N150T1L	1102237	M1N150T22L	1102167	
M1H	15		M1H15T22L	1102303	
	20		M1H20T22L	1102304	
	25		M1H25T22L	1102305	
	30		M1H30T22L	1102306	
	35		M1H35T22L	1102307	
	40		M1H40T22L	1102308	
	45		M1H45T22L	1102309	
	50		M1H50T22L	1102310	
	60		M1H60T22L	1102311	
	70		M1H70T22L	1102312	
	80		M1H80T22L	1102313	
	90		M1H90T22L	1102314	
	100		M1H100T22L	1102315	
	125		M1H125T22L	1102168	
150		M1H150T22L	1102169		

\*\* NOTE: Breakers Amp rating below 50A are Fixed Thermal - Fixed Magnetic.

# Molded Case Circuit Breakers

## M1 Bus Bar Connection

- Bus Bar Connection MCCB not sold with Bus Bar\* or Terminal Lugs



Rated Amperage(A)	2 Poles**		3 Poles		
	Adjustable Thermal • Fixed Magnetic***		Adjustable Thermal • Fixed Magnetic***		
	Product	Part Number	Product	Part Number	
	Bus Bar Connection		Bus Bar Connection		
M1S	15	M1S15T2	1100105	M1S15T3	1100001
	20	M1S20T2	1100106	M1S20T3	1100002
	25	M1S25T2	1100107	M1S25T3	1100003
	30	M1S30T2	1100108	M1S30T3	1100004
	35	M1S35T2	1100109	M1S35T3	1100005
	40	M1S40T2	1100110	M1S40T3	1100006
	45	M1S45T2	1100111	M1S45T3	1100007
	50	M1S50T2	1100112	M1S50T3	1100008
	60	M1S60T2	1100113	M1S60T3	1100009
	70	M1S70T2	1100114	M1S70T3	1100010
	80	M1S80T2	1100115	M1S80T3	1100011
	90	M1S90T2	1100116	M1S90T3	1100012
	100	M1S100T2	1100117	M1S100T3	1100013
125	-	-	M1S125T3	1102158	
150	-	-	M1S150T3	1102159	
M1N	15	M1N15T2	1100118	M1N15T3	1100014
	20	M1N20T2	1100119	M1N20T3	1100015
	25	M1N25T2	1100120	M1N25T3	1100016
	30	M1N30T2	1100121	M1N30T3	1100017
	35	M1N35T2	1100122	M1N35T3	1100018
	40	M1N40T2	1100123	M1N40T3	1100019
	45	M1N45T2	1100124	M1N45T3	1100020
	50	M1N50T2	1100125	M1N50T3	1100021
	60	M1N60T2	1100126	M1N60T3	1100022
	70	M1N70T2	1100127	M1N70T3	1100023
	80	M1N80T2	1100128	M1N80T3	1100024
	90	M1N90T2	1100129	M1N90T3	1100025
	100	M1N100T2	1100130	M1N100T3	1100026
125	-	-	M1N125T3	1102160	
150	-	-	M1N150T3	1102161	
M1H	15	M1H15T2	1101587	M1H15T3	1101535
	20	M1H20T2	1101588	M1H20T3	1101536
	25	M1H25T2	1101589	M1H25T3	1101537
	30	M1H30T2	1101590	M1H30T3	1101538
	35	M1H35T2	1101591	M1H35T3	1101539
	40	M1H40T2	1101592	M1H40T3	1101540
	45	M1H45T2	1101593	M1H45T3	1101541
	50	M1H50T2	1101594	M1H50T3	1101542
	60	M1H60T2	1101595	M1H60T3	1101543
	70	M1H70T2	1101596	M1H70T3	1101544
	80	M1H80T2	1101597	M1H80T3	1101545
	90	M1H90T2	1101598	M1H90T3	1101546
	100	M1H100T2	1101599	M1H100T3	1101547
125	-	-	M1H125T3	1102162	
150	-	-	M1H150T3	1102163	

\* NOTE: Bus Bar Connection not available through NOARK Electric.

\*\* 2 pole in a 3 pole case

\*\*\* Breakers Amp rating below 50A are Fixed Thermal · Fixed Magnetic.

## Molded Case Circuit Breakers

### M1 Lug Line/Load Side Connection

- Lug Line/Load Side Connection  
MCCB sold with Terminal Lugs



Rated Amperage(A)	2 Poles*		3 Poles		
	Adjustable Thermal • Fixed Magnetic**		Adjustable Thermal • Fixed Magnetic**		
	Product	Part Number	Product	Part Number	
	Lug Line/Load Side Connection		Lug Line/Load Side Connection		
M1S	15	M1S15T2L	1100131	M1S15T3L	1100027
	20	M1S20T2L	1100132	M1S20T3L	1100028
	25	M1S25T2L	1100133	M1S25T3L	1100029
	30	M1S30T2L	1100134	M1S30T3L	1100030
	35	M1S35T2L	1100135	M1S35T3L	1100031
	40	M1S40T2L	1100136	M1S40T3L	1100032
	45	M1S45T2L	1100137	M1S45T3L	1100033
	50	M1S50T2L	1100138	M1S50T3L	1100034
	60	M1S60T2L	1100139	M1S60T3L	1100035
	70	M1S70T2L	1100140	M1S70T3L	1100036
	80	M1S80T2L	1100141	M1S80T3L	1100037
	90	M1S90T2L	1100142	M1S90T3L	1100038
	100	M1S100T2L	1100143	M1S100T3L	1100039
125	-	-	M1S125T3L	1102170	
150	-	-	M1S150T3L	1102171	
M1N	15	M1N15T2L	1100144	M1N15T3L	1100040
	20	M1N20T2L	1100145	M1N20T3L	1100041
	25	M1N25T2L	1100146	M1N25T3L	1100042
	30	M1N30T2L	1100147	M1N30T3L	1100043
	35	M1N35T2L	1100148	M1N35T3L	1100044
	40	M1N40T2L	1100149	M1N40T3L	1100045
	45	M1N45T2L	1100150	M1N45T3L	1100046
	50	M1N50T2L	1100151	M1N50T3L	1100047
	60	M1N60T2L	1100152	M1N60T3L	1100048
	70	M1N70T2L	1100153	M1N70T3L	1100049
	80	M1N80T2L	1100154	M1N80T3L	1100050
	90	M1N90T2L	1100155	M1N90T3L	1100051
	100	M1N100T2L	1100156	M1N100T3L	1100052
125	-	-	M1N125T3L	1102172	
150	-	-	M1N150T3L	1102173	
M1H	15	M1H15T2L	1101600	M1H15T3L	1101548
	20	M1H20T2L	1101601	M1H20T3L	1101549
	25	M1H25T2L	1101602	M1H25T3L	1101550
	30	M1H30T2L	1101603	M1H30T3L	1101551
	35	M1H35T2L	1101604	M1H35T3L	1101552
	40	M1H40T2L	1101605	M1H40T3L	1101553
	45	M1H45T2L	1101606	M1H45T3L	1101554
	50	M1H50T2L	1101607	M1H50T3L	1101555
	60	M1H60T2L	1101608	M1H60T3L	1101556
	70	M1H70T2L	1101609	M1H70T3L	1101557
	80	M1H80T2L	1101610	M1H80T3L	1101558
	90	M1H90T2L	1101611	M1H90T3L	1101559
	100	M1H100T2L	1101612	M1H100T3L	1101560
125	-	-	M1H125T3L	1102174	
150	-	-	M1H150T3L	1102175	

\* 2 pole in a 3 pole case

\*\* Breakers Amp rating below 50A are Fixed Thermal - Fixed Magnetic.

# Molded Case Circuit Breakers

## M2 Bus Bar Connection and Lug Line/Load Side Connection

- Bus Bar Connection MCCB not sold with Bus Bar\* or Terminal Lugs
- Lug Line/Load Side Connection MCCB sold with Terminal Lugs



Rated Amperage(A)		1 Pole		2 Poles		
		Fixed Thermal • Fixed Magnetic		Adjustable Thermal • Adjustable Magnetic		
		Product	Part Number	Product	Part Number	
		Bus Bar Connection		Bus Bar Connection		
M2S	100			M2S100T22	1102330	
	125			M2S125T22	1102331	
	150			M2S150T22	1102332	
	175			M2S175T22	1102333	
	200			M2S200T22	1102334	
	225			M2S225T22	1102335	
	250			M2S250T22	1102336	
M2N	100	M2N100T1	1102316	M2N100T22	1102344	
	125	M2N125T1	1102317	M2N125T22	1102345	
	150	M2N150T1	1102318	M2N150T22	1102346	
	175	M2N175T1	1102319	M2N175T22	1102347	
	200	M2N200T1	1102320	M2N200T22	1102348	
	225	M2N225T1	1102321	M2N225T22	1102349	
		250	M2N250T1	1102322	M2N250T22	1102350
			Lug Line/Load Side Connection		Lug Line/Load Side Connection	
M2S	100			M2S100T22L	1102337	
	125			M2S125T22L	1102338	
	150			M2S150T22L	1102339	
	175			M2S175T22L	1102340	
	200			M2S200T22L	1102341	
	225			M2S225T22L	1102342	
	250			M2S250T22L	1102343	
M2N	100	M2N100T1L	1102323	M2N100T22L	1102351	
	125	M2N125T1L	1102324	M2N125T22L	1102352	
	150	M2N150T1L	1102325	M2N150T22L	1102353	
	175	M2N175T1L	1102326	M2N175T22L	1102354	
	200	M2N200T1L	1102327	M2N200T22L	1102355	
	225	M2N225T1L	1102328	M2N225T22L	1102356	
		250	M2N250T1L	1102329	M2N250T22L	1102357

\*NOTE: Bus Bar Connection not available through NOARK Electric.

## Molded Case Circuit Breakers

### M2 Bus Bar Connection and Lug Line/Load Side Connection

- Bus Bar Connection MCCB not sold with Bus Bar\* or Terminal Lugs
- Lug Line/Load Side Connection MCCB sold with Terminal Lugs



Rated Amperage(A)	2 Poles**		3 Poles		
	Adjustable Thermal • Adjustable Magnetic		Adjustable Thermal • Adjustable Magnetic		
	Product	Part Number	Product	Part Number	
	Bus Bar Connection		Bus Bar Connection		
M2S	100	M2S100T2	1100257	M2S100T3	1100209
	125	M2S125T2	1100258	M2S125T3	1100210
	150	M2S150T2	1100259	M2S150T3	1100211
	175	M2S175T2	1100260	M2S175T3	1100212
	200	M2S200T2	1100261	M2S200T3	1100213
	225	M2S225T2	1100262	M2S225T3	1100214
	250	M2S250T2	1101967	M2S250T3	1101955
M2N	100	M2N100T2	1100263	M2N100T3	1100215
	125	M2N125T2	1100264	M2N125T3	1100216
	150	M2N150T2	1100265	M2N150T3	1100217
	175	M2N175T2	1100266	M2N175T3	1100218
	200	M2N200T2	1100267	M2N200T3	1100219
	225	M2N225T2	1100268	M2N225T3	1100220
	250	M2N250T2	1101968	M2N250T3	1101956
M2H	100	M2H100T2	1101663	M2H100T3	1101639
	125	M2H125T2	1101664	M2H125T3	1101640
	150	M2H150T2	1101665	M2H150T3	1101641
	175	M2H175T2	1101666	M2H175T3	1101642
	200	M2H200T2	1101667	M2H200T3	1101643
	225	M2H225T2	1101668	M2H225T3	1101644
	250	M2H250T2	1101969	M2H250T3	1101957
	Lug Line/Load Side Connection		Lug Line/Load Side Connection		
M2S	100	M2S100T2L	1100269	M2S100T3L	1100221
	125	M2S125T2L	1100270	M2S125T3L	1100222
	150	M2S150T2L	1100271	M2S150T3L	1100223
	175	M2S175T2L	1100272	M2S175T3L	1100224
	200	M2S200T2L	1100273	M2S200T3L	1100225
	225	M2S225T2L	1100274	M2S225T3L	1100226
	250	M2S250T2L	1101970	M2S250T3L	1101958
M2N	100	M2N100T2L	1100275	M2N100T3L	1100227
	125	M2N125T2L	1100276	M2N125T3L	1100228
	150	M2N150T2L	1100277	M2N150T3L	1100229
	175	M2N175T2L	1100278	M2N175T3L	1100230
	200	M2N200T2L	1100279	M2N200T3L	1100231
	225	M2N225T2L	1100280	M2N225T3L	1100232
	250	M2N250T2L	1101971	M2N250T3L	1101959
M2H	100	M2H100T2L	1101669	M2H100T3L	1101645
	125	M2H125T2L	1101670	M2H125T3L	1101646
	150	M2H150T2L	1101671	M2H150T3L	1101647
	175	M2H175T2L	1101672	M2H175T3L	1101648
	200	M2H200T2L	1101673	M2H200T3L	1101649
	225	M2H225T2L	1101674	M2H225T3L	1101650
	250	M2H250T2L	1101972	M2H250T3L	1101960

\*NOTE: Bus Bar Connection not available through NOARK Electric.

\*\* 2 pole in a 3 pole case

# Molded Case Circuit Breakers

## M2G MCCB with Ground Fault Protection



A

Rated Amperage(A)	Product		Product	
	Lug Line/Load Side Connection (1-Hole)		Bus Bar Connection	
M2GS	100	M2GS100T3L 1102626	M2GS100T3 1102647	
	125	M2GS125T3L 1102627	M2GS125T3 1102648	
	150	M2GS150T3L 1102628	M2GS150T3 1102649	
	175	M2GS175T3L 1102629	M2GS175T3 1102650	
	200	M2GS200T3L 1102630	M2GS200T3 1102651	
	225	M2GS225T3L 1102631	M2GS225T3 1102652	
	250	M2GS250T3L 1102632	M2GS250T3 1102653	
M2GN	100	M2GN100T3L 1102633	M2GN100T3 1102654	
	125	M2GN125T3L 1102634	M2GN125T3 1102655	
	150	M2GN150T3L 1102635	M2GN150T3 1102656	
	175	M2GN175T3L 1102636	M2GN175T3 1102657	
	200	M2GN200T3L 1102637	M2GN200T3 1102658	
	225	M2GN225T3L 1102638	M2GN225T3 1102659	
	250	M2GN250T3L 1102639	M2GN250T3 1102660	
M2GH	100	M2GH100T3L 1102640	M2GH100T3 1102661	
	125	M2GH125T3L 1102641	M2GH125T3 1102662	
	150	M2GH150T3L 1102642	M2GH150T3 1102663	
	175	M2GH175T3L 1102643	M2GH175T3 1102664	
	200	M2GH200T3L 1102644	M2GH200T3 1102665	
	225	M2GH225T3L 1102645	M2GH225T3 1102666	
	250	M2GH250T3L 1102646	M2GH250T3 1102667	

\*NOTE: Bus Bar Connection not available through NOARK Electric.  
 \*\* 2 pole in a 3 pole case

## Molded Case Circuit Breakers

### M2HVS/M2HVN BasBar and Lug Terminal Connection



**3 Poles**

Rated Amperage(A)		Product	Part Number
<b>Basbar Connection</b>			
<b>M2HVS</b>	60	M2HVS60T3	1103214
	80	M2HVS80T3	1103215
	100	M2HVS100T3	1103216
	125	M2HVS125T3	1103217
	150	M2HVS150T3	1103218
	175	M2HVS175T3	1103219
	200	M2HVS200T3	1103220
	225	M2HVS225T3	1103221
	250	M2HVS250T3	1103222
<b>Lug Terminal</b>			
	100	M2HVS100T3L	1103223
	125	M2HVS125T3L	1103224
	150	M2HVS150T3L	1103225
	175	M2HVS175T3L	1103226
	200	M2HVS200T3L	1103227
	225	M2HVS225T3L	1103228
	250	M2HVS250T3L	1103229
<b>Basbar Connection</b>			
<b>M2HVN</b>	60	M2HVN60T3	1103230
	80	M2HVN80T3	1103231
	100	M2HVN100T3	1103232
	125	M2HVN125T3	1103233
	150	M2HVN150T3	1103234
	175	M2HVN175T3	1103235
	200	M2HVN200T3	1103236
	225	M2HVN225T3	1103237
	250	M2HVN250T3	1103238
<b>Lug Terminal</b>			
	100	M2HVN100T3L	1103239
	125	M2HVN125T3L	1103240
	150	M2HVN150T3L	1103241
	175	M2HVN175T3L	1103242
	200	M2HVN200T3L	1103243
	225	M2HVN225T3L	1103244
	250	M2HVN250T3L	1103245

# Molded Case Circuit Breakers

## M3 Bus Bar Connection and Lug Line/Load Side Connection

- Bus Bar Connection MCCB not sold with Bus Bar\* or Terminal Lugs
- Lug Line/Load Side Connection MCCB sold with Terminal Lugs



A

Rated Amperage(A)	2 Poles**		3 Poles		
	Adjustable Thermal • Adjustable Magnetic		Adjustable Thermal • Adjustable Magnetic		
	Product	Part Number	Product	Part Number	
	Bus Bar Connection		Bus Bar Connection		
M3S	250	M3S250T2	1100306	M3S250T3	1100356
	300	M3S300T2	1100307	M3S300T3	1100357
	350	M3S350T2	1100308	M3S350T3	1100358
	400	M3S400T2	1100309	M3S400T3	1100359
M3N	250	M3N250T2	1100311	M3N250T3	1100361
	300	M3N300T2	1100312	M3N300T3	1100362
	350	M3N350T2	1100313	M3N350T3	1100363
	400	M3N400T2	1100314	M3N400T3	1100364
M3H	250	M3H250T2	1101688	M3H250T3	1101718
	300	M3H300T2	1101689	M3H300T3	1101719
	350	M3H350T2	1101690	M3H350T3	1101720
	400	M3H400T2	1101691	M3H400T3	1101721
	Lug Line/Load Side Connection (1-Hole)		Lug Line/Load Side Connection (1-Hole)		
M3S	250	M3S250T2L	1100316	M3S250T3L	1100366
	300	M3S300T2L	1100317	M3S300T3L	1100367
	350	M3S350T2L	1100318	M3S350T3L	1100368
	400	M3S400T2L	1100319	M3S400T3L	1100369
M3N	250	M3N250T2L	1100321	M3N250T3L	1100371
	300	M3N300T2L	1100322	M3N300T3L	1100372
	350	M3N350T2L	1100323	M3N350T3L	1100373
	400	M3N400T2L	1100324	M3N400T3L	1100374
M3H	250	M3H250T2L	1101693	M3H250T3L	1101723
	300	M3H300T2L	1101694	M3H300T3L	1101724
	350	M3H350T2L	1101695	M3H350T3L	1101725
	400	M3H400T2L	1101696	M3H400T3L	1101726

\*NOTE: Bus Bar Connection not available through NOARK Electric.  
 \*\* 2 pole in a 3 pole case

## Molded Case Circuit Breakers

### M3HVS/MD3HVF BasBar and Lug Terminal Connection



Rated Amperage(A)		3 Poles	
		Product	Part Number
		Basbar Connection	
M3HVS	60	M3HVS250T3	1103246
	80	M3HVS300T3	1103247
	100	M3HVS350T3	1103248
	125	M3HVS400T3	1103249
		Lug Terminal	
	100	M3HVS250T3L	1103250
	125	M3HVS300T3L	1103251
	150	M3HVS350T3L	1103252
	175	M3HVS400T3L	1103253
		Basbar Connection	
M3HVN	60	M3HVN250T3	1103254
	80	M3HVN300T3	1103255
	100	M3HVN350T3	1103256
	125	M3HVN400T3	1103257
		Lug Terminal	
	100	M3HVN250T3L	1103258
	125	M3HVN300T3L	1103259
	150	M3HVN350T3L	1103260
	175	M3HVN400T3L	1103261



Rated Amperage(A)		2 Poles	
		Product	Part Number
		Bus Bar Connection	
MD3HVF	60	MD3HVF200T22	1103262
	80	MD3HVF225T22	1103263
	100	MD3HVF250T22	1103264
	125	MD3HVF275T22	1103265
	100	MD3HVF300T22	1103266
	125	MD3HVF325T22	1103267
	150	MD3HVF350T22	1103268
	175	MD3HVF400T22	1103269

# Molded Case Circuit Breakers

## M4 Bus Bar Connection and Lug Line/Load Side Connection

- Bus Bar Connection MCCB not sold with Bus Bar\* or Terminal Lugs
- Lug Line/Load Side Connection MCCB sold with Terminal Lugs



A

Rated Amperage(A)	2 Poles**		3 Poles		
	Adjustable Thermal • Adjustable Magnetic		Adjustable Thermal • Adjustable Magnetic		
	Product	Part Number	Product	Part Number	
	Bus Bar Connection		Bus Bar Connection		
M4S	400	M4S400T2	1100429	M4S400T3	1100405
	500	M4S500T2	1100430	M4S500T3	1100406
	600	M4S600T2	1100431	M4S600T3	1100407
M4N	400	M4N400T2	1100432	M4N400T3	1100408
	500	M4N500T2	1100433	M4N500T3	1100409
	600	M4N600T2	1100434	M4N600T3	1100410
M4H	400	M4H400T2	1101759	M4H400T3	1101747
	500	M4H500T2	1101760	M4H500T3	1101748
	600	M4H600T2	1101761	M4H600T3	1101749
	Lug Line/Load Side Connection		Lug Line/Load Side Connection		
M4S	400	M4S400T2L	1100435	M4S400T3L	1100411
	500	M4S500T2L	1100436	M4S500T3L	1100412
	600	M4S600T2L	1100437	M4S600T3L	1100413
M4N	400	M4N400T2L	1100438	M4N400T3L	1100414
	500	M4N500T2L	1100439	M4N500T3L	1100415
	600	M4N600T2L	1100440	M4N600T3L	1100416
M4H	400	M4H400T2L	1101762	M4H400T3L	1101750
	500	M4H500T2L	1101763	M4H500T3L	1101751
	600	M4H600T2L	1101764	M4H600T3L	1101752

\*NOTE: Bus Bar Connection not available through NOARK Electric.  
 \*\* 2 pole in a 3 pole case

## Molded Case Circuit Breakers

### M5 Bus Bar Connection and Lug Line/Load Side Connection

- Bus Bar Connection MCCB not sold with Bus Bar\* or Terminal Lugs
- Lug Line/Load Side Connection MCCB sold with Terminal Lugs



Rated Amperage(A)	2 Poles*				3 Poles				
	Adjustable Thermal • Adjustable Magnetic				Adjustable Thermal • Adjustable Magnetic				
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
	Bus Bar Connection				Bus Bar Connection				
M5S	600	M5S600T2	1102001	M5S600T3	1102020	M5S700T2	1102002	M5S700T3	1102020
	700	M5S700T2	1102002	M5S800T2	1102003	M5S800T3	1102021		
	800	M5S800T2	1102003						
M5N	600	M5N600T2	1102004	M5N600T3	1102022	M5N700T2	1102005	M5N700T3	1102023
	700	M5N700T2	1102005	M5N800T2	1102006	M5N800T3	1102024		
	800	M5N800T2	1102006						
M5H	600	M5H600T2	1102007	M5H600T3	1102025	M5H700T2	1102008	M5H700T3	1102026
	700	M5H700T2	1102008	M5H800T2	1102009	M5H800T3	1102027		
	800	M5H800T2	1102009						
	Lug Line/Load Side Connection				Lug Line/Load Side Connection				
M5S	600	M5S600T2L	1102010	M5S600T3L	1102028	M5S700T2L	1102011	M5S700T3L	1102029
	700	M5S700T2L	1102011	M5S800T2L	1102012	M5S800T3L	1102030		
	800	M5S800T2L	1102012						
M5N	600	M5N600T2L	1102013	M5N600T3L	1102031	M5N700T2L	1102014	M5N700T3L	1102032
	700	M5N700T2L	1102014	M5N800T2L	1102015	M5N800T3L	1102033		
	800	M5N800T2L	1102015						
M5H	600	M5H600T2L	1102016	M5H600T3L	1102034	M5H700T2L	1102017	M5H700T3L	1102035
	700	M5H700T2L	1102017	M5H800T2L	1102018	M5H800T3L	1102036		
	800	M5H800T2L	1102018						

\* 2 pole in a 3 pole case

# Molded Case Circuit Breakers

## M5 Bus Bar Connection and Lug Line/Load Side Connection

- Bus Bar Connection MCCB not sold with Bus Bar\* or Terminal Lugs
- Lug Line/Load Side Connection MCCB sold with Terminal Lugs



A

Rated Amperage(A)	4 Poles Adjustable Thermal • Adjustable Magnetic Neutral 0% Protection			4 Poles Adjustable Thermal • Adjustable Magnetic Neutral 100% Protection		
	Product	Part Number		Product	Part Number	
	Bus Bar Connection			Bus Bar Connection		
M5S	600	M5S600T4	1102037	M5S600T4C	1102055	
	700	M5S700T4	1102038	M5S700T4C	1102056	
	800	M5S800T4	1102039	M5S800T4C	1102057	
M5N	600	M5N600T4	1102040	M5N600T4C	1102058	
	700	M5N700T4	1102041	M5N700T4C	1102059	
	800	M5N800T4	1102042	M5N800T4C	1102060	
M5H	600	M5H600T4	1102043	M5H600T4C	1102061	
	700	M5H700T4	1102044	M5H700T4C	1102062	
	800	M5H800T4	1102045	M5H800T4C	1102063	
	Lug Line/Load Side Connection			Lug Line/Load Side Connection		
M5S	600	M5S600T4L	1102046	M5S600T4LC	1102064	
	700	M5S700T4L	1102047	M5S700T4LC	1102065	
	800	M5S800T4L	1102048	M5S800T4LC	1102066	
M5N	600	M5N600T4L	1102049	M5N600T4LC	1102067	
	700	M5N700T4L	1102050	M5N700T4LC	1102068	
	800	M5N800T4L	1102051	M5N800T4LC	1102069	
M5H	600	M5H600T4L	1102052	M5H600T4LC	1102070	
	700	M5H700T4L	1102053	M5H700T4LC	1102071	
	800	M5H800T4L	1102054	M5H800T4LC	1102072	

## Molded Case Circuit Breakers

### M6 Bus Bar Connection and Lug Line/Load Side Connection

- Bus Bar Connection MCCB not sold with Bus Bar\* or Terminal Lugs
- Lug Line/Load Side Connection MCCB sold with Terminal Lugs



Rated Amperage(A)	3 Poles			4 Poles		
	Electronic Trip Unit • 80% Rate Code			Electronic Trip Unit • 80% Rate Code		
	Product	Part Number		Product	Part Number	
	Bus Bar Connection			Bus Bar Connection		
M6S	800	M6S800E3	1101835	M6S800E4	1101847	
	1000	M6S1000E3	1101836	M6S1000E4	1101848	
	1200	M6S1200E3	1101837	M6S1200E4	1101849	
M6N	800	M6N800E3	1101838	M6N800E4	1101850	
	1000	M6N1000E3	1101839	M6N1000E4	1101851	
	1200	M6N1200E3	1101840	M6N1200E4	1101852	
	Lug Line/ Load Side Connection			Lug Line/ Load Side Connection		
M6S	800	M6S800E3L	1101841	M6S800E4L	1101853	
	1000	M6S1000E3L	1101842	M6S1000E4L	1101854	
	1200	M6S1200E3L	1101843	M6S1200E4L	1101855	
M6N	800	M6N800E3L	1101844	M6N800E4L	1101856	
	1000	M6N1000E3L	1101845	M6N1000E4L	1101857	
	1200	M6N1200E3L	1101846	M6N1200E4L	1101858	

# Molded Case Circuit Breakers

## M6 Bus Bar Connection and Lug Line/Load Side Connection

- Bus Bar Connection MCCB not sold with Bus Bar\* or Terminal Lugs
- Lug Line/Load Side Connection MCCB sold with Terminal Lugs



A

Rated Amperage(A)	3 Poles			4 Poles		
	Electronic Trip Unit • 100% Rate Code					
	Product	Part Number	Product	Part Number		
	Bus Bar Connection			Bus Bar Connection		
M6S	800	M6S800E3F	1101895	M6S800E4F	1101907	
	1000	M6S1000E3F	1101896	M6S1000E4F	1101908	
	1200	M6S1200E3F	1101897	M6S1200E4F	1101909	
M6N	800	M6N800E3F	1101898	M6N800E4F	1101910	
	1000	M6N1000E3F	1101899	M6N1000E4F	1101911	
	1200	M6N1200E3F	1101900	M6N1200E4F	1101912	
	Lug Line/Load Side Connection			Lug Line/Load Side Connection		
M6S	800	M6S800E3LF	1101901	M6S800E4LF	1101913	
	1000	M6S1000E3LF	1101902	M6S1000E4LF	1101914	
	1200	M6S1200E3LF	1101903	M6S1200E4LF	1101915	
M6N	800	M6N800E3LF	1101904	M6N800E4LF	1101916	
	1000	M6N1000E3LF	1101905	M6N1000E4LF	1101917	
	1200	M6N1200E3LF	1101906	M6N1200E4LF	1101918	

## Molded Case Circuit Breakers

### Electronic Trip Unit 3P4W, Lug Terminal/Bus bar Connection



\* NCS26N should be ordered separately from the breaker

PN	SKU	Description
1103041	M6N1000E3W4L	1200A Frame Size MCCB, 1000A, 3P, 65kA@480Vac, Electronic Trip Unit 3P4W, Lug Terminal, 80% Rated
1103201	M6N1000E3W4LF	1200A Frame Size MCCB, 1000A, 3P, 65kA@480Vac, Electronic Trip Unit 3P4W, Lug Terminal, 100% Rated
1103035	M6N1000E3W4	1200A Frame Size MCCB, 1000A, 3P, 65kA@480Vac, Electronic Trip Unit 3P4W, Bus bar connection, 80% Rated
1103195	M6N1000E3W4F	1200A Frame Size MCCB, 1000A, 3P, 65kA@480Vac, Electronic Trip Unit 3P4W, Bus bar connection, 100% Rated
1103042	M6N1200E3W4L	1200A Frame Size MCCB, 1200A, 3P, 65kA@480Vac, Electronic Trip Unit 3P4W, Lug Terminal, 80% Rated
1103202	M6N1200E3W4LF	1200A Frame Size MCCB, 1200A, 3P, 65kA@480Vac, Electronic Trip Unit 3P4W, Lug Terminal, 100% Rated
1103036	M6N1200E3W4	1200A Frame Size MCCB, 1200A, 3P, 65kA@480Vac, Electronic Trip Unit 3P4W, Bus bar connection, 80% Rated
1103196	M6N1200E3W4F	1200A Frame Size MCCB, 1200A, 3P, 65kA@480Vac, Electronic Trip Unit 3P4W, Bus bar connection, 100% Rated
1103040	M6N800E3W4L	1200A Frame Size MCCB, 800A, 3P, 65kA@480Vac, Electronic Trip Unit 3P4W, Lug Terminal, 80% Rated
1103200	M6N800E3W4LF	1200A Frame Size MCCB, 800A, 3P, 65kA@480Vac, Electronic Trip Unit 3P4W, Lug Terminal, 100% Rated
1103034	M6N800E3W4	1200A Frame Size MCCB, 800A, 3P, 65kA@480Vac, Electronic Trip Unit 3P4W, Bus bar connection, 80% Rated
1103194	M6N800E3W4F	1200A Frame Size MCCB, 800A, 3P, 65kA@480Vac, Electronic Trip Unit 3P4W, Bus bar connection, 100% Rated
1103038	M6S1000E3W4L	1200A Frame Size MCCB, 1000A, 3P, 42kA@480Vac, Electronic Trip Unit 3P4W, Lug Terminal, 80% Rated
1103198	M6S1000E3W4LF	1200A Frame Size MCCB, 1000A, 3P, 42kA@480Vac, Electronic Trip Unit 3P4W, Lug Terminal, 100% Rated
1103032	M6S1000E3W4	1200A Frame Size MCCB, 1000A, 3P, 42kA@480Vac, Electronic Trip Unit 3P4W, Bus bar connection, 80% Rated
1103044	M6S1000E3W4F	1200A Frame Size MCCB, 1000A, 3P, 42kA@480Vac, Electronic Trip Unit 3P4W, Bus bar connection, 100% Rated
1103039	M6S1200E3W4L	1200A Frame Size MCCB, 1200A, 3P, 42kA@480Vac, Electronic Trip Unit 3P4W, Lug Terminal, 80% Rated
1103199	M6S1200E3W4LF	1200A Frame Size MCCB, 1200A, 3P, 42kA@480Vac, Electronic Trip Unit 3P4W, Lug Terminal, 100% Rated
1103033	M6S1200E3W4	1200A Frame Size MCCB, 1200A, 3P, 42kA@480Vac, Electronic Trip Unit 3P4W, Bus bar connection, 80% Rated
1103193	M6S1200E3W4F	1200A Frame Size MCCB, 1200A, 3P, 42kA@480Vac, Electronic Trip Unit 3P4W, Bus bar connection, 100% Rated
1103037	M6S800E3W4L	1200A Frame Size MCCB, 800A, 3P, 42kA@480Vac, Electronic Trip Unit 3P4W, Lug Terminal, 80% Rated
1103197	M6S800E3W4LF	1200A Frame Size MCCB, 800A, 3P, 42kA@480Vac, Electronic Trip Unit 3P4W, Lug Terminal, 100% Rated
1103031	M6S800E3W4	1200A Frame Size MCCB, 800A, 3P, 42kA@480Vac, Electronic Trip Unit 3P4W, Bus bar connection, 80% Rated
1103043	M6S800E3W4F	1200A Frame Size MCCB, 800A, 3P, 42kA@480Vac, Electronic Trip Unit 3P4W, Bus bar connection, 100% Rated
1103203	NCS26N	Neutral Current Sensor for 3P4W M6

# Molded Case Circuit Breakers

## M1PVS Specifications

		M1PVS
Rated Service Current		15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 100
Number of Poles		3
Rated Service Voltage		1000Vdc
Short-circuit Interrupting rating @1000Vdc		10
Trip Unit		TM
Ambient temperature		-40°C~70°C
Certification		UL 489B
Mechanical life		10,000
Electrical life (operations @ 1000 VDC)		1,000
Dimensions (mm/in)	M1PVS-A/B	W 90 (3.5)
		D 84.5 (3.33)
		H 201 (7.91)
	M1PVS-C/D	W 90 (3.5)
		D 84.5 (3.33)
		H 238 (9.37)
Weight (with jumper)	M1PVS-A/B (kg/lbs)	1.50/3.29
	M1PVS-C/D (kg/lbs)	1.659/3.64
Suitable for Reverse-feed Applications		Yes
<b>Accessories</b>		
Alarm Switch		■
Auxiliary Contact		■
Shunt Trip		■
Under-Voltage Trip		■
Handle Lock		■
Flange Handle		■
Rotary Handle		■
Mechanical Interlock		■
Motor Operator		■
<b>Terminations</b>		
Connections		Jumpers
Cable Selection		Cu

A

## Molded Case Circuit Breakers

### M1-M2 Specifications

		M1							M2						
Rated Current (A)		15~150							100~250						
Number of Poles		1	2		2*, 3				1	2		2*,3			
Breaker Type		N	S	N	H	S	N	H	N	S	N	S	N	H	
Rated Voltage 50/60 Hz	Vac	480	600		600**				480	600		600**			
	Vdc	250	500						250	500					
Interrupting Capacity (kA rms)															
Circuit Breaker Ratings UL 489 CSA C22.2 (kA rms) Vac 50/60 Hz	240 Vac	50	50	100	150	50	100	150	50	50	100	50	100	150	
	480 Vac	10	35	65	100	35	65	100	10	35	65	35	65	100	
	600 Vac	-	14	20	25	14	20	25	-	14	20	14	20	25	
	250 Vdc 1 Pole	25	-						25	-					
	500 Vdc 2 Poles	-	20	35	50	20	35	50	-	20	35	20	35	50	
600 Vdc 3 Poles		-			20	35	50		-		20	35	50		
Current Rating (A) @ 104 °F (40 °C)		15~150							100~250						
Thermal-Magnetic Trip Units (Fixed)	A = Adjustable T = Thermal F = Fixed M = Magnetic	FT/ FM	15~45 FT/FM 50~150A AT/FM		15~45A FT/FM 50~100A AT/FM 125~150A AT/AM			FT/ FM	AT / AM						
<b>Accessories</b>															
Alarm Switch															
Auxiliary Contact															
Shunt Trip		-	■					-	■						
Under-Voltage Trip															
Handle Lock															
Handle Operators															
Mechanical Interlock															
Motor Operator															
Flange Handle															
Terminal Cover and Kits															
<b>Connection</b>															
Bus Bar Connection															
Lug Line/Load Side Connection		■					■					■			
Plug-In		-					-					■			
Rear Connection		■					■								

\* 2 pole in a 3 pole case

\*\* 600 Vdc only available for 3 pole and 4 pole

# Molded Case Circuit Breakers

## M3-M6 Specifications

		M3			M4			M5			M6	
Rated Current (A)		250~400			400~600			600~800			800~1,200	
Number of Poles		2*,3						2*,3,4			3, 4	
Breaker Type		S	N	H	S	N	H	S	N	H	S	N
Rated Voltage 50/60 Hz	Vac	600**									600	
	Vdc										-	
<b>Interrupting Capacity (kA rms)</b>												
Circuit Breaker Ratings UL 489 CSA C22.2 (kA rms) Vac 50/60 Hz	240 Vac	65	100	150	65	100	150	65	100	150	65	100
	480 Vac	42	65	100	42	65	100	42	65	100	42	65
	600 Vac	18	25	30	22	30	50	22	30	50	22	42
	500 Vdc 2 Poles	35	50	65	35	50	65	35	50	65	-	
	600 Vdc 3 Poles	35	50	65	35	50	65	35	50	65	-	
Current Rating (A) @ 104 °F (40 °C)		250~400			400~600			600~800			800~1,200	
Thermal-Magnetic Trip Units (Fixed)	A = Adjustable T = Thermal F = Fixed M = Magnetic	AT / AM									Electronic	
<b>Accessories</b>												
Alarm Switch												
Auxiliary Contact												
Shunt Trip												
Under-Voltage Trip								■				
Handle Lock		■										
Flange Handle												
Mechanical Interlock												
Motor Operator								■			-	
Handle Operators								■				
Terminal Cover and Kits											-	
<b>Connection</b>												
Bus Bar Connection					■			■				
Lug Line/Load Side Connection		■										
Plug-In					-							
Rear Connection					■							

\* 2 pole in a 3 pole case  
 \*\* 600 Vdc only available for 3 pole and 4 pole

A

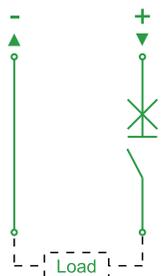
## Molded Case Circuit Breakers

### M1-M6 Specifications

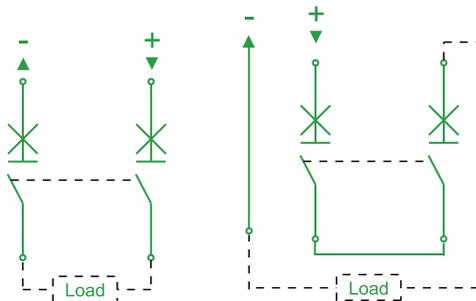
		M1	M2	M3	M4	M5	M6
Insulation Voltage (Vi)		800 Vac					
Impulse Withstand Voltage (Vimp)		8kVac					
Operational Voltage (Ve) UL		600 Vac					
Operational Ambient Temperature		-40 to 70 C					-35 to 70 C
Utilization Category		A					
Mechanical Operating Cycles		10,000		8,000		3,000	
Electrical Operating Cycles		6,000		5,000		500	
Dimensions LxWxD in (mm)	1 Pole	6.46x1.4x3.33 (164x35x84.5)	7.17x1.57x3.47 (182x40x88)	-			
	2 Pole	6.46x2.44x3.33 (164x62x84.5)	7.17x2.95x3.47 (182x75x88)	-			
	2 Pole*					-	
	3 Pole	6.46x3.54x3.33 (164x90x84.5)	7.17x4.13x3.47 (182x105x88)	11.22x5.51x4.59 (285x140x116.5)	12.32x7.68x5.43 (313x195x138)	16.18x7.68x7.58 (411x195x192.5)	22.64x9.84x15.16 (575x250x385)
	4 Pole	-				16.18x10.2x7.58 (411x260x192.5)	22.64x12.6x15.16 (575x320x385)
Weight of Unit lb (kg)	1 Pole	1.47 (0.67)	1.76 (0.8)	-			
	2 Pole	2.53 (1.15)	3.3 (1.5)	-			
	2 Poles*	3.17 (1.44)	3.75 (1.70)	8.97 (4.07)	20.94 (9.5)	27.8 (12.5)	-
	3 Poles	3.68 (1.67)	4.41 (2.00)	13.45 (6.1)	25.35 (11.5)	33.18 (15.05)	55.56 (25.2)
	4 Poles	-				43.43 (19.7)	69.67 (31.6)
<b>Connection</b>							
Bus Bar Connection		■					
Lug Line/Load Side Connection		■					

## M1 - M5 Interruption Polarity for DC Application

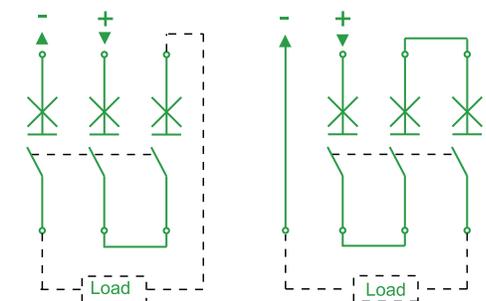
1 Pole



2 Poles



3 Poles



\* 2 pole in a 3 pole case

# Molded Case Circuit Breakers

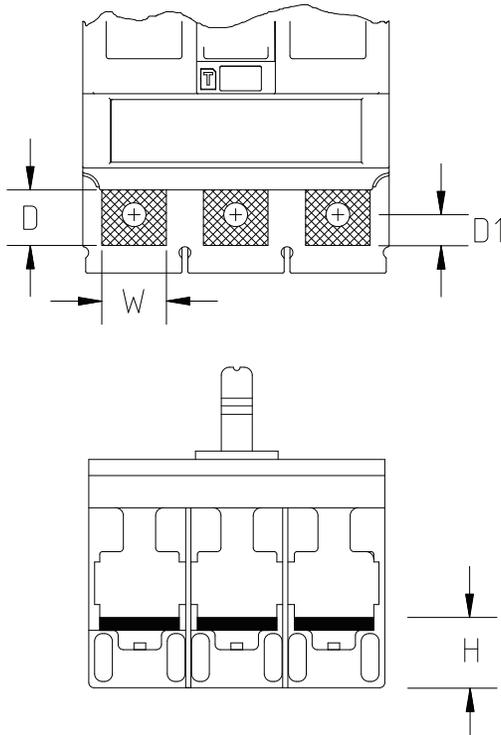
## BusBar Dimensions

Breaker	*Conversion Kit	Bus Pad Dimensions (mm)										Bolt Size	Bolt Torque
		Top					Bottom						
		W	D	H	D1	C	W	D	H	D1	C		
M1	CKLB21	14.2	14.8	18.5	7.3	-	14.2	16.8	17.5	7.3	-	M6×16	10Nm/89 lb in
M2	CKLB22	25	18.5	23	8.5	-	25	18.1	21	8.5	-	M8×20	11Nm/97.4 lb in
M3	Not Required	30	30	27.8	13.5	-	26	27	25.9	13.5	-	M10×30	25Nm/222lb-in
M4	Not Required	50	33.3	33.5	16.5	-	50	33	33.5	17	-	M12×30	30Nm/265lb-in
M5	Not Required	50	33.4	33.5	16.5	-	50	33	33.5	17	-	M12×30	30Nm/265lb-in
M6	Not Required	50	30	32.6	12	25	50	27.5	32.6	11.7	25	M10×40(2)	25Nm/222lb-in
M2HV	CKLB22	20	21	23.5	8.3	-	20	21	23.5	8.3	-	M8×20	11Nm/97.4lb-in
M3HV	Not Required	30	30	28.5	13.5	-	26	30	26.5	13.5	-	M10×30	25Nm/222lb-in

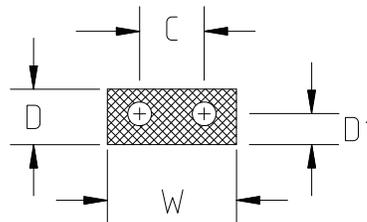
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\* CKLB (Conversion Kit from Lug to Busbar) is needed when breakers with lug terminals are converted to busbar connection in the field

### M1-M5 Breaker Bus Pad Dimensions



### M6 Breaker Bus Pad Dimensions



### CKLB Conversion Kit



## Molded Case Circuit Breakers M1-M6 Specifications

### Working current as per ambient temperature

Temperature Rated Current		+40°C	+50°C	+60°C	+70°C
		M1	15A	15	14.3
20A	20		19	17.2	16
25A	25		24	21.5	20
30A	30		28.1	25.8	24
35A	35		32.8	30.1	28
40A	40		38	34.4	32
45A	45		42.5	48.7	36
50A	50		47.5	43	40
60A	60		57	51.6	48
70A	70		66.5	60.2	56
80A	80		76	68.8	64
90A	90		85.5	77.4	72
100A	100		95	86	80
125A	125		112.5	107.5	100
150A	150		135	129	120
M2	125A	125	112.5	100	87.5
	150A	150	135	120	105
	175A	175	166.2	157.5	148.7
	200A	200	190	180	170
	225A	225	202.5	184.5	175
	250A	250	237.5	225	187.5
M3	250A	250	237.5	212.5	225
	300A	300	285	255	262.5
	350A	350	332.5	297.5	300
	400A	400	380	340	100
M4	400A	400	380	360	340
	500A	500	465	430	400
	600A	600	558	516	480
M5	600A	600	558	516	480
	700A	700	644	595	546
	800A	800	736	680	624
M6	800A	800	800	800	800
	1000A	1000	1000	1000	900
	1200A	1200	1080	1080	960

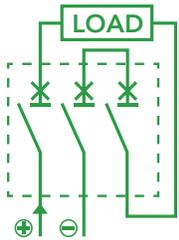
### Altitude derating coefficients

Altitude(m)		2000	3000	4000	5000
In		1×In	0.96×In	0.93×In	0.9×In
Ue(V)	AC/DC	600	480	420	360
Dielectric Properties(V)	AC/DC	2400	2000	1680	1440
Rated Insulation Impulse Voltage-Uimp(kV)		8	8	8	8

# Molded Case Circuit Breakers

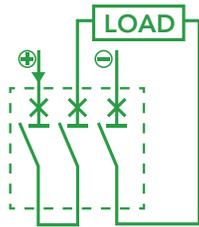
## M1PVS Jumper Connection Type and Trip Unit

Connection A



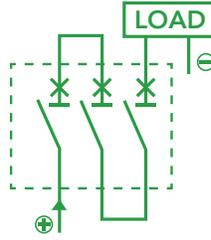
ungrounded system wiring

Connection B



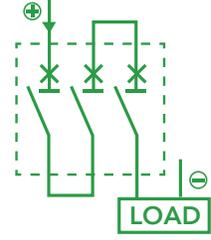
ungrounded system wiring

Connection C



For both grounded and ungrounded

Connection D

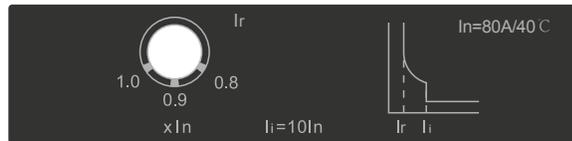


For both grounded and ungrounded

A

## M1PVS Adjustable Thermal, Fixed Magnetic

- Fixed Thermal: 15~45 A rated current
- Adjustable Thermal: 50~100 A rated current  
Adjustable: 0.8~1 x I<sub>n</sub>
- Fixed Magnetic: 150~1000 A tripping current



		M1PVS Trip Unit											
		15 A	20 A	25 A	30 A	35 A	40 A	45 A	50 A	60 A	70 A	80 A	100 A
Adjustable Thermal Overload Protection	I <sub>R</sub> 0.8 x I <sub>n</sub>								40	48	56	64	80
	0.9 x I <sub>n</sub>								45	54	63	72	90
	1.0 x I <sub>n</sub>								50	60	70	80	100
Fixed Magnetic Short Circuit Protection	I <sub>i</sub>	15 A	20 A	25 A	30 A	35 A	40 A	45 A	50 A	60 A	70 A	80 A	100 A
	Fixed 10 x I <sub>n</sub>	150	200	250	300	350	400	450	500	600	700	800	1000

## Molded Case Circuit Breakers

### M1 Trip Unit

## Adjustable Thermal, Fixed Magnetic

#### M1 1 Pole

- Fixed Magnetic: 150~1,500 A tripping current
- Fixed Thermal: 15~150 A rated current

#### M1 2 Poles

- Fixed Thermal: 15~45 A rated current
- Adjustable Thermal: 50~150 A rated current  
Adjustable: 0.8~1 x In
- Fixed Magnetic: 150~1,500 A tripping current

#### M1 3 Poles

- Fixed Thermal: 15-45A rated current
- Adjustable Thermal: 50-150A rated current  
Adjustable: 0.8~1×In
- Fixed Magnetic: 150~1,000 A tripping current
- Adjustable Magnetic: 125~150 A rated current  
Adjustable: 5~10 x In



		M1 - 1 Pole															
		$I_R$	15 A	20 A	25 A	30 A	35 A	40 A	45 A	50 A	60 A	70 A	80 A	90 A	100 A	125 A	150 A
Fixed Thermal Overload Protection	Fixed $1.0 \times I_n$		15	20	25	30	35	40	45	50	60	70	80	90	100	125	150
Fixed Magnetic Short Circuit Protection	Fixed $10 \times I_n$		150	200	250	300	350	400	450	500	600	700	800	900	1000	1250	1500

		M1 - 2 Poles															
		$I_R$	15 A	20 A	25 A	30 A	35 A	40 A	45 A	50 A	60 A	70 A	80 A	90 A	100 A	125 A	150 A
Adjustable Thermal Overload Protection	$0.8 \times I_n$									40	48	56	64	72	80	100	120
	$0.9 \times I_n$									45	54	63	72	81	90	112.5	135
	$1.0 \times I_n$									50	60	70	80	90	100	125	150
Fixed Magnetic Short Circuit Protection	Fixed $10 \times I_n$		150	200	250	300	350	400	450	500	600	700	800	900	1,000	1250	1500

		M1 - 3 Poles															
		$I_R$	15 A	20 A	25 A	30 A	35 A	40 A	45 A	50 A	60 A	70 A	80 A	90 A	100 A	125 A	150 A
Adjustable Thermal Overload Protection	$0.8 \times I_n$									40	48	56	64	72	80	100	120
	$0.9 \times I_n$									45	54	63	72	81	90	112.5	135
	$1.0 \times I_n$									50	60	70	80	90	100	125	150
Fixed Magnetic Short Circuit Protection	Fixed $10 \times I_n$		150	200	250	300	350	400	450	500	600	700	800	900	1,000	-	-
Adjustable Magnetic Short Circuit Protection	$I_i$		15 A	20 A	25 A	30 A	35 A	40 A	45 A	50 A	60 A	70 A	80 A	90 A	100 A	125 A	150 A
	$5 \times I_n$															625	750
	$6 \times I_n$															750	900
	$7 \times I_n$															875	1050
	$8 \times I_n$															1000	1200
	$10 \times I_n$															1125	1350

# Molded Case Circuit Breakers

## M2-M5 Trip Unit

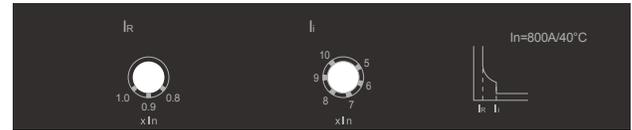
### Adjustable Thermal, Adjustable Magnetic

#### M2 1 Pole

- Fixed Magnetic: 1,000~2,500 A tripping current
- Fixed Thermal: 100~250 A rated current

#### M2 2 Poles/3 Poles - M5

- Adjustable Thermal: 100~800 A rated current  
Adjustable: 0.8~1 x I<sub>n</sub>
- Adjustable Magnetic: 700~8,000 A tripping current  
Adjustable:  
M2 - 2 Poles/3 Poles 100~150 = 7~12 x I<sub>n</sub>  
M2 - 2 Poles/3 Poles 175~250 = 5~10 x I<sub>n</sub>  
M3/M4 225~600 = 5~10 x I<sub>n</sub>  
M5 600~800=5~10 x I<sub>n</sub>



		M2 - 1 Pole							
		I <sub>R</sub>	100 A	125 A	150 A	175 A	200 A	225 A	250 A
Fixed Thermal									
Overload Protection	Fixed 1.0 x I <sub>n</sub>		100	125	150	175	200	225	250
Fixed Magnetic		I <sub>i</sub>	100A	125A	150A	175A	200A	225A	250A
Short Circuit Protection	Fixed 10 x I <sub>n</sub>		1000	1250	1500	1750	2000	2250	2500

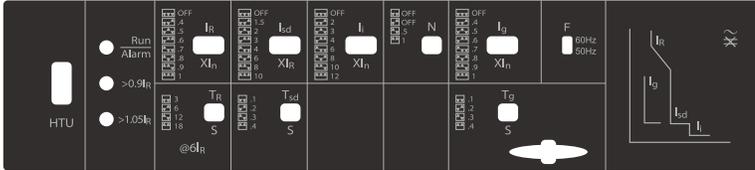
		M2 - 2 Poles/3 Pole							
		I <sub>R</sub>	100 A	125 A	150 A	175 A	200 A	225 A	250 A
Adjustable Thermal Overload Protection	0.8 x I <sub>n</sub>		80	100	120	140	160	180	200
	0.9 x I <sub>n</sub>		90	112.5	135	157.5	180	202.5	225
	1.0 x I <sub>n</sub>		100	125	150	175	200	225	250
Adjustable Magnetic Short Circuit Protection		I <sub>i</sub>	100 A	125 A	150 A	175 A	200 A	225 A	250 A
	7 x I <sub>n</sub>		700	875	1050				
	8 x I <sub>n</sub>		800	1000	1200				
	9 x I <sub>n</sub>		900	1125	1350				
	10 x I <sub>n</sub>		1000	1250	1500				
	11 x I <sub>n</sub>		1100	1375	1650				
Adjustable Magnetic Short Circuit Protection		I <sub>i</sub>	100A	125A	150A	175A	200A	225A	250A
	5 x I <sub>n</sub>					875	1000	1125	1250
	6 x I <sub>n</sub>					1050	1200	1350	1500
	7 x I <sub>n</sub>					1225	1400	1575	1750
	8 x I <sub>n</sub>					1400	1600	1800	2000
	9 x I <sub>n</sub>					1575	1800	2025	2250
10 x I <sub>n</sub>					1750	2000	2250	2500	

		M3 - 400 A					M4 - 600 A			M5 - 800 A			
		I <sub>R</sub>	225 A	250 A	300 A	350 A	400 A	400 A	500 A	600 A	600 A	700 A	800 A
Adjustable Thermal Overload Protection	0.8 x I <sub>n</sub>		180	200	240	280	320	320	400	480	480	560	640
	0.9 x I <sub>n</sub>		202.5	225	270	315	360	360	450	540	540	630	720
	1.0 x I <sub>n</sub>		225	250	300	350	400	400	500	600	600	700	800
Adjustable Magnetic Short Circuit Protection		I <sub>i</sub>	225 A	250 A	300 A	350 A	400 A	400 A	500 A	600 A	600 A	700 A	800 A
	5 x I <sub>n</sub>		1,125	1,250	1,500	1,750	2,000	2,000	2,500	3,000	3,000	3,500	4,000
	6 x I <sub>n</sub>		1,350	1,500	1,800	2,100	2,400	2,400	3,000	3,600	3,600	4,200	4,800
	7 x I <sub>n</sub>		1,575	1,750	2,100	2,450	2,800	2,800	3,500	4,200	4,200	4,800	5,600
	8 x I <sub>n</sub>		1,800	2,000	2,400	2,800	3,200	3,200	4,000	4,800	4,800	5,600	6,400
	9 x I <sub>n</sub>		2,025	2,250	2,700	3,150	3,600	3,600	4,500	5,400	5,400	6,300	7,200
10 x I <sub>n</sub>		2,250	2,500	3,000	3,500	4,000	4,000	5,000	6,000	6,000	7,000	8,000	

# Molded Case Circuit Breakers

## M6 Trip Unit

### Electronic Trip Unit



**These trip functions are available:**

- L**=Long-time Delay: Long-time Delay Protection Current; Long-time Delay Protection Time
- S**=Short-time Delay: Short-time Delay Protection Current: Short-time Delay Protection Time
- I**=Instantaneous Trip
- G**=Ground Fault Protection Current: Short-time Delay Protection Time

**Neutral Protection:** Long-time Delay, Short-time Delay, Instantaneous protection

**Frequency Selection available:** 50 or 60 Hz

**Long-time delay protection current (IR):** 8 specific setting (IR): OFF, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0\*I<sub>n</sub>

**Note:**

Thermal memory function: protect load circuits against the affects of repeated overload conditions. When circuit breaker immediately closes after a long-time trip, and the continuous current exceeds the long-time setting value (I<sub>r</sub>), thermal memory function will automatically reduce the trip time. Given repeated overload current, thermal memory function will make circuit breaker trip in gradually reduced time. When the load current resumes normally, thermal current function will start to reset. It will totally reset in about 1 hour. So next long-time trip time will correspond to the setting value. Thermal memory function will be cleared in OFF setting.

**Long-time delay protection time (TR):** 4 specific setting (TR) @6\*I<sub>R</sub>: 3s, 6s, 12s, 18s

Working Current (I)	Long-time delay protection time (TR)
≤ 1.05*I <sub>R</sub>	≥ 2h not trip
≤ 1.3*I <sub>R</sub>	< 1h trip
=6*I <sub>R</sub>	3s/6s/12s/18s

**Short-time delay protection current (I<sub>sd</sub>):** 8 specific setting (I<sub>sd</sub>): OFF, 1.5, 2, 3, 4, 6, 8, 10\*I<sub>R</sub>

**Short-time delay protection time (T<sub>sd</sub>):** 4 specific setting (T<sub>sd</sub>): 0.1s, 0.2s, 0.3s, 0.4s

**Instantaneous protection Current (I<sub>i</sub>):** 8 specific setting (I<sub>i</sub>): OFF, 2, 3, 4, 6, 8, 10, 12\*I<sub>n</sub>

**Neutral Protecting:**

**Neutral long-time delay protection, 3 specific setting I<sub>R</sub>(N):** OFF, 0.5, 1

Neutral Line Short-time delay protection setting, same as power line, I<sub>sd</sub>(N)

Neutral Line Instantaneous protection setting, same as power line, I<sub>i</sub>(N)

**Ground Fault Protection Current Setting:** 8 specific setting (I<sub>g</sub>): OFF, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1\*I<sub>n</sub>

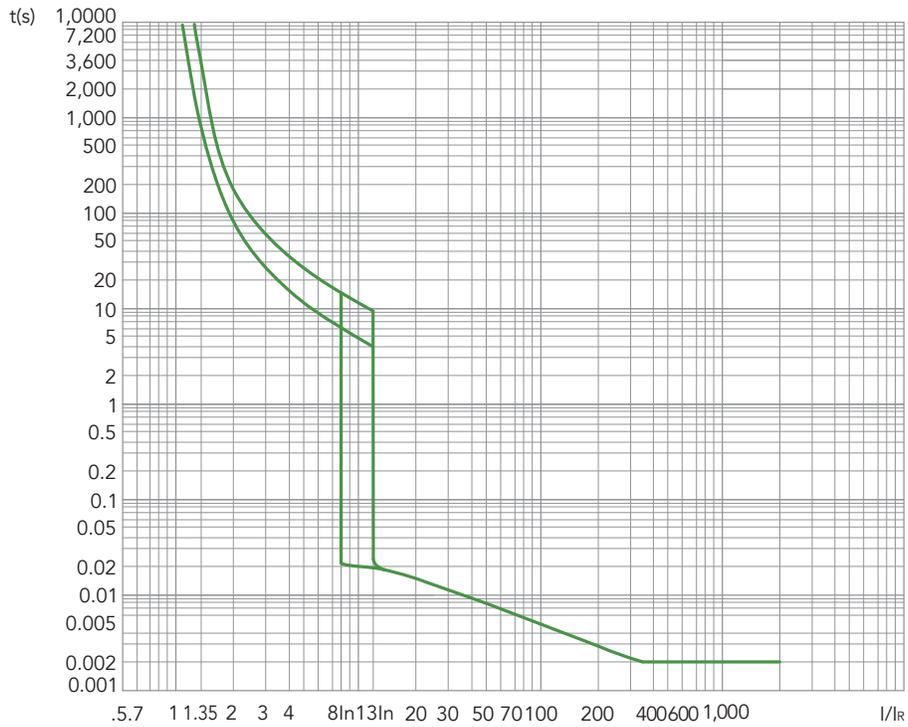
**Ground Fault Protection Time Setting:** 4 specific setting (T<sub>g</sub>): 0.1s, 0.2s, 0.3s, 0.4s

**Frequency Selection Setting:** 2 specific setting: 50Hz, 60Hz

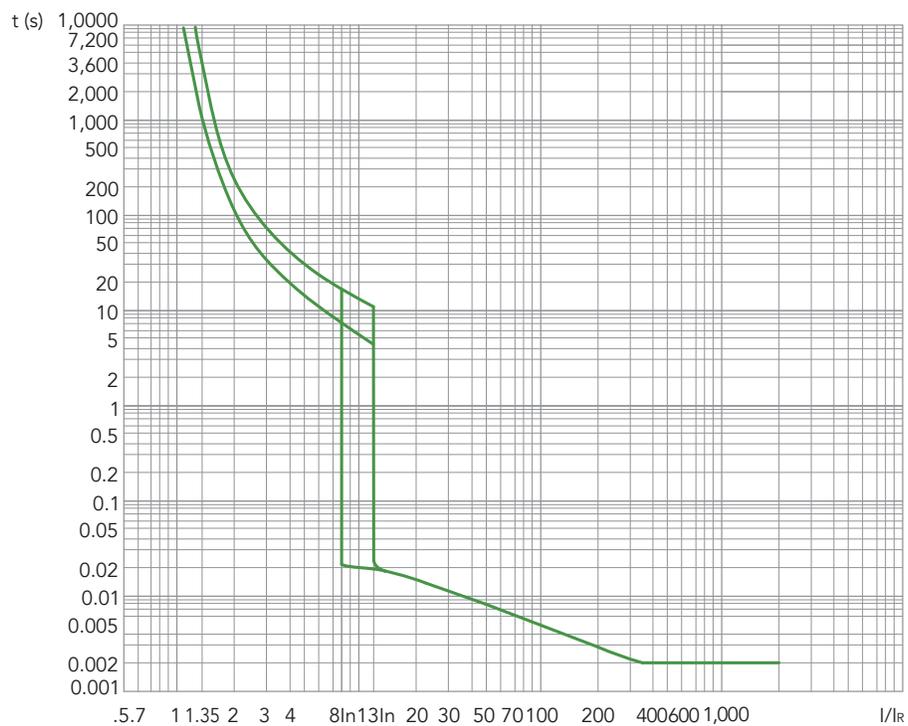
# Molded Case Circuit Breakers

## M1PVS Trip Curve

**M1PVS**  
(15~35 A)



**M1PVS**  
(40~50 A)

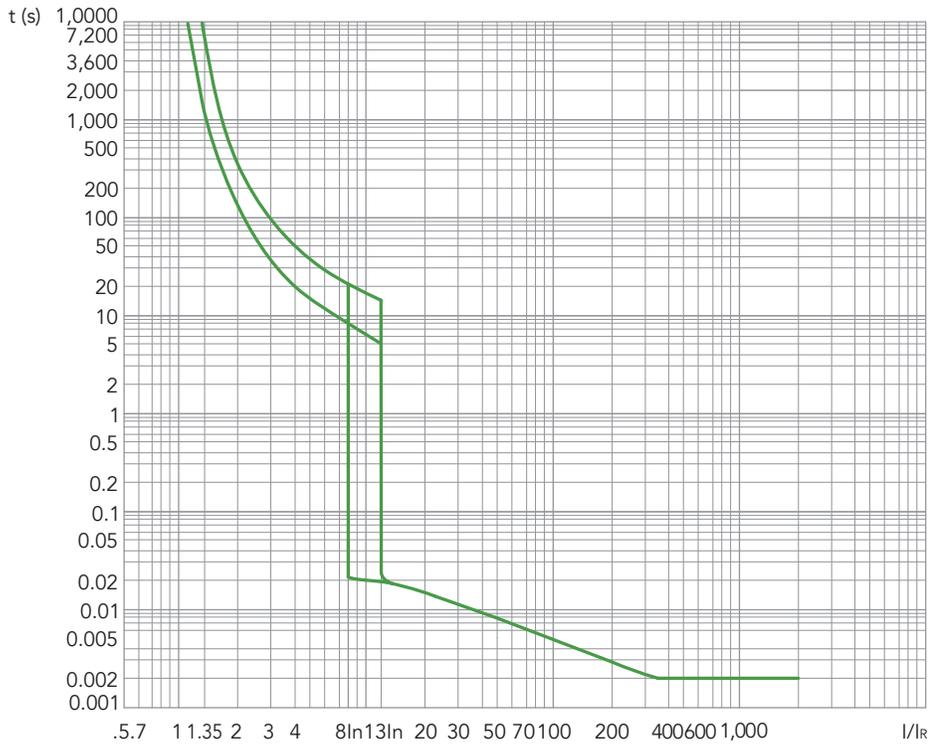


A

## Molded Case Circuit Breakers

### M1PVS Trip Curve

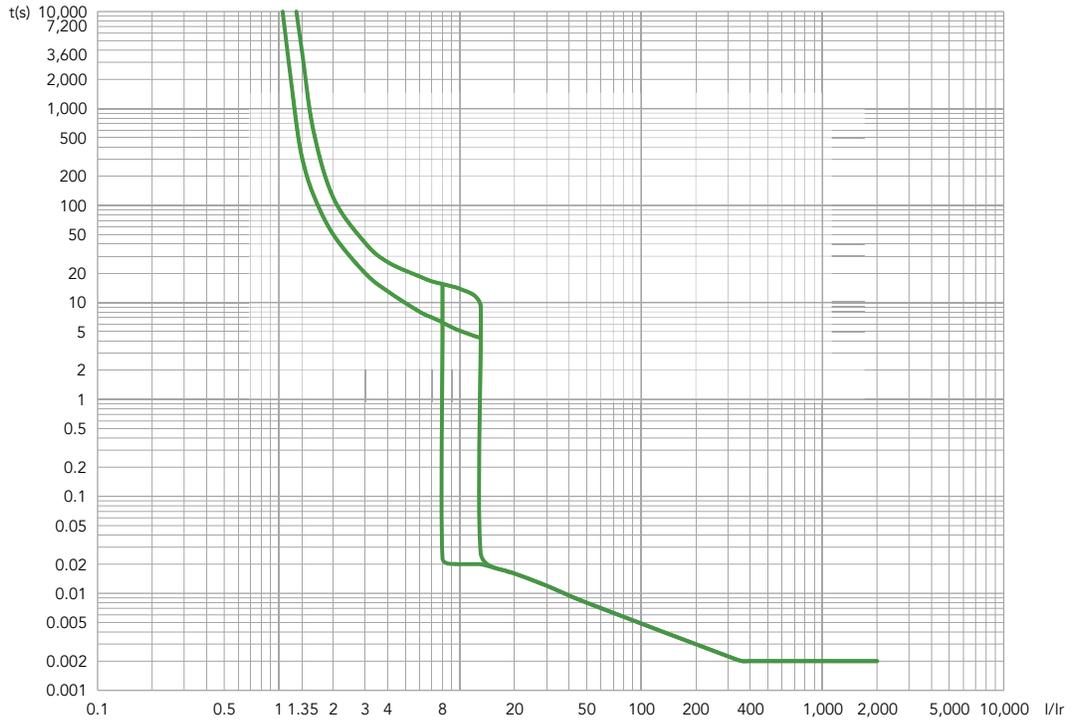
**M1PVS**  
(60~100 A)



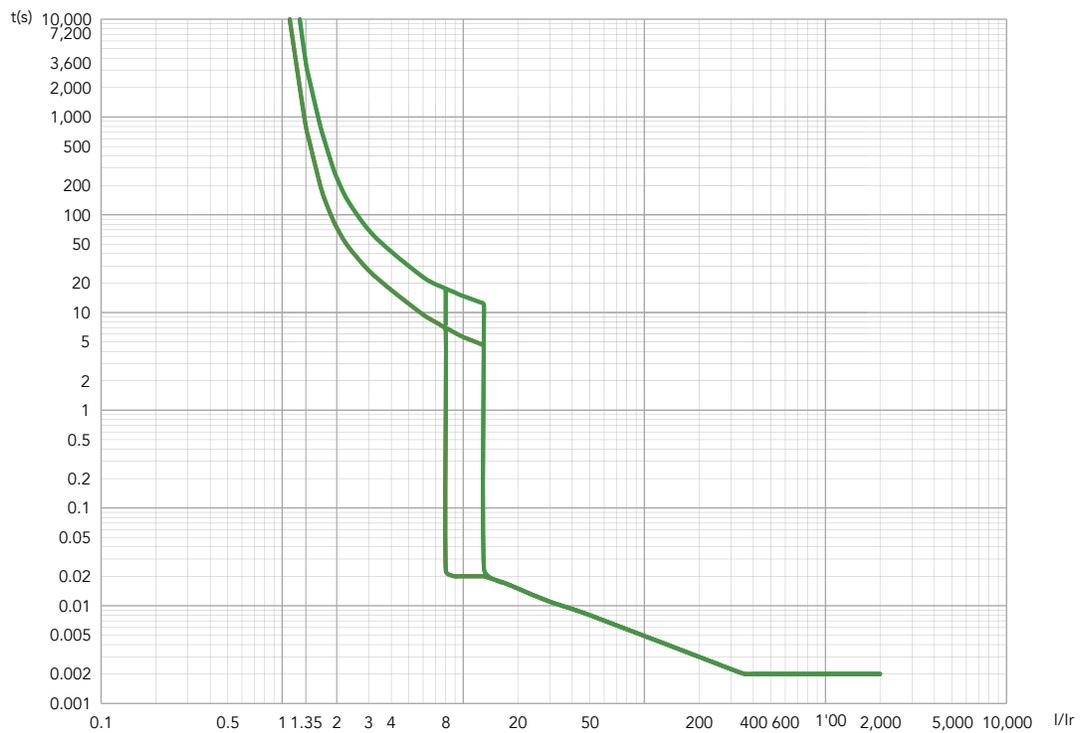
# Molded Case Circuit Breakers

## M1 Trip Curves

**M1 1P、2P**  
(15~35 A)



**M1 1P、2P**  
(40~50 A)

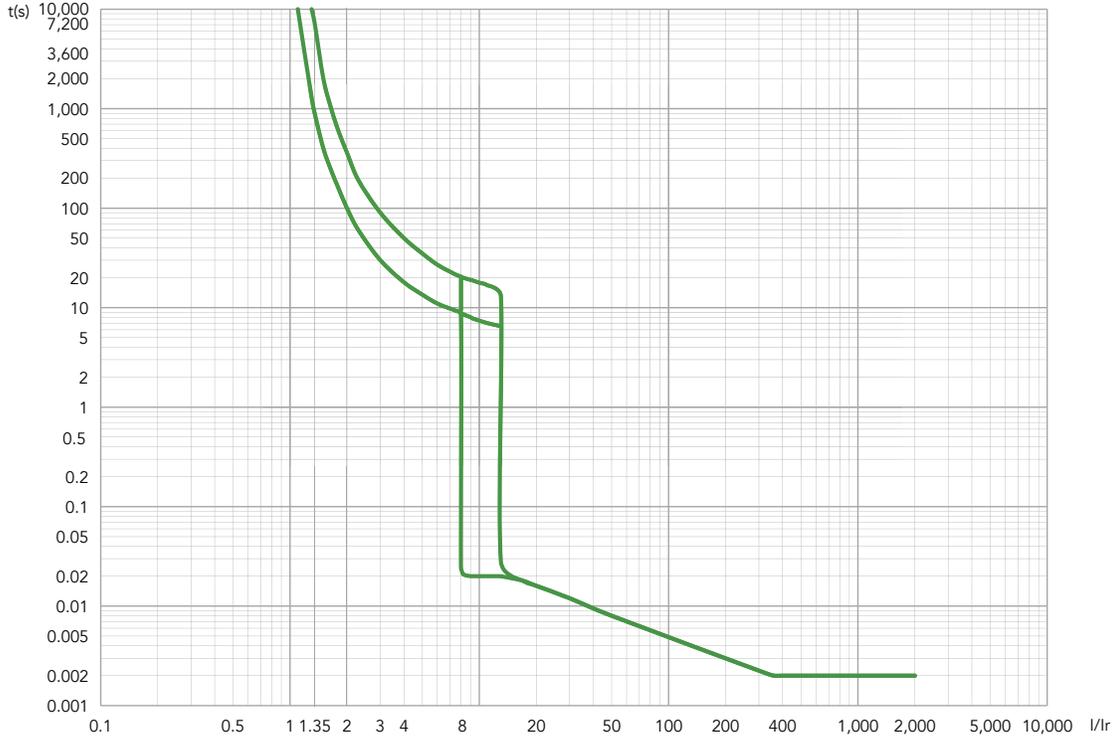


A

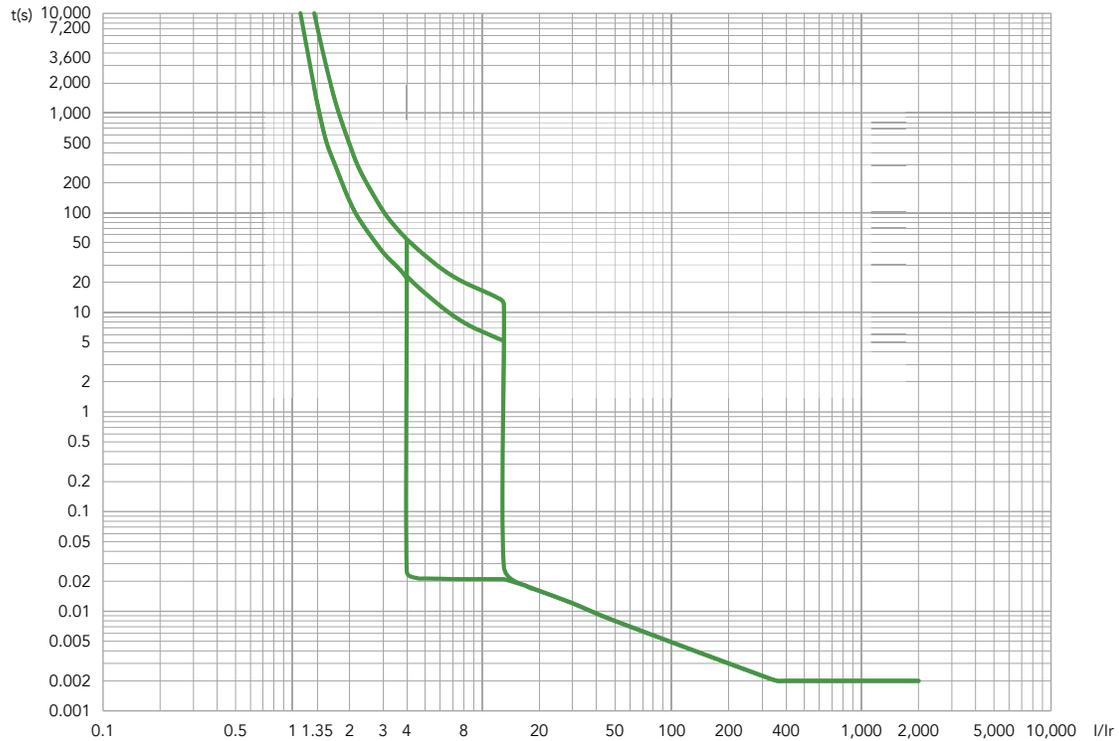
## Molded Case Circuit Breakers

### M1 Trip Curves

**M1 1P、2P**  
(60~100 A)



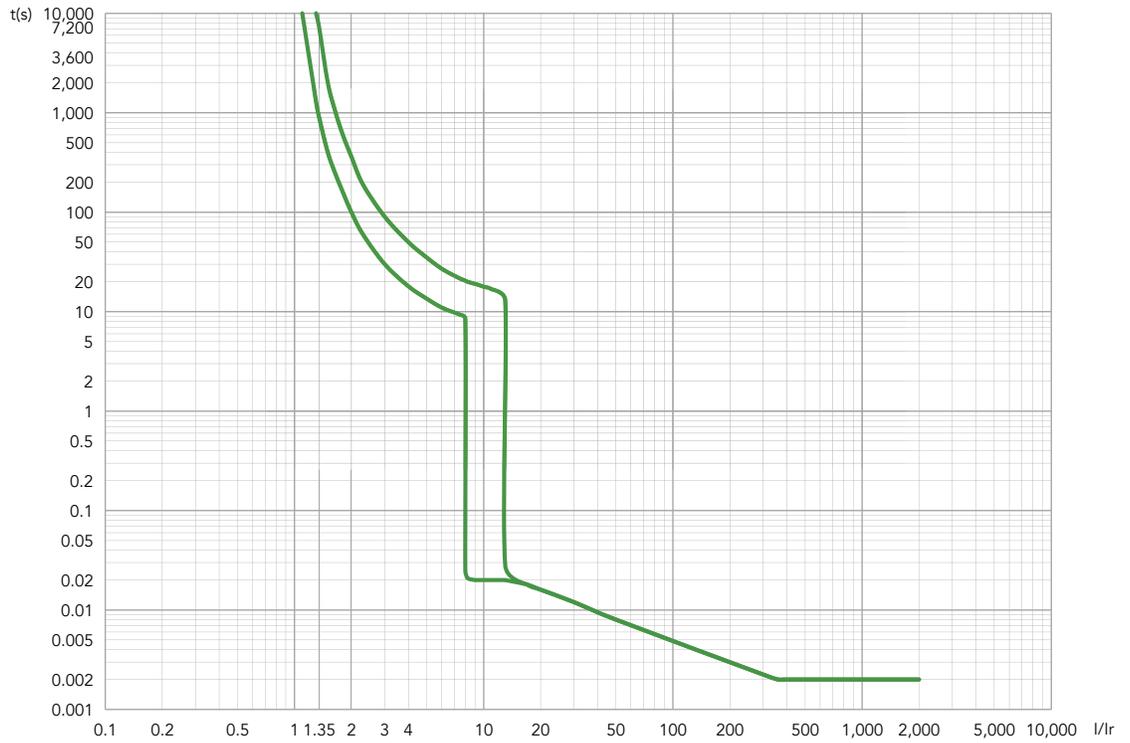
**M1 1P、2P**  
(125~150 A)



# Molded Case Circuit Breakers

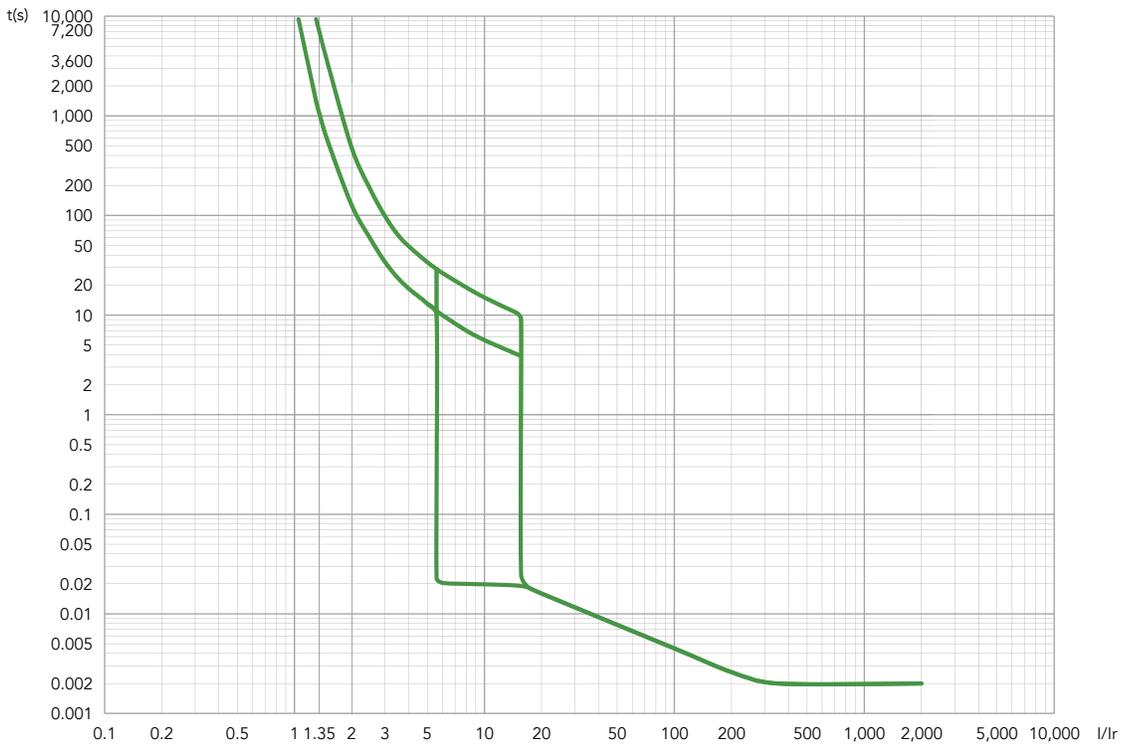
## M2 Trip Curves

**M2 1P**  
(100~250 A)



A

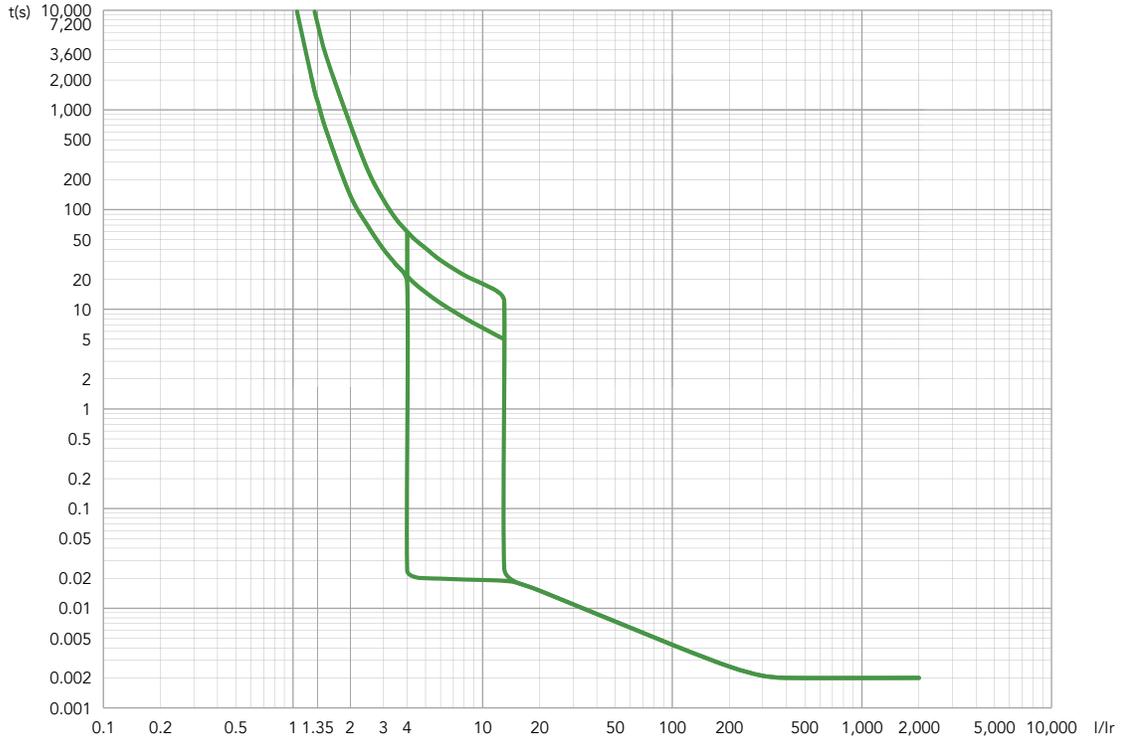
**M2 2P、3P**  
(100~150 A)



## Molded Case Circuit Breakers

### M2 Trip Curves

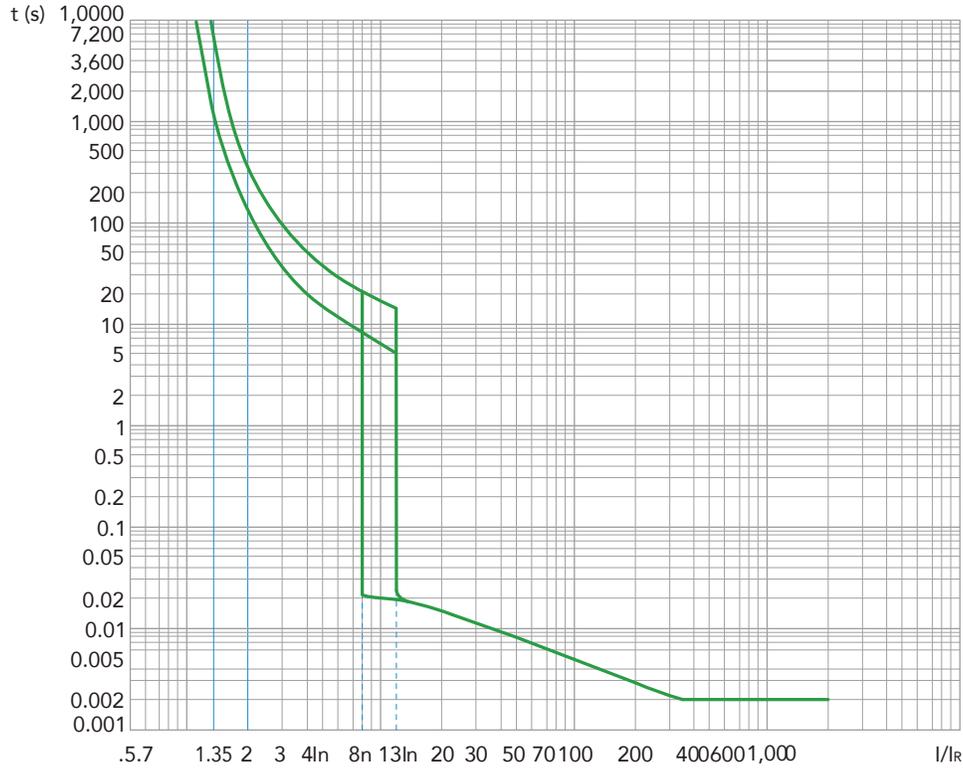
**M2 2P, 3P**  
(175~250 A)



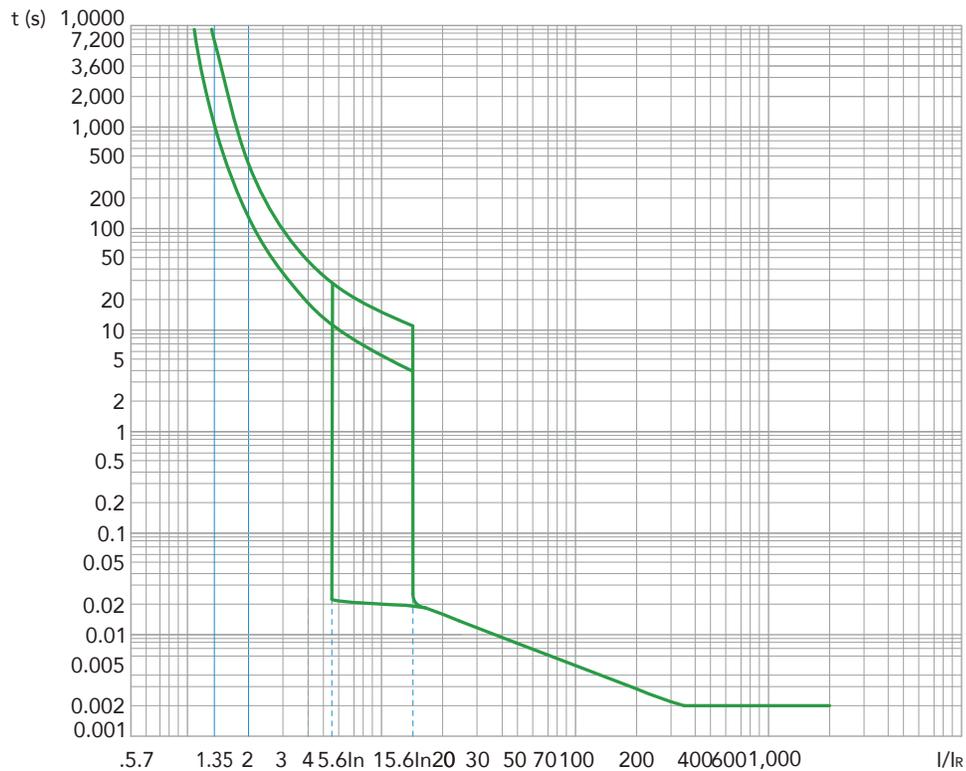
# Molded Case Circuit Breakers

## M2HV Trip Curves

**M2HV**  
( 60~100 A )



**M2HV**  
( 125~150 A )

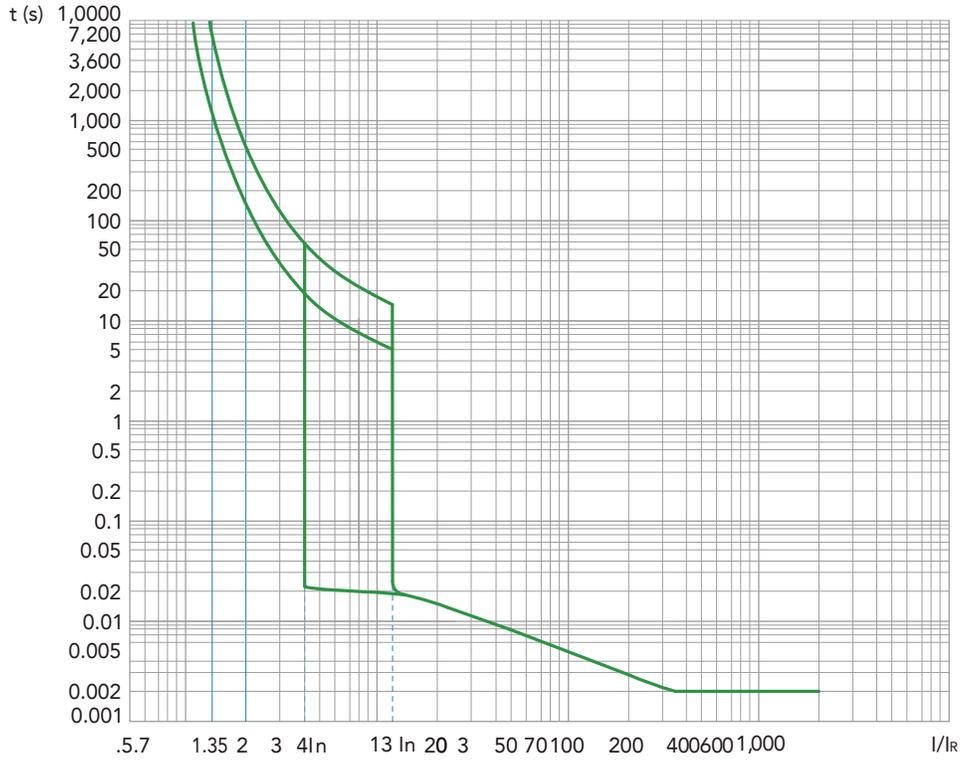


A

## Molded Case Circuit Breakers

### M2HV Trip Curves

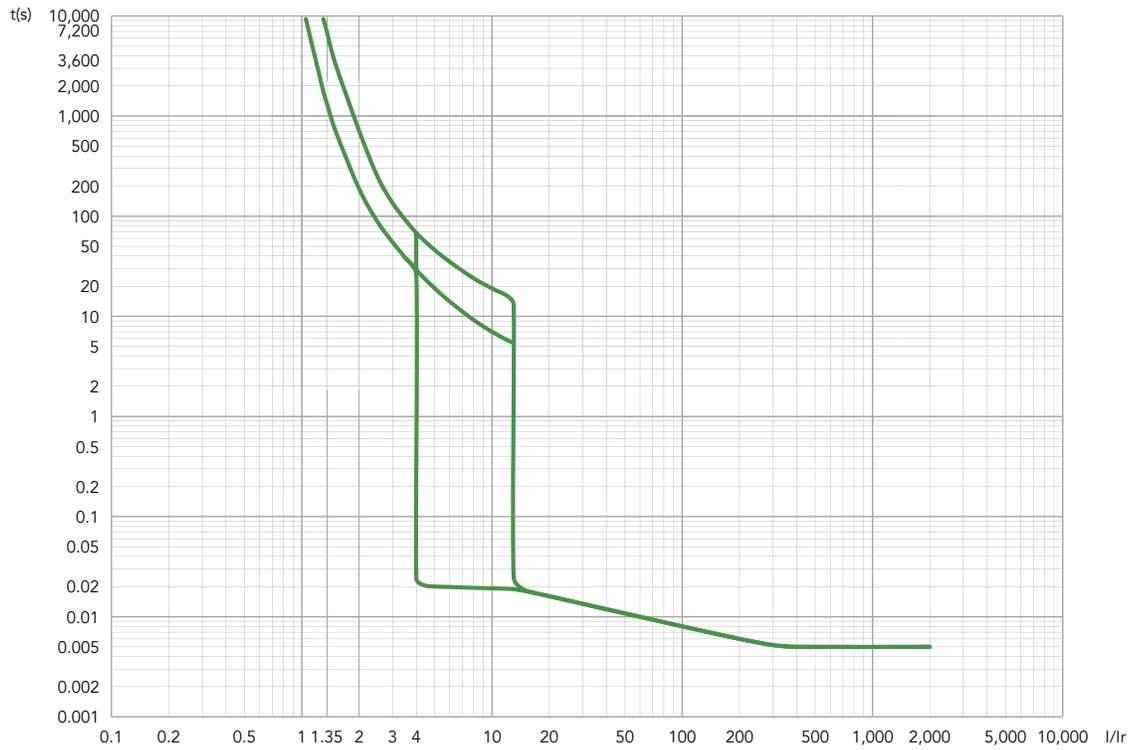
**M2HV**  
(175~250 A)



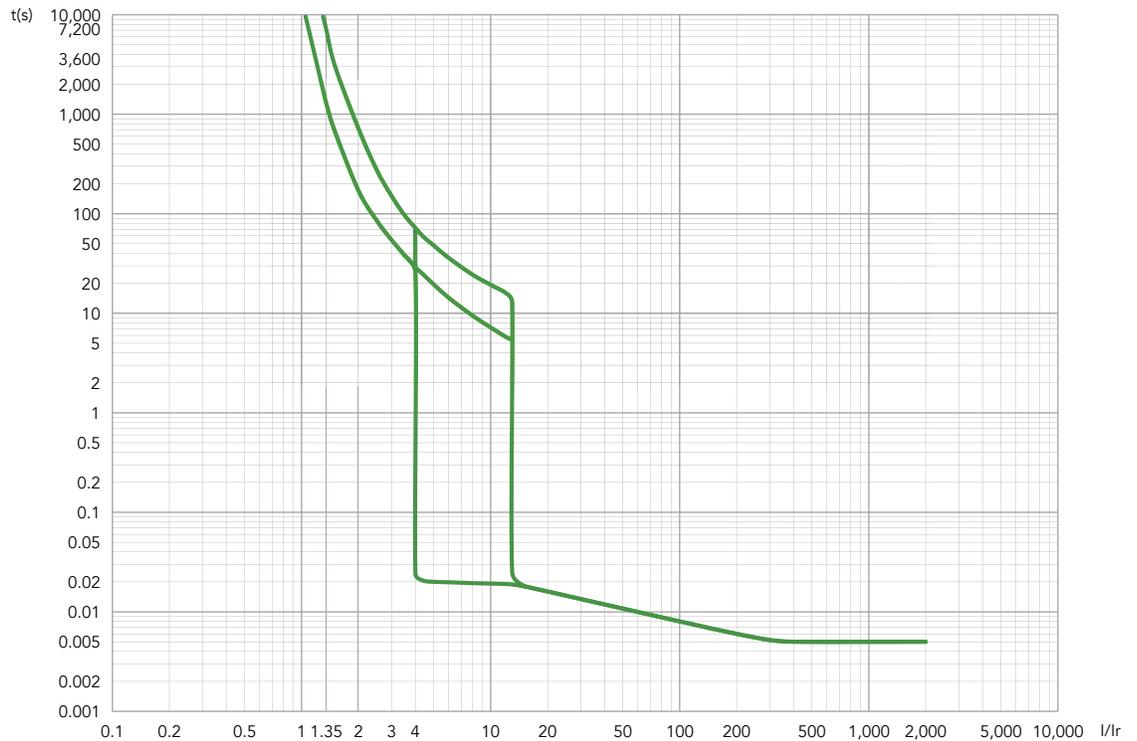
# Molded Case Circuit Breakers

## M3 Trip Curves

**M3**  
(225~350 A)



**M3**  
(400 A)  
 $t=f(I/r)$

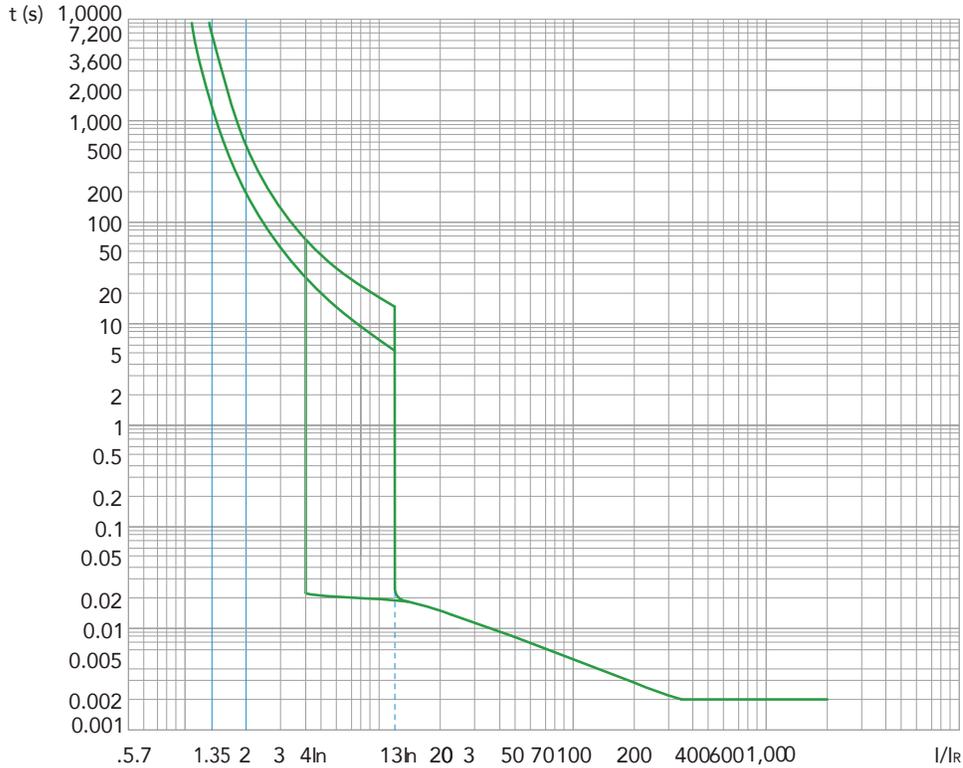


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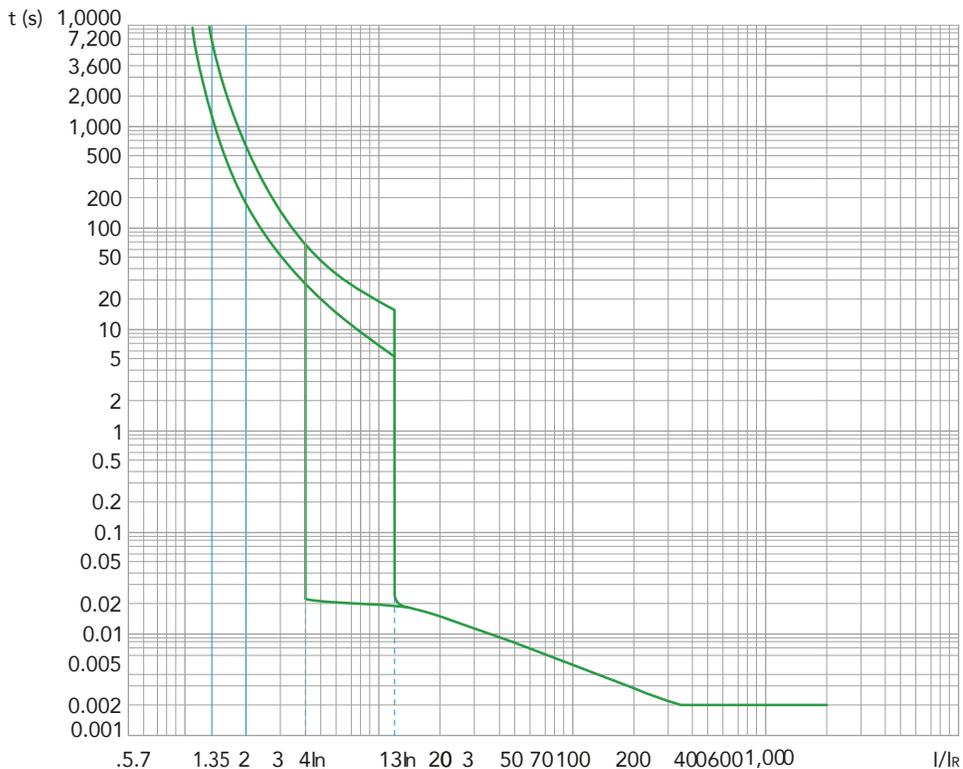
## Molded Case Circuit Breakers

### M3HV Trip Curves

**M3HV**  
(250~350 A)



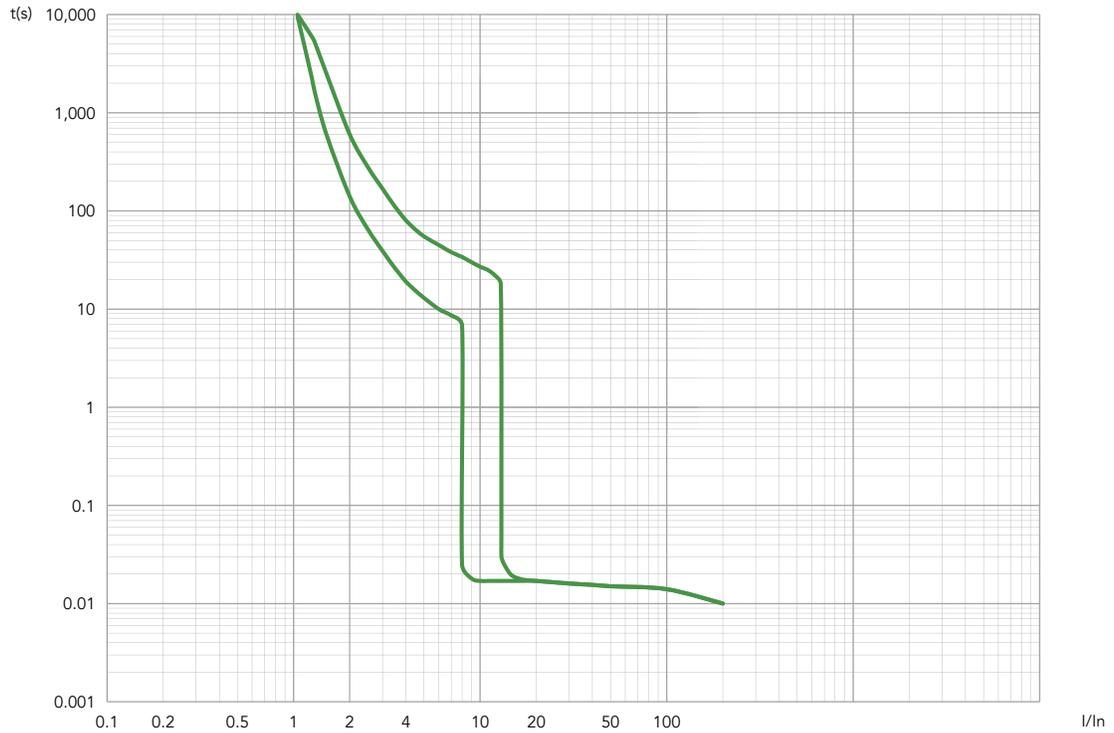
**M3HV**  
(400 A)



# Molded Case Circuit Breakers

## MD3HVF Trip Curves

**MD3HVF**  
(400 A)

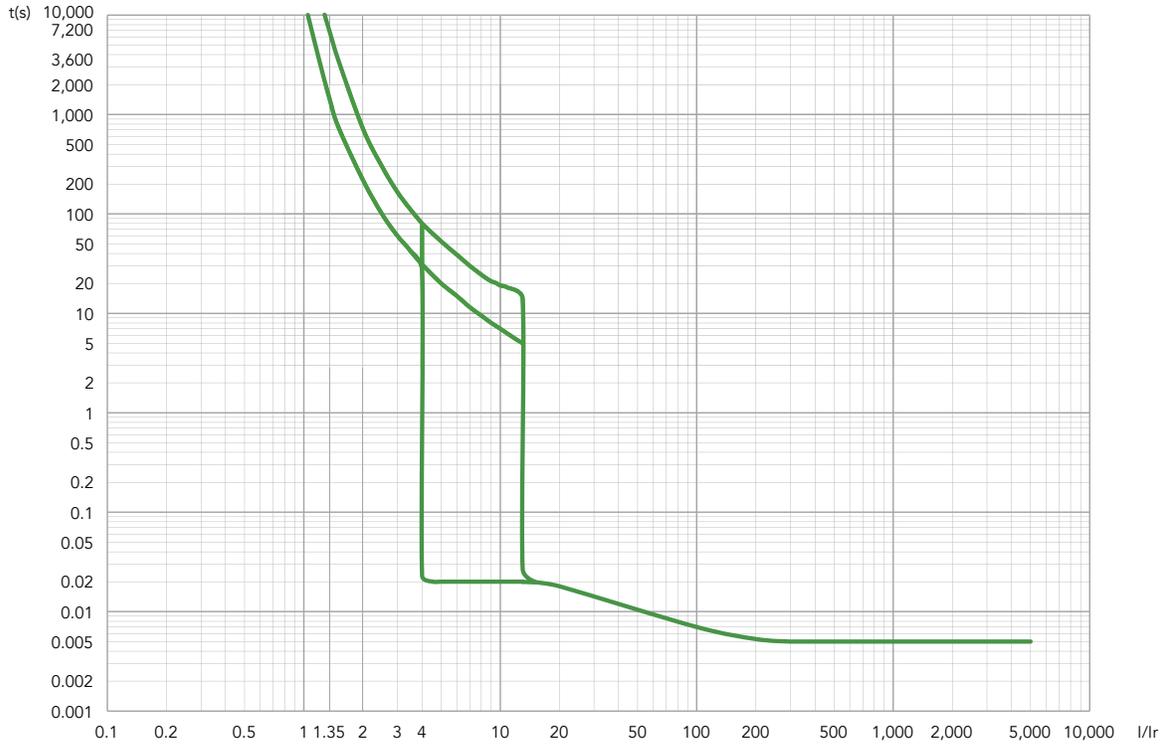


A

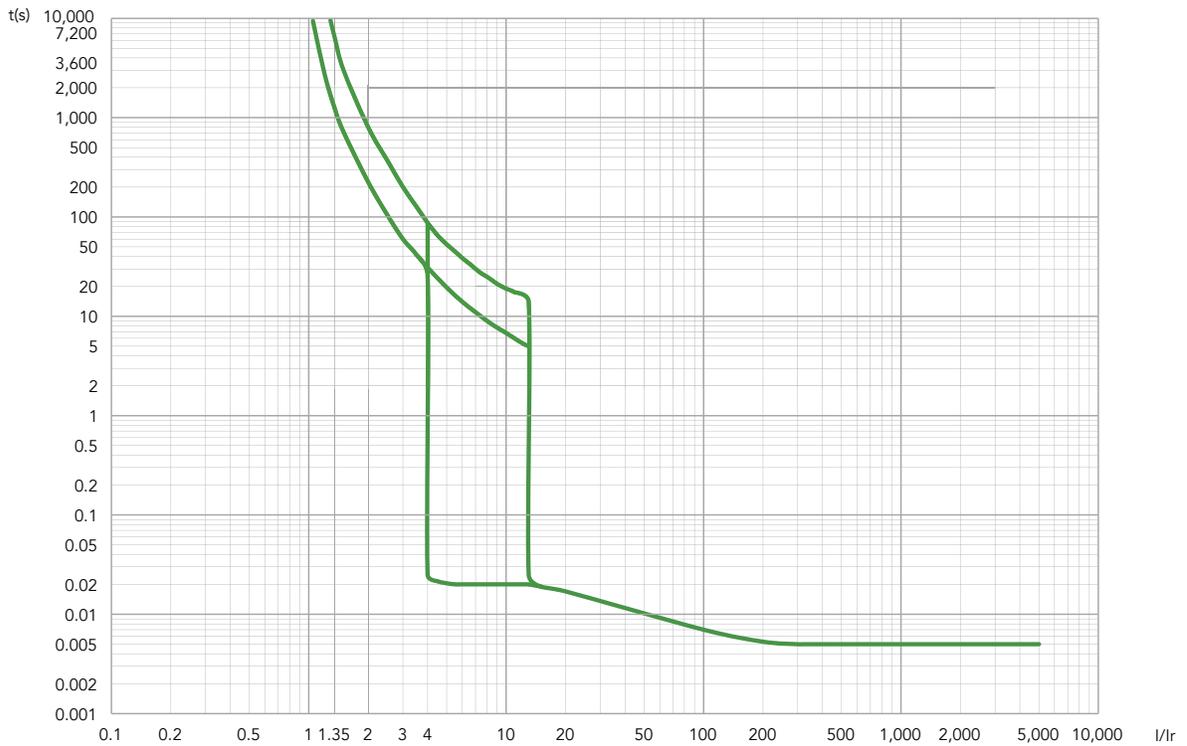
## Molded Case Circuit Breakers

### M4 Trip Curves

**M4**  
(400 A)



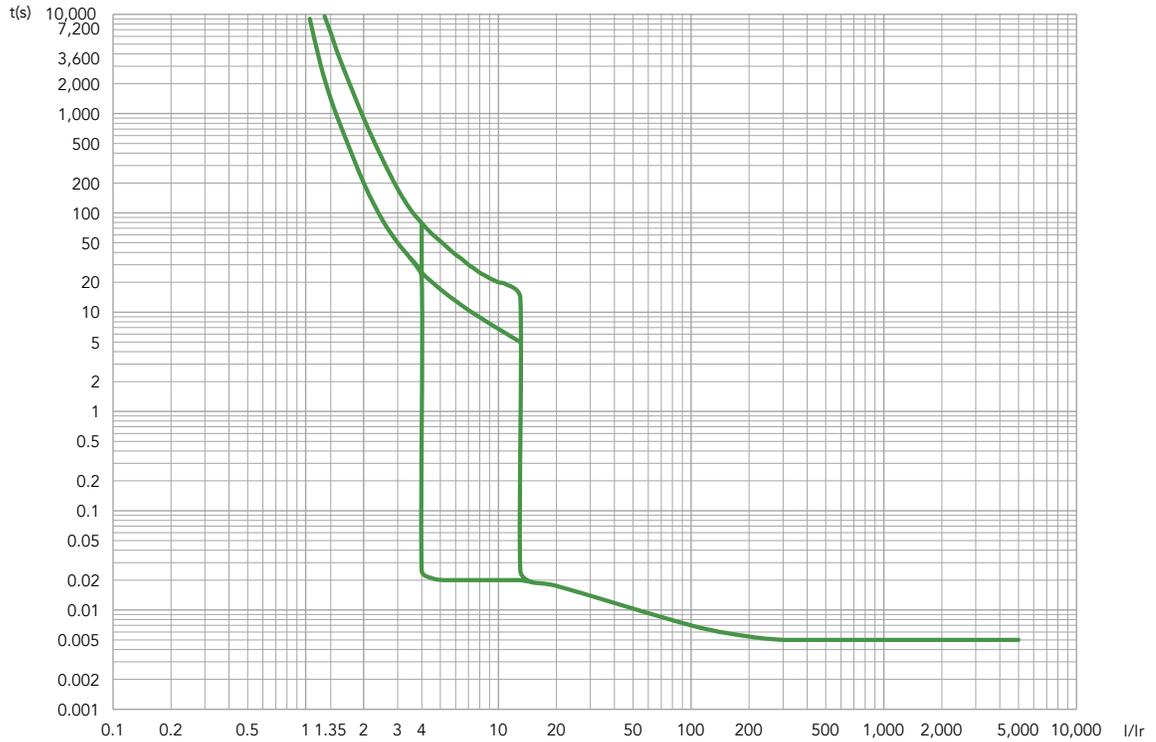
**M4**  
(500~600 A)



# Molded Case Circuit Breakers

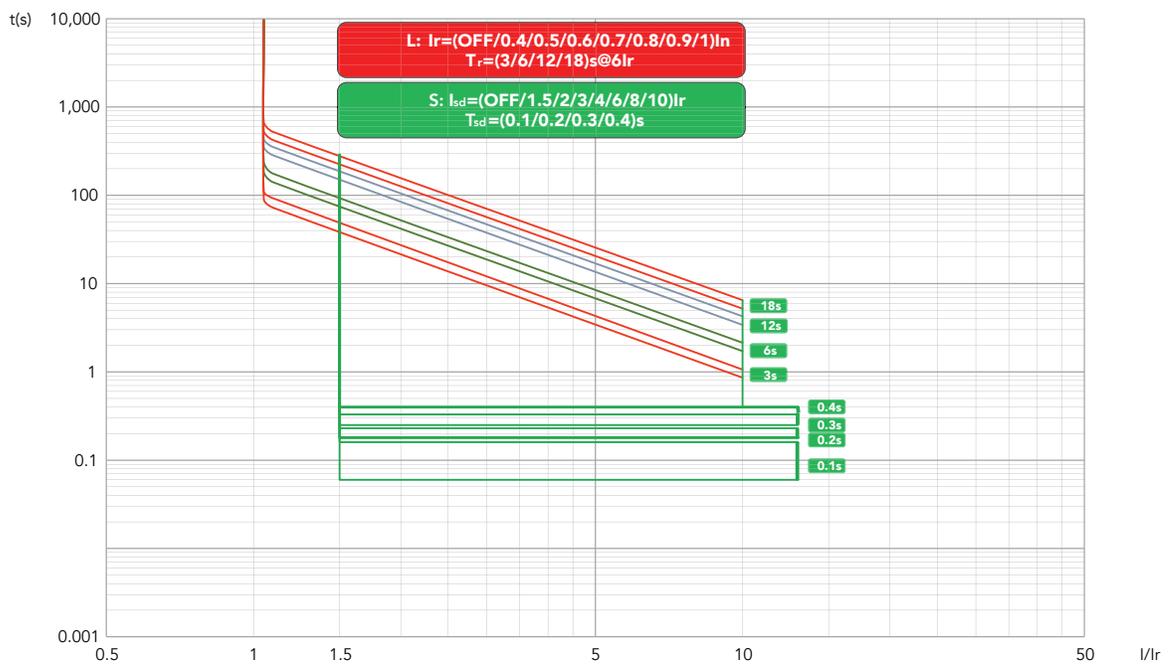
## M5-M6 Trip Curves

**M5**  
(600~800 A)



A

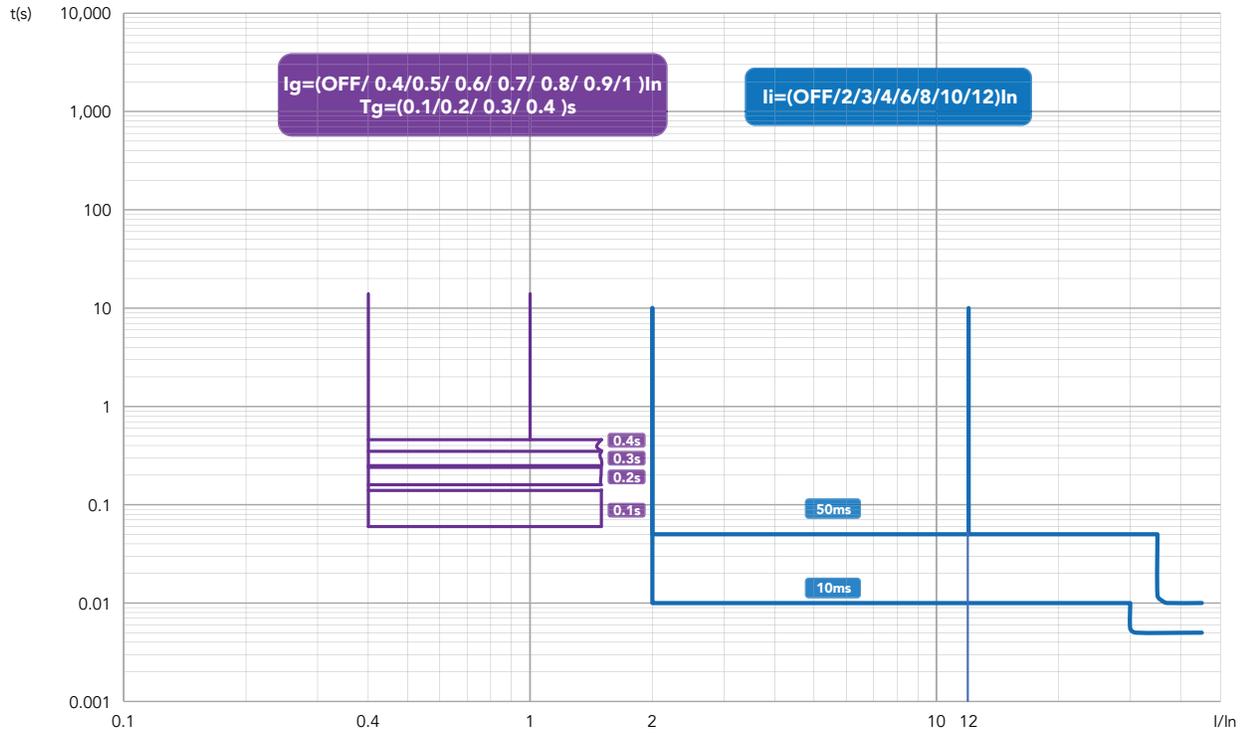
**M6**  
(800~1200 A)



## Molded Case Circuit Breakers

### M6 Trip Curves

**M6**  
(800~1200 A)

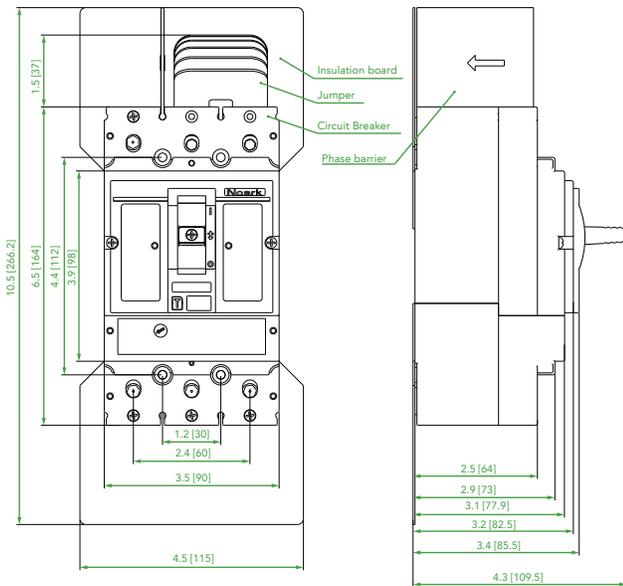


# M Series Dimensions

## M1PVS Dimensions

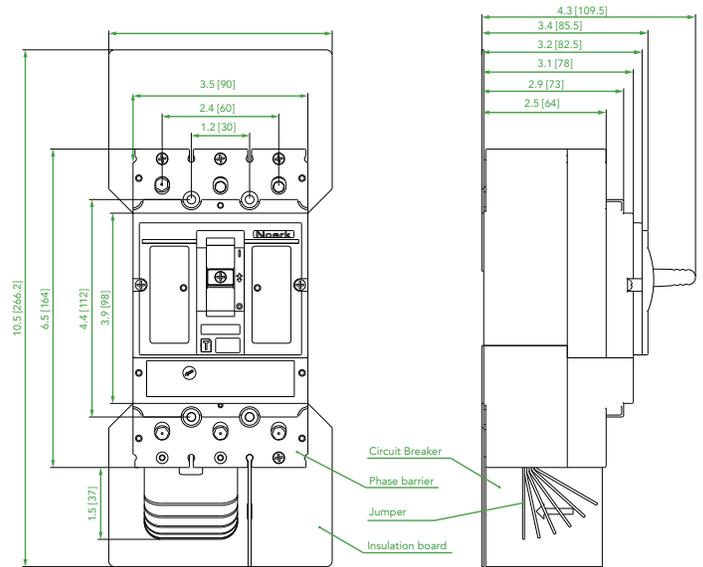
### M1PVS Connection A

Unit: in [mm]



### M1PVS Connection B

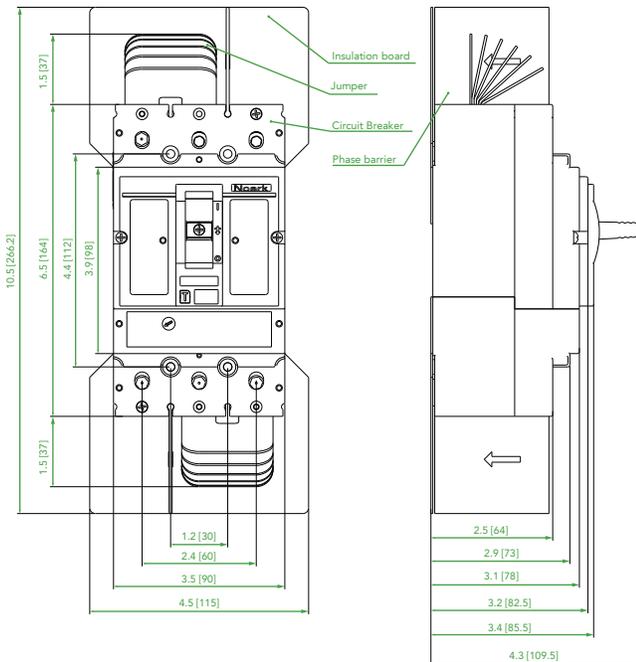
Unit: in [mm]



A

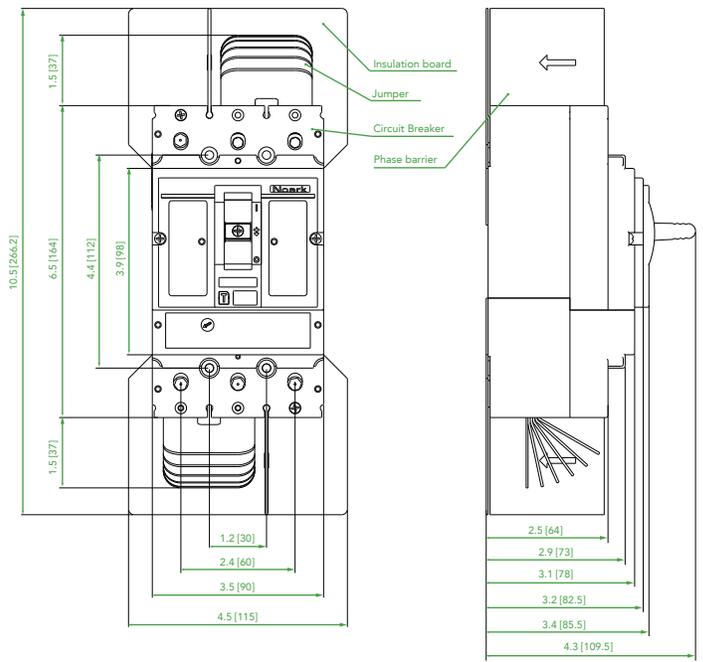
### M1PVS Connection C

Unit: in [mm]



### M1PVS Connection D

Unit: in [mm]

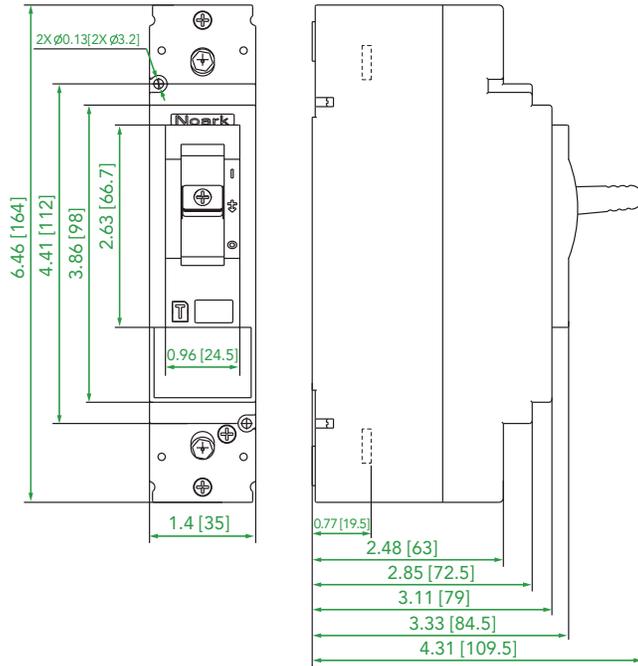


## M Series Dimensions

### M1/M1M/M1D Dimensions

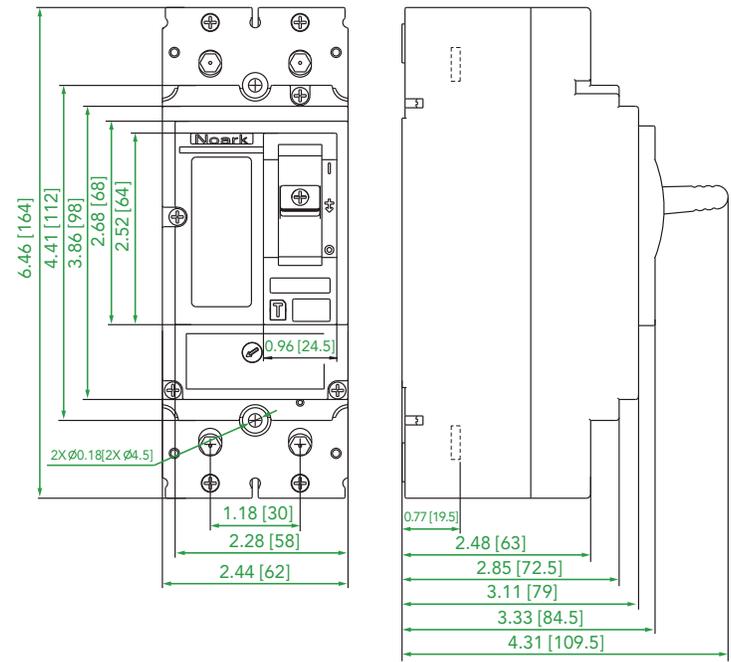
#### M1 1 Pole

Unit: in [mm]



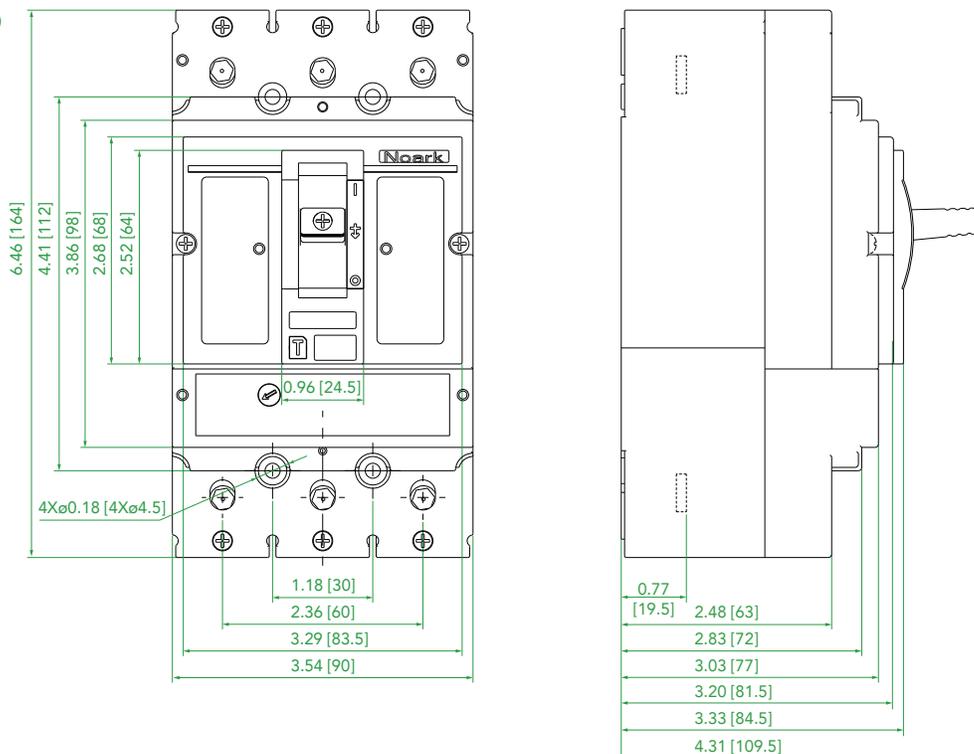
#### M1 2 Pole

Unit: in [mm]



#### M1/M1M/M1D

Unit: in [mm]

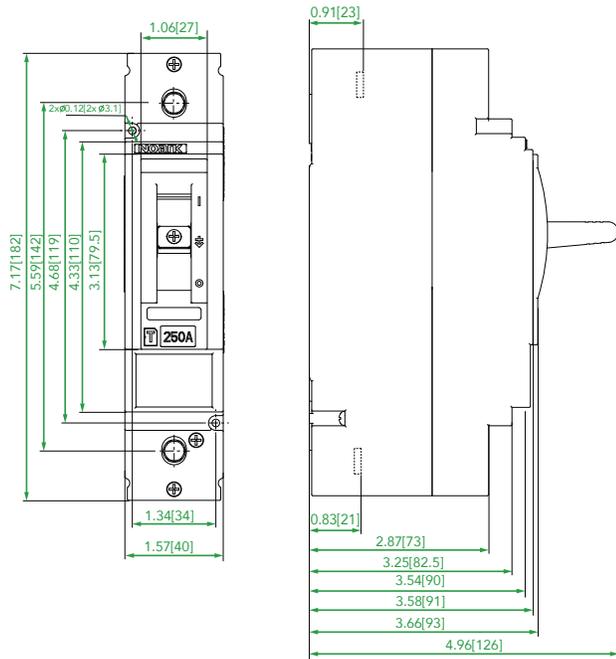


# M Series Dimensions

## M2/M2M/M2D Dimensions

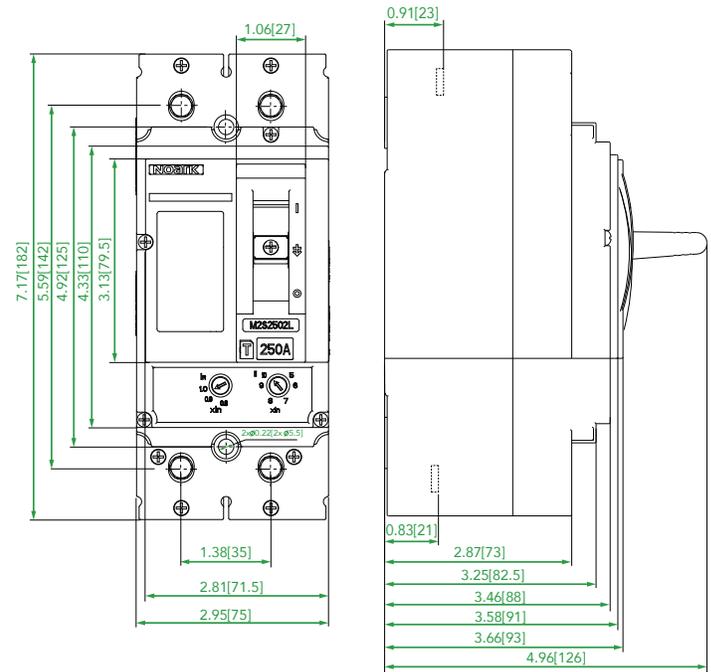
### M2 1 Pole

Unit: in [mm]



### M2 2 Pole

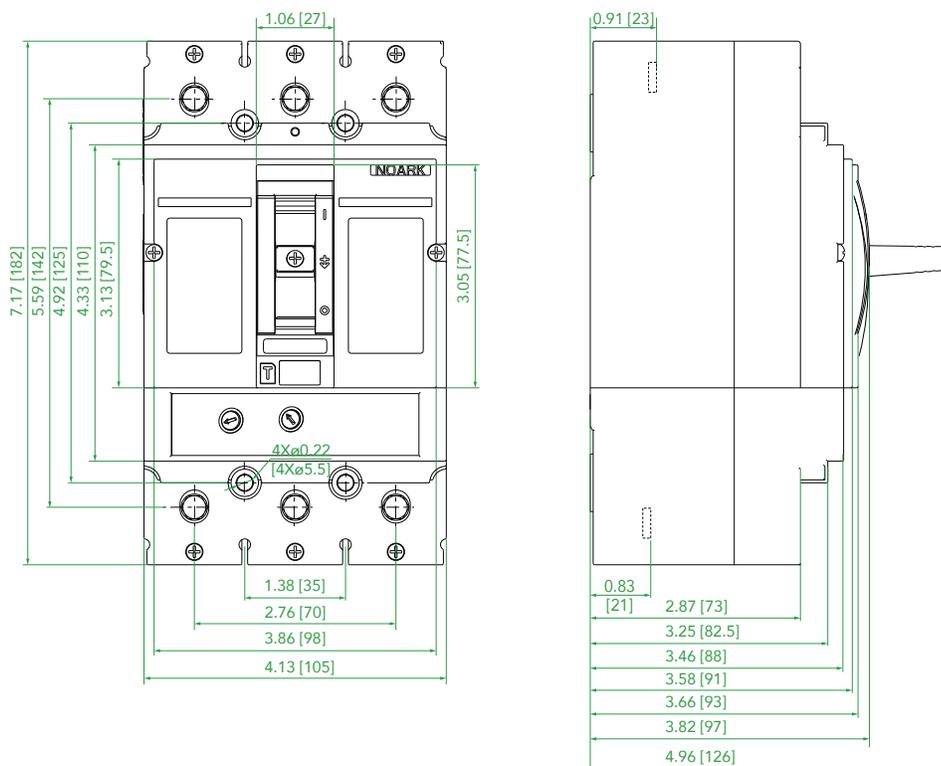
Unit: in [mm]



A

### M2/M2M/M2D

Unit: in [mm]

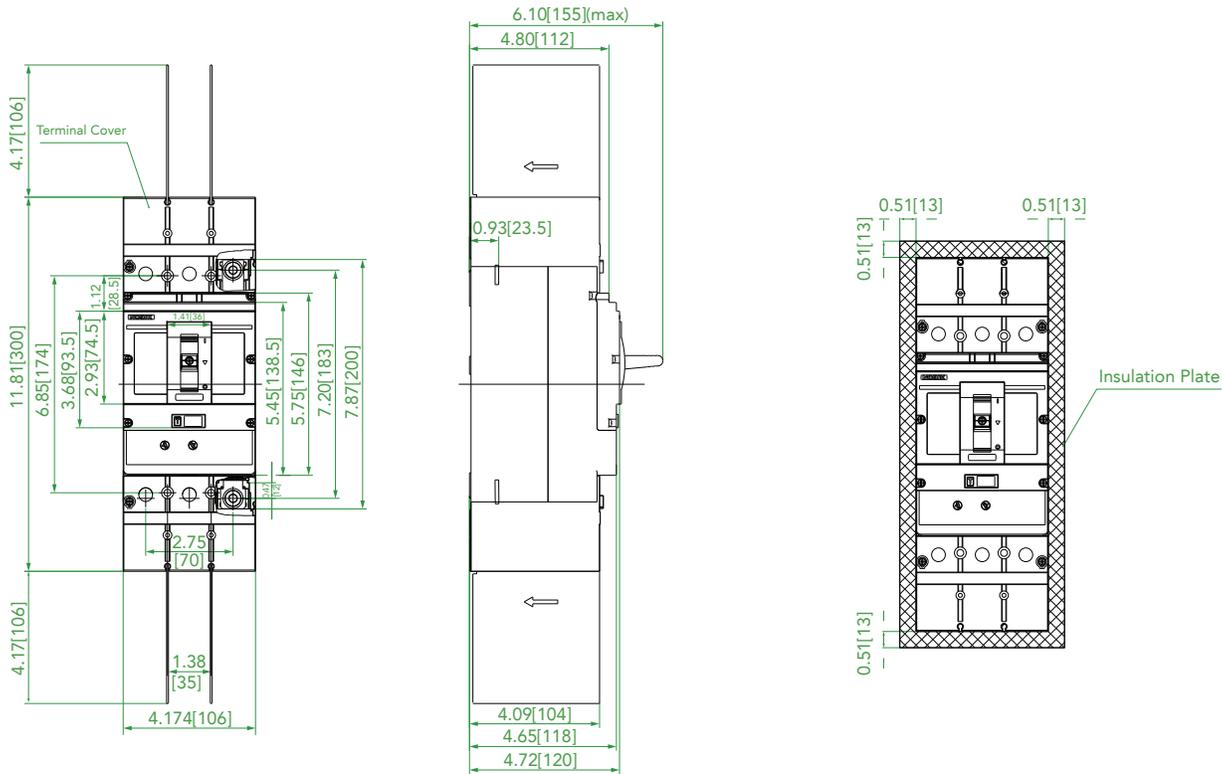


## M Series Dimensions

### M2HV/MV2DPV Dimensions

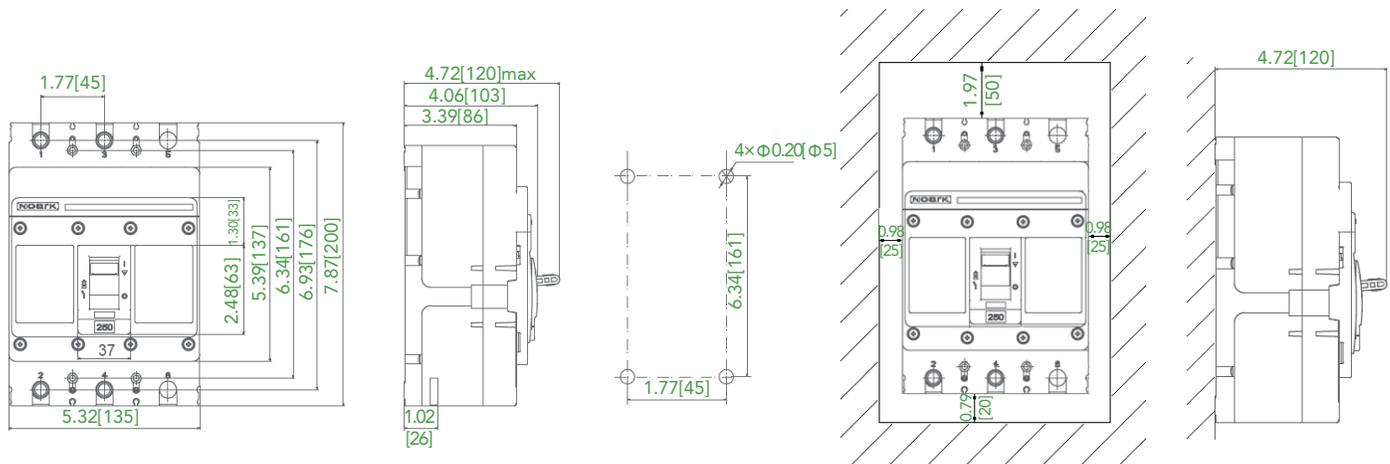
#### M2HV

Unit: in [mm]



#### MV2DPV

Unit: in [mm]

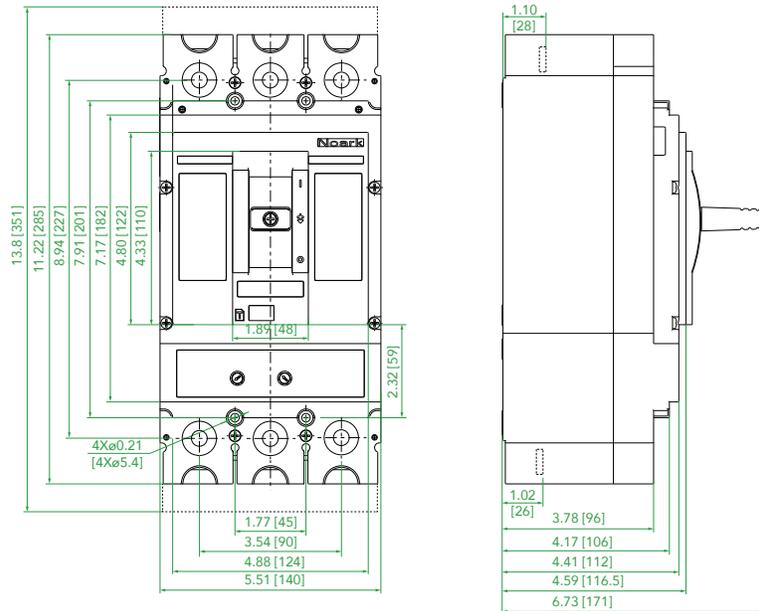


## M Series Dimensions

### M3/M3M/M3D-M3HV Dimensions

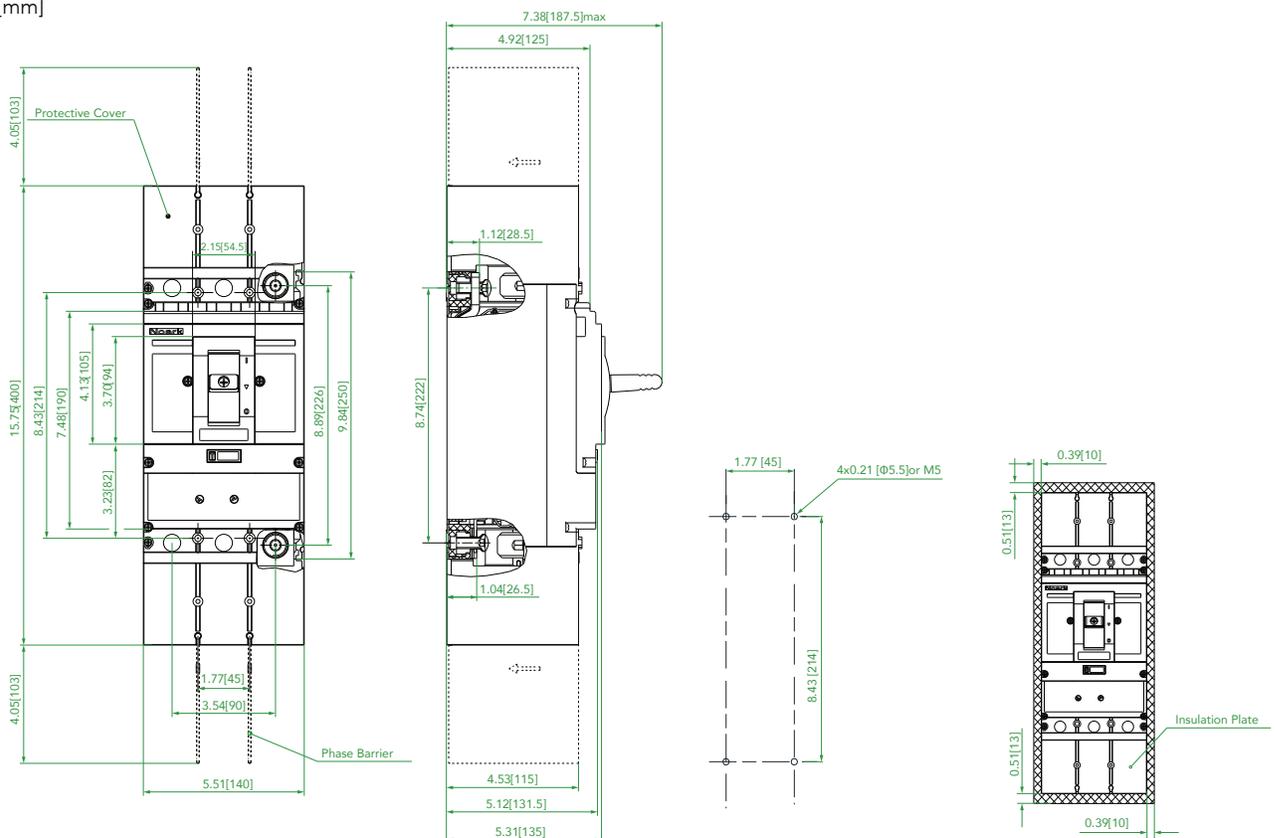
#### M3/M3M/M3D

Unit: in [mm]



#### M3HV

Unit: in [mm]

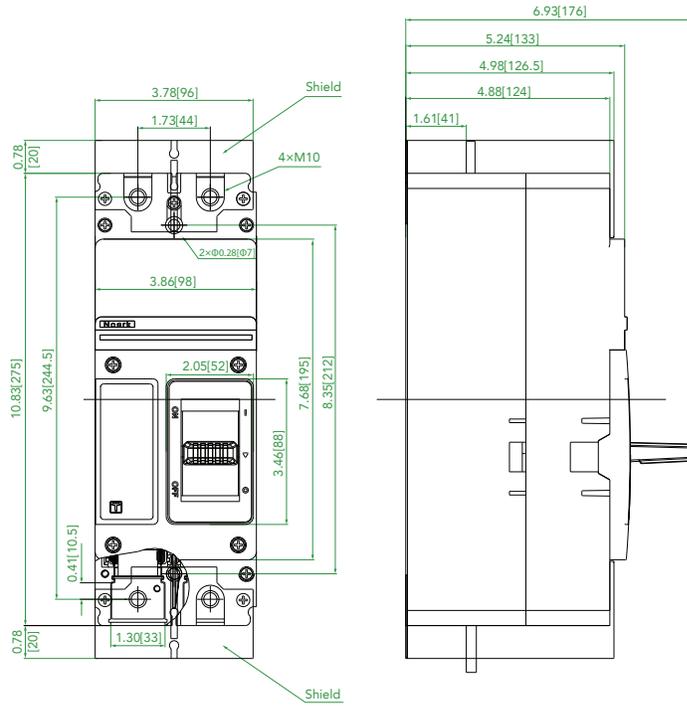


## M Series Dimensions

### M3DHVF-M4/M4M/M4D Dimensions

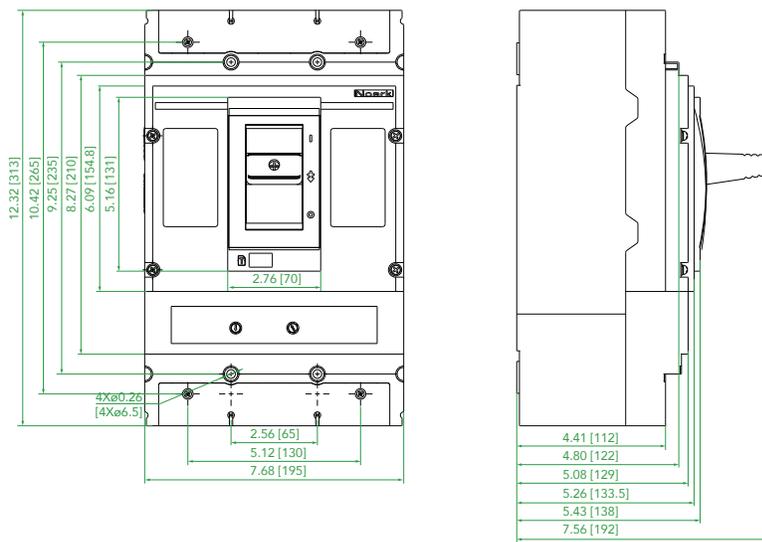
#### M3DHVF

Unit: in [mm]



#### M4/M4M/M4D

Unit: in [mm]



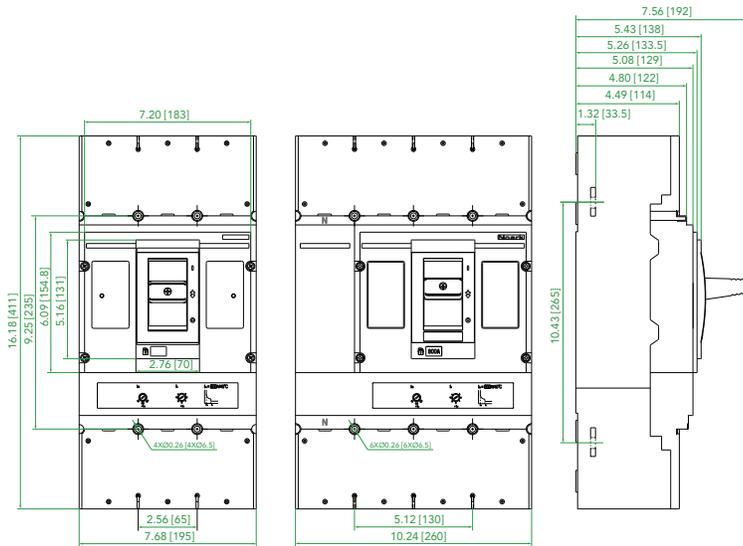
# M Series Dimensions

## M5/M5M/M5D-M6/M6M/M6D Dimensions

### M5/M5D/M5M

2P, 3P, 4P

Unit: in [mm]

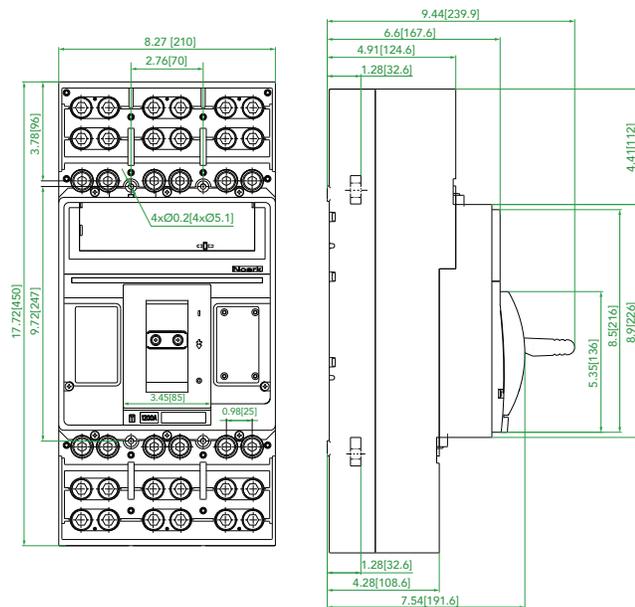


A

### M6/M6D/M6M

3P

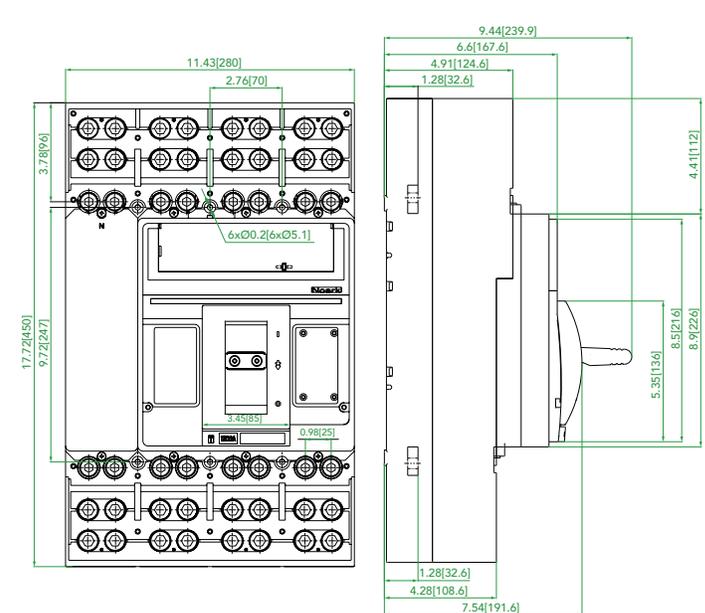
Unit: in [mm]



### M6/M6D/M6M

4P

Unit: in [mm]

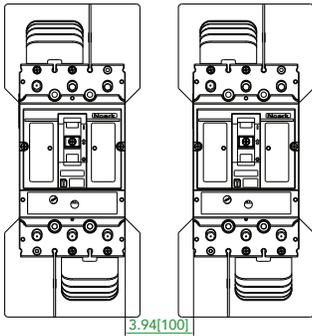
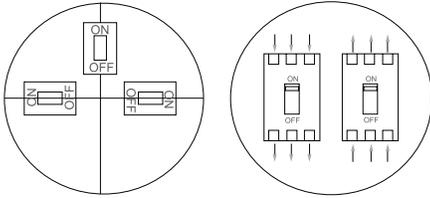


## M Series Mounting Positions

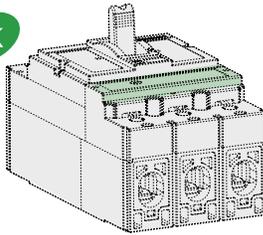
### M1PVS Mounting Positions

#### M1PVS

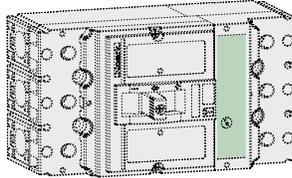
Reverse Feed Allowed



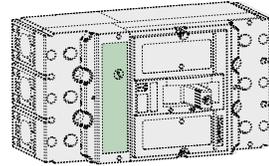
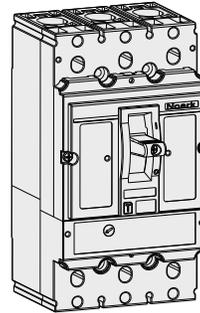
OK



OK



OK

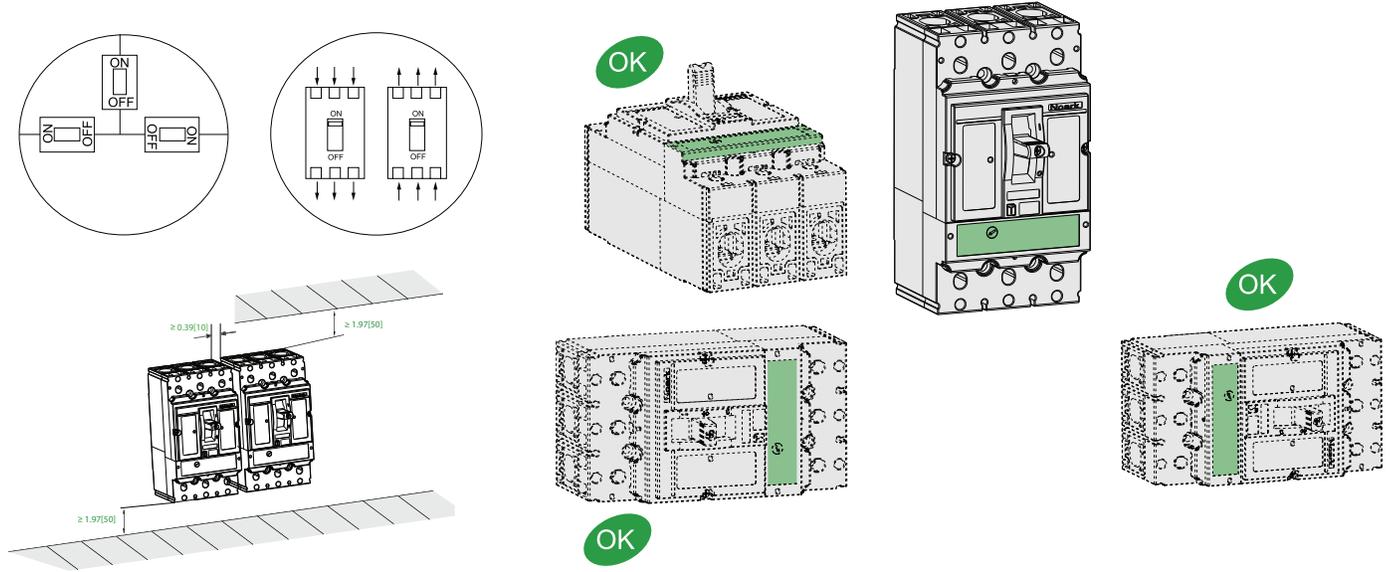


# M Series Mounting Positions

## M1/M1M/M1D-M2/M2M/M2D Mounting Positions

### M1/M1M/M1D

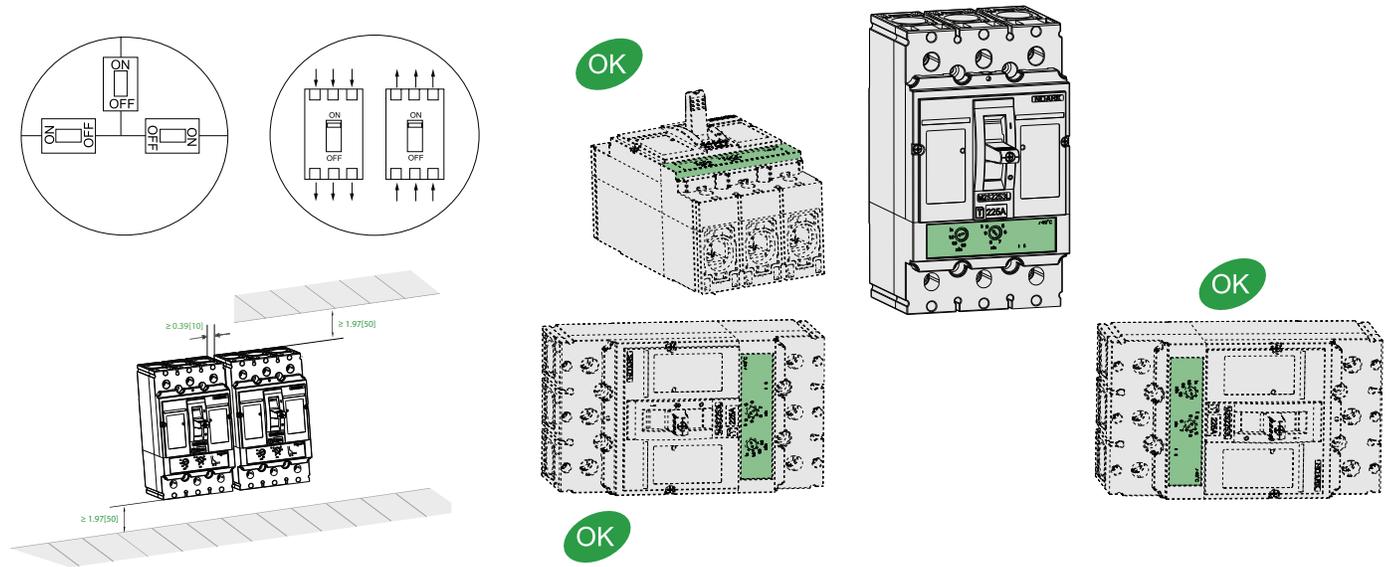
Reverse Feed Allowed



A

### M2/M2M/M2D

Reverse Feed Allowed

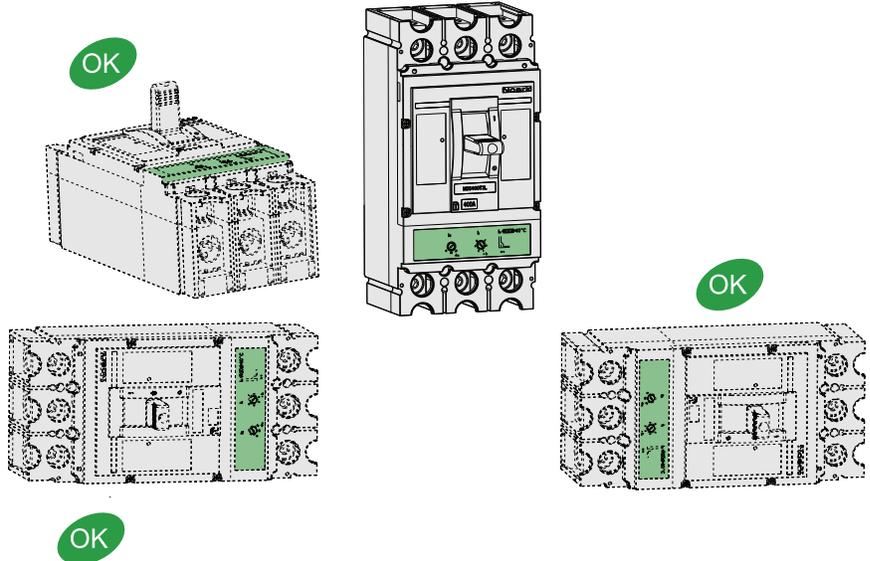
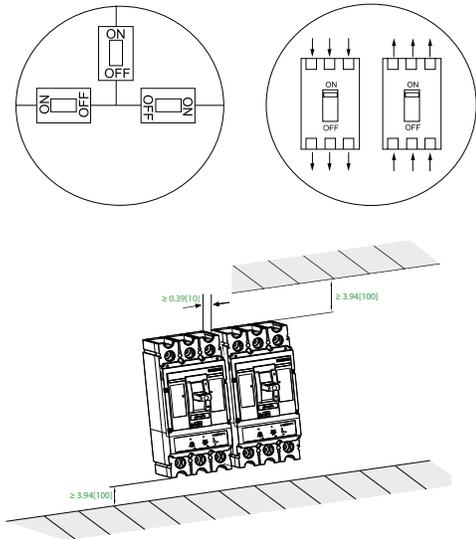


## M Series Mounting Positions

### M3/M3M/M3D-M4/M4M/M4D Mounting Positions

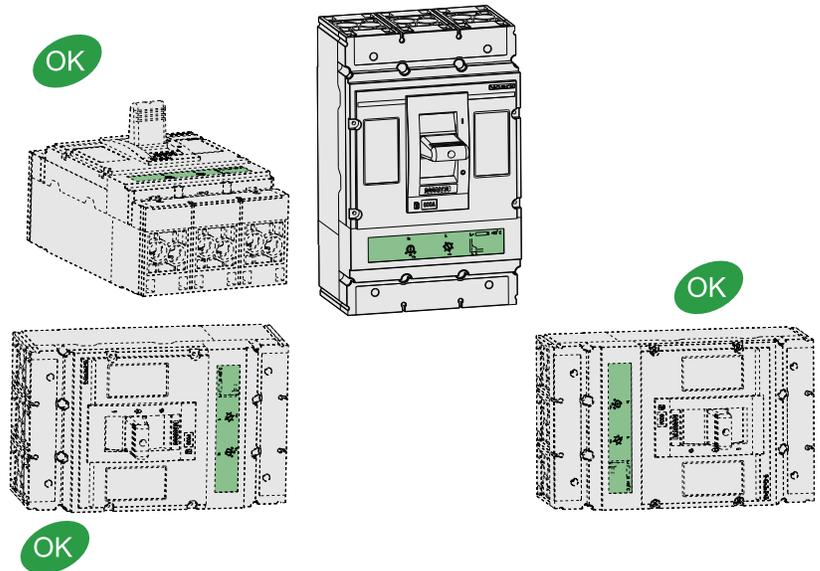
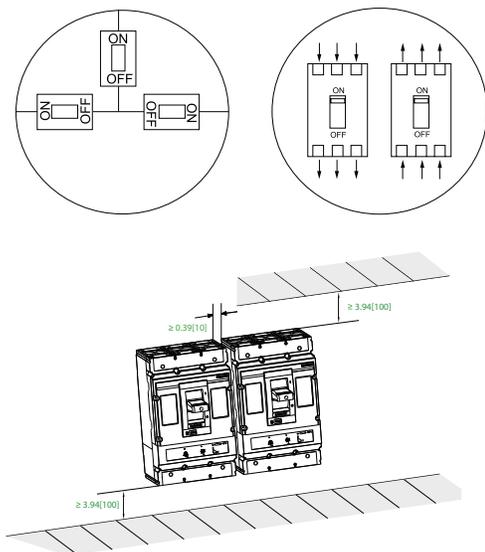
#### M3/M3M/M3D

Reverse Feed Allowed



#### M4/M4M/M4D

Reverse Feed Allowed

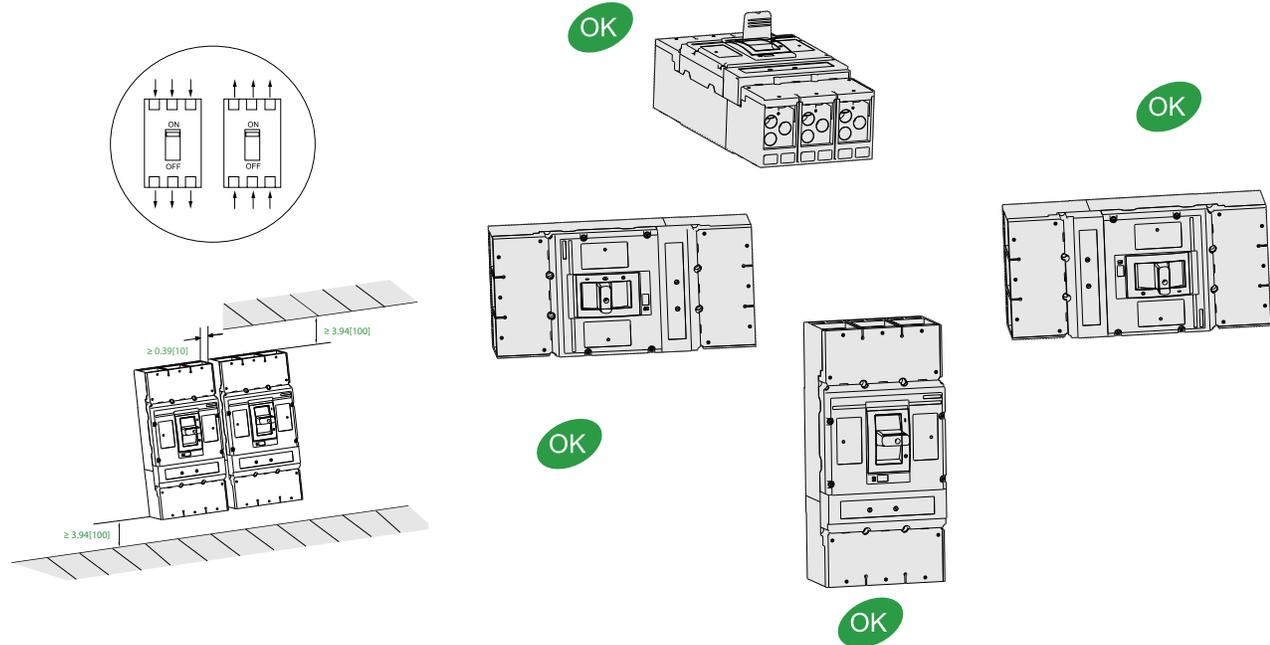


# M Series Mounting Positions

## M5/M5M/M5D-M6/M6M/M6D Mounting Positions

### M5/M5M/M5D

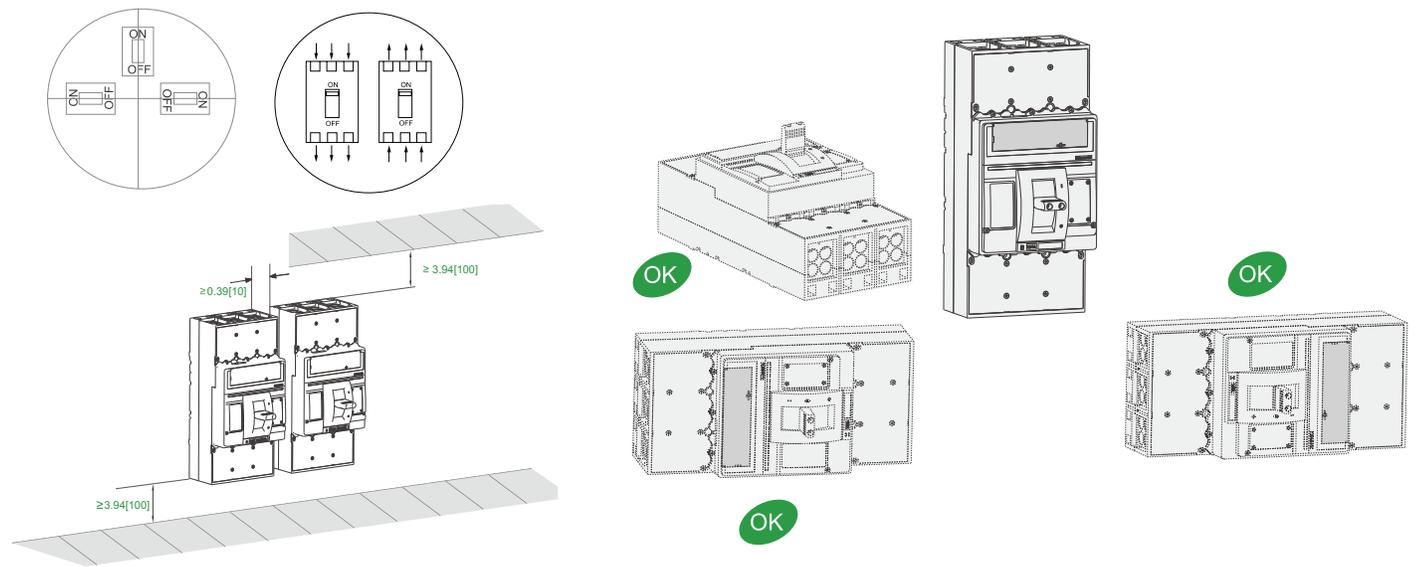
Reverse Feed Allowed



A

### M6/M6M/M6D

Reverse Feed Allowed





## Molded Case Motor Circuit Protectors

### M1M-M6M Product Overview

# Features

B

#### Ex9 Series - M Molded Case Motor Circuit Protectors, 3~1200 A

NOARK Electric offers a complete range of 3 pole Molded Case Motor Circuit Protectors (MCPs) which are used to protect the three phase asynchronous motors in six frame sizes: M1M - 150 A, M2M - 250 A, M3M - 400 A, M4M - 600 A, M5M - 800 A, and M6M - 1,200 A. Each frame size offers a range of interrupting voltage ratings from 240-600 Vac. This series MCP conforms to global standards that include UL 489, CSA C22.2 No 5 and IEC 60947-2.

The traditional system used for this purpose is based on three different devices: a circuit breaker for protection against short-circuit, a thermal relay for protection against overload and phase loss or unbalance of phase, and a contactor for motor switching.

In particular, when selecting these devices, different factors must be taken into consideration, such as:

- The motor power
- The diagram and type of starting
- The type of motor: with cage rotor or with wound rotor
- The fault current at the point of the network where the motor is installed

## Molded Case Motor Circuit Protectors

### M1M-M6M National and International Standards

### Certifications

- UL 489 Recognized, File Number E355392  
(Standard for connection terminals which allows the user to apply field wiring directly to the breaker)
- Certified for Canada according to CSA standards 22.2 No. 5
- IEC/EN 60947-2
- CE Compliant
- RoHS Compliant

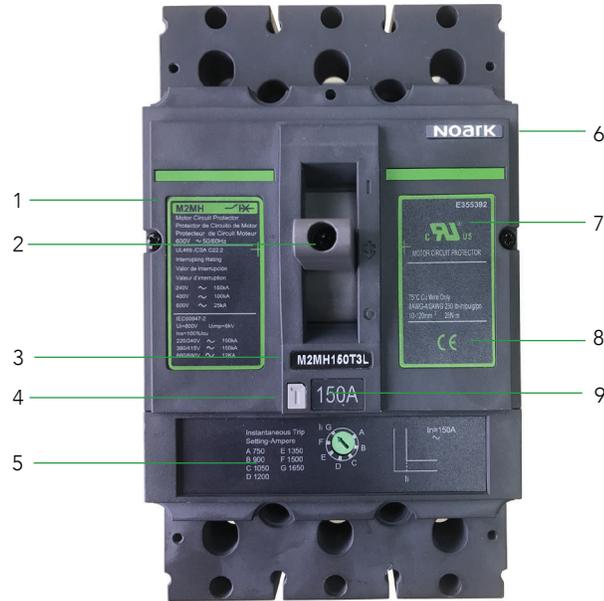


# Molded Case Motor Circuit Protectors

## M1M-M6M Product Selection Guide

### Label

B



- 1. Product Series
- 2. Handle
- 3. Product Selection
- 4. Test Button
- 5. Instantaneous Trip

- 6. Brand
- 7. UL Listed Mark
- 8. CE Mark
- 9. Rated Current

### Product Selection Guide

<b>M</b>	<b>1</b>	<b>M</b>	<b>S</b>	<b>100</b>	<b>T</b>	<b>3</b>	<b>L</b>	<b>F†</b>
NOARK Ex9 Series - M	Frame Size	Type	Interrupting Rating	Ampereage	Trip Unit	Pole	Terminal Option	Rate Code
	1: 150 A 2: 250 A 3: 400 A 4: 600 A 5: 800 A 6: 1200 A	M: Motor Protection Type	S: Standard N: N:Normal H: High	M1: 3~150 A M2: 250 A M3: 400 A M4: 600 A M5: 800A M6: 1200 A	T: Magnetic Only  E: Electronic (M6 only)	3: 3 Poles	Blank: Bus Bar Connection L: Lug Line/Load Side Connection	F: M6 Frame Mark

\*: Used for M1-M4  
 \*\*: Used for M1-M5  
 †: M6 only

## Molded Case Motor Circuit Protectors

### M1M - Bus Bar Connection

- Bus Bar Connection MCP not sold with Bus Bar\* or Terminal Lugs



Continuous Amperes	Cam Setting	Full Load Current Amperes	MCP Trip Setting	S Interrupting - Bus Bar Connection		N Interrupting - Bus Bar Connection		H Interrupting - Bus Bar Connection	
				SKU	Part Number	SKU	Part Number	SKU	Part Number
3	A	1.6~1.7	21	M1MS03T3	1102126	M1MN03T3	1102127	M1MH03T3	1102128
	B	1.8~1.9	24						
	C	2.0~2.2	27						
	D	2.3~2.4	30						
	E	2.5~2.6	33						
7	A	2.7~3.1	35	M1MS07T3	1102129	M1MN07T3	1102130	M1MH07T3	1102131
	B	3.2~3.6	42						
	C	3.7~4.2	49						
	D	4.3~4.7	56						
	E	4.8~5.2	63						
	F	5.3~5.8	70						
15	A	5.7~6.8	75	M1MS15T3	1101400	M1MN15T3	1101406	M1MH15T3	1101412
	B	6.9~7.9	90						
	C	8.0~9.1	105						
	D	9.2~10.3	120						
	E	10.4~11.4	135						
	F	11.5~12.6	150						
30	A	11.5~13.7	150	M1MS30T3	1101401	M1MN30T3	1101407	M1MH30T3	1101413
	B	13.8~16.0	180						
	C	16.1~18.3	210						
	D	18.4~20.6	240						
	E	20.7~22.9	270						
	F	23.0~25.2	300						
	G	25.3~26.1	330						
50	A	19.2~22.9	250	M1MS50T3	1101402	M1MN50T3	1101408	M1MH50T3	1101414
	B	23.0~26.8	300						
	C	26.9~30.6	350						
	D	30.7~34.5	400						
	E	34.6~38.3	450						
	F	38.4~42.1	500						
	G	42.2~43.5	550						

\*NOTE: Bus Bar Connection not available through NOARK Electric.

# Molded Case Motor Circuit Protectors

## M1M - Bus Bar Connection

- Bus Bar Connection MCP not sold with Bus Bar\* or Terminal Lugs



B

Continuous Amperes	Cam Setting	Full Load Current Amperes	MCP Trip Setting	S Interrupting - Bus Bar Connection		N Interrupting - Bus Bar Connection		H Interrupting - Bus Bar Connection	
				SKU	Part Number	SKU	Part Number	SKU	Part Number
70	A	26.9-32.2	350	M1MS70T3	1101403	M1MN70T3	1101409	M1MH70T3	1101415
	B	23.0-26.8	420						
	C	37.6-42.9	490						
	D	30.7-34.5	560						
	E	48.4-53.7	630						
	F	53.8-59.1	700						
	G	59.2-60.9	770						
100	A	38.4-46.0	500	M1MS100T3	1101405	M1MN100T3	1101411	M1MH100T3	1101417
	B	46.1-53.7	600						
	C	53.8-61.4	700						
	D	61.5-69.1	800						
	E	69.2-76.8	900						
	F	76.9-84.5	1000						
	G	84.6-87.0	1100						
150	A	57.7~69.1	750	M1MS150T3	1102135	M1MN150T3	1102136	M1MH150T3	1102137
	B	69.2~80.6	900						
	C	80.7~92.2	1050						
	D	92.3~103.7	1200						
	E	103.8~115.2	1350						
	F	115.3~126.7	1500						
	G	126.9~130.5	1650						

## Molded Case Motor Circuit Protectors

### M1M - Lug Line/Load Side Connection

- Lug Line/Load Side Connection  
MCP sold with Terminal Lugs



Continuous Amperes	Cam Setting	Full Load Current Amperes	MCP Trip Setting	S Interrupting - Lug Line/Load Side		N Interrupting - Lug Line/Load Side		H Interrupting - Lug Line/Load Side	
				SKU	Part Number	SKU	Part Number	SKU	Part Number
3	A	1.6~1.7	21	M1MS03T3L	1102138	M1MN03T3L	1102139	M1MH03T3L	1102140
	B	1.8~1.9	24						
	C	2.0~2.2	27						
	D	2.3~2.4	30						
	E	2.5~2.6	33						
7	A	2.7~3.1	35	M1MS07T3L	1102141	M1MN07T3L	1102142	M1MH07T3L	1102143
	B	3.2~3.6	42						
	C	3.7~4.2	49						
	D	4.3~4.7	56						
	E	4.8~5.2	63						
	F	5.3~5.8	70						
15	A	5.7~6.8	75	M1MS15T3L	1101418	M1MN15T3L	1101424	M1MH15T3L	1101430
	B	6.9~7.9	90						
	C	8.0~9.1	105						
	D	9.2~10.3	120						
	E	10.4~11.4	135						
	F	11.5~12.6	150						
30	A	11.5-13.7	150	M1MS30T3L	1101419	M1MN30T3L	1101425	M1MH30T3L	1101431
	B	13.8-16.0	180						
	C	16.1-18.3	210						
	D	18.4-20.6	240						
	E	20.7-22.9	270						
	F	23.0-25.2	300						
	G	25.3-26.1	330						
50	A	19.2-22.9	250	M1MS50T3L	1101420	M1MN50T3L	1101426	M1MH50T3L	1101432
	B	23.0-26.8	300						
	C	26.9-30.6	350						
	D	30.7-34.5	400						
	E	34.6-38.3	450						
	F	38.4-42.1	500						
	G	42.2-43.5	550						

# Molded Case Motor Circuit Protectors

## M1M - Lug Line/Load Side Connection

- Lug Line/Load Side Connection  
MCP sold with Terminal Lugs



B

Continuous Amperes	Cam Setting	Full Load Current Amperes	MCP Trip Setting	S Interrupting - Lug Line/Load Side		N Interrupting - Lug Line/Load Side		H Interrupting - Lug Line/Load Side	
				SKU	Part Number	SKU	Part Number	SKU	Part Number
70	A	26.9-32.2	350	M1MS70T3L	1101421	M1MN70T3L	1101427	M1MH70T3L	1101433
	B	32.3-37.6	420						
	C	37.7-43.0	490						
	D	43.1-48.4	560						
	E	48.5-53.7	630						
	F	53.8-59.1	700						
	G	59.2-60.9	770						
100	A	38.4-46.0	500	M1MS100T3L	1101423	M1MN100T3L	1101429	M1MH100T3L	1101435
	B	46.1-53.7	600						
	C	53.8-61.4	700						
	D	61.5-69.1	800						
	E	69.2-76.8	900						
	F	76.9-84.5	1000						
	G	84.6-87.0	1100						
150	A	57.7~69.1	750	M1MS150T3L	1102147	M1MN150T3L	1102148	M1MH150T3L	1102149
	B	69.2~80.6	900						
	C	80.7~92.2	1050						
	D	92.3~103.7	1200						
	E	103.8~115.2	1350						
	F	115.3~126.7	1500						
	G	126.9~130.5	1650						

## Molded Case Motor Circuit Protectors

### M2M - Bus Bar Connection

- Bus Bar Connection MCP not sold with Bus Bar\* or Terminal Lugs



Continuous Amperes	Cam Setting	Full Load Current Amperes	MCP Trip Setting	S Interrupting - Bus Bar Connection		N Interrupting - Bus Bar Connection		H Interrupting - Bus Bar Connection	
				SKU	Part Number	SKU	Part Number	SKU	Part Number
250	A	96.2-115.3	1250	M2MS250T3	1101995	M2MN250T3	1101996	M2MH250T3	1101997
	B	115.4-134.5	1500						
	C	134.6-153.7	1750						
	D	153.8-173.0	2000						
	E	173.1-192.2	2250						
	F	192.3-211.4	2500						
	G	211.5-217.6	2750						

# Molded Case Motor Circuit Protectors

## M2M - Lug Line/Load Side Connection

- Lug Line/Load Side Connection  
MCP sold with Terminal Lugs



B

Continuous Amperes	Cam Setting	Full Load Current Amperes	MCP Trip Setting	S Interrupting - Lug Line/Load Side		N Interrupting - Lug Line/Load Side		H Interrupting - Lug Line/Load Side	
				SKU	Part Number	SKU	Part Number	SKU	Part Number
250	A	96.2-115.3	1250	M2MS250T3L	1101998	M2MN250T3L	1101999	M2MH250T3L	1102000
	B	115.4-134.5	1500						
	C	134.6-153.7	1750						
	D	153.8-173.0	2000						
	E	173.1-192.2	2250						
	F	192.3-211.4	2500						
	G	211.5-217.6	2750						

## Molded Case Motor Circuit Protectors

### M3M - Bus Bar Connection

- Bus Bar Connection MCP not sold with Bus Bar\* or Terminal Lugs



Continuous Amperes	Cam Setting	Full Load Current Amperes	MCP Trip Setting	S Interrupting - Bus Bar Connection		N Interrupting - Bus Bar Connection		H Interrupting - Bus Bar Connection	
				SKU	Part Number	SKU	Part Number	SKU	Part Number
400	A	153.8-184.5	2000	M3MS400T3	1101476	M3MN400T3	1101481	M3MH400T3	1101486
	B	184.6-215.3	2400						
	C	215.4-246.0	2800						
	D	246.1-276.8	3200						
	E	276.9-307.6	3600						
	F	307.7-338.4	4000						
	G	338.5-348.1	4400						

# Molded Case Motor Circuit Protectors

## M3M - Lug Line/Load Side Connection

- Lug Line/Load Side Connection  
MCP sold with Terminal Lugs



B

Continuous Amperes	Cam Setting	Full Load Current Amperes	MCP Trip Setting	S Interrupting - Lug Line/Load Side		N Interrupting - Lug Line/Load Side		H Interrupting - Lug Line/Load Side	
				SKU	Part Number	SKU	Part Number	SKU	Part Number
400	A	153.8-184.5	2000	M3MS400T3L	1101491	M3MN400T3L	1101496	M3MH400T3L	1101501
	B	184.6-215.3	2400						
	C	215.4-246.0	2800						
	D	246.1-276.8	3200						
	E	276.9-307.6	3600						
	F	307.7-338.4	4000						
	G	338.5-348.1	4400						

## Molded Case Motor Circuit Protectors

### M4M - Bus Bar Connection

- Bus Bar Connection MCP not sold with Bus Bar\* or Terminal Lugs



Continuous Amperes	Cam Setting	Full Load Current Amperes	MCP Trip Setting	S Interrupting - Bus Bar Connection		N Interrupting - Bus Bar Connection		H Interrupting - Bus Bar Connection	
				SKU	Part Number	SKU	Part Number	SKU	Part Number
600	A	230.8-276.8	3000	M4MS600T3	1101519	M4MN600T3	1101522	M4MH600T3	1101525
	B	276.9-323.0	3600						
	C	323.1-369.0	4200						
	D	369.2-415.3	4800						
	E	415.4-461.4	5400						
	F	461.5-507.6	6000						
	G	507.7-522.2	6600						

\*NOTE: Bus Bar Connection not available through NOARK Electric.

# Molded Case Motor Circuit Protectors

## M4M - Lug Line/Load Side Connection

- Lug Line/Load Side Connection  
MCP sold with Terminal Lugs



B

Continuous Amperes	Cam Setting	Full Load Current Amperes	MCP Trip Setting	S Interrupting - Lug Line/Load Side		N Interrupting - Lug Line/Load Side		H Interrupting - Lug Line/Load Side	
				SKU	Part Number	SKU	Part Number	SKU	Part Number
600	A	230.8-276.8	3000	M4MS600T3L	1101528	M4MN600T3L	1101531	M4MH600T3L	1101534
	B	276.9-323.0	3600						
	C	323.1-369.0	4200						
	D	369.2-415.3	4800						
	E	415.4-461.4	5400						
	F	461.5-507.6	6000						
	G	507.7-522.2	6600						

## Molded Case Motor Circuit Protectors

### M5M - Bus Bar Connection

- Bus Bar Connection MCP not sold with Bus Bar\* or Terminal Lugs



Continuous Amperes	Cam Setting	Full Load Current Amperes	MCP Trip Setting	S Interrupting - Bus Bar Connection		N Interrupting - Bus Bar Connection		H Interrupting - Bus Bar Connection	
				SKU	Part Number	SKU	Part Number	SKU	Part Number
800	A	307.7-369.1	4000	M5MS800T3	1102105	M5MN800T3	1102108	M5MH800T3	1102111
	B	369.2-430.7	4800						
	C	430.8-492.2	5600						
	D	492.3-553.7	6400						
	E	553.8-615.3	7200						
	F	615.4-676.8	8000						
	G	676.9-738.5	8800						

\*NOTE: Bus Bar Connection not available through NOARK Electric.

# Molded Case Motor Circuit Protectors

## M5M - Lug Line/Load Side Connection

- Lug Line/Load Side Connection  
MCP sold with Terminal Lugs



B

Continuous Amperes	Cam Setting	Full Load Current Amperes	MCP Trip Setting	S Interrupting - Lug Line/Load Side		N Interrupting - Lug Line/Load Side		H Interrupting - Lug Line/Load Side	
				SKU	Part Number	SKU	Part Number	SKU	Part Number
800	A	307.7-369.1	4000	M5MS800T3L	1102114	M5MN800T3L	1102117	M5MH800T3L	1102120
	B	369.2-430.7	4800						
	C	430.8-492.2	5600						
	D	492.3-553.7	6400						
	E	553.8-615.3	7200						
	F	615.4-676.8	8000						
	G	676.9-738.5	8800						

## Molded Case Motor Circuit Protectors

### M6M - Bus Bar Connection

- Bus Bar Connection MCP not sold with Bus Bar\* or Terminal Lugs



Continuous Amperes	Cam Setting	Full Load Current Amperes	MCP Trip Setting	S Interrupting - Bus Bar Connection		N Interrupting - Bus Bar Connection	
				SKU	Part Number	SKU	Part Number
1200	2	184.6-276.8	2400	M6MS1200E3F	1101933	M6MN1200E3F	1101936
	3	276.9-369.1	3600				
	4	369.2-553.7	4800				
	6	553.8-738.4	7200				
	8	738.5-923.0	9600				
	10	923.1-1107.6	12000				
	12	1107.7-1309.1	14400				

\*NOTE: Bus Bar Connection not available through NOARK Electric.

# Molded Case Motor Circuit Protectors

## M6M - Lug Line/Load Side Connection

- Lug Line/Load Side Connection  
MCP sold with Terminal Lugs



B

Continuous Amperes	Cam Setting	Full Load Current Amperes	MCP Trip Setting	S Interrupting - Lug Line/Load Side		N Interrupting - Lug Line/Load Side	
				SKU	Part Number	SKU	Part Number
1200	2	184.6-276.8	2400	M6MS1200E3LF	1101939	M6MN1200E3LF	1101942
	3	276.9-369.1	3600				
	4	369.2-553.7	4800				
	6	553.8-738.4	7200				
	8	738.5-923.0	9600				
	10	923.1-1107.6	12000				
	12	1107.7-1309.1	14400				

## Molded Case Motor Circuit Protectors

### M1M - M6M Specifications

		M1M			M2M			M3M			M4M			M5M			M6M	
Current Range (A)		3~150			250			400			600			800			1200	
Number of Poles		3																
Breaker Type		S	N	H	S	N	H	S	N	H	S	N	H	S	N	H	S	N
Rated Voltage 50/60 Hz Vac		600																
<b>Interrupting Capacity (kA rms)</b>																		
Circuit Breaker Ratings UL 489	240 Vac	50	100	150	50	100	150	65	100	150	65	100	150	65	100	150	65	100
CSA C22.2 (kA rms)	480 Vac	35	65	100	35	65	100	42	65	100	42	65	100	42	65	100	42	65
Vac 50/60 Hz	600 Vac	14	20	25	14	20	25	18	25	30	22	30	50	22	30	50	22	42
Magnetic Trip Units	A = Adjustable T = Thermal F = Fixed M = Magnetic	AM																
<b>Accessories</b>																		
Alarm Switch																		
Auxiliary Contact																		
Shunt Trip																		
Under-Voltage Trip																		
Handle Lock																		
Flange Handle																		
Mechanical Interlock																		
Motor Operator																		
Handle Operators																		
Terminal Cover and Kits																		
<b>Connection</b>																		
Bus Bar Connection																		
Lug Line/Load Side Connection																		

# Molded Case Motor Circuit Protectors

## M1M - M3M Trip Unit

### Adjustable Magnetic

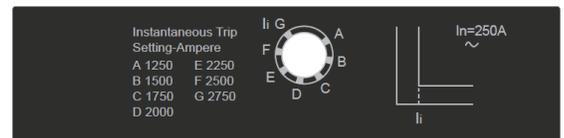
- Adjustable Magnetic
- 75-14400A Tripping Current
- Continuous Amperes: M1M~M6M 3~1200A
- Frames applicable to M1M:150A, M2M: 250A, M3M: 400A, M4M: 600A, M5M: 800A, M6M: 1200A

B

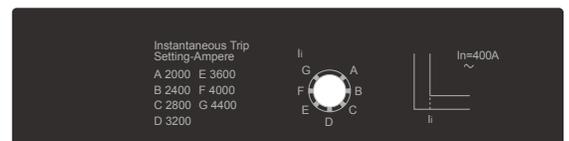
	M1M								
	I <sub>i</sub>	3A	7A	15A	30A	50A	70A	100A	150A
Adjustable Magnetic Short Circuit Protection	A	21	35	75	150	250	350	500	750
	B	24	42	90	180	300	420	600	900
	C	27	49	105	210	350	490	700	1050
	D	30	56	120	240	400	560	800	1200
	E	33	63	135	270	450	630	900	1350
	F		70	150	300	500	700	1000	1500
	G				330	550	770	1100	1650



	M2M	
	I <sub>i</sub>	250 A
Adjustable Magnetic Short Circuit Protection	A	1250
	B	1500
	C	1750
	D	2000
	E	2250
	F	2500
	G	2750



	M3M	
	I <sub>i</sub>	400A
Adjustable Magnetic Short Circuit Protection	A	2000
	B	2400
	C	2800
	D	3200
	E	3600
	F	4000
	G	4400



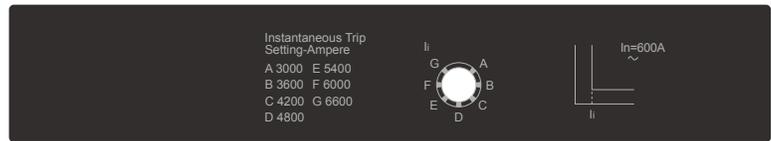
## Molded Case Motor Circuit Protectors

### M4M - M6M Trip Unit

## Adjustable Magnetic

- Adjustable Magnetic
- 75-14400A Tripping Current
- Continuous Amperes: M1M~M6M 3~1200A
- Frames applicable to M1M:150A, M2M: 250A, M3M: 400A, M4M: 600A, M5M: 800A, M6M: 1200A

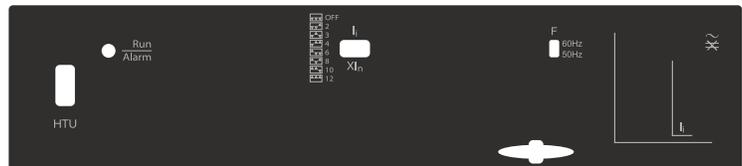
		M4M	
		$I_i$	600A
Adjustable Magnetic Short Circuit Protection	A	3000	
	B	3600	
	C	4200	
	D	4800	
	E	5400	
	F	6000	
	G	6600	



		M5M	
		$I_i$	800A
Adjustable Magnetic Short Circuit Protection	A	4000	
	B	4800	
	C	5600	
	D	6400	
	E	7200	
	F	8000	
	G	8800	



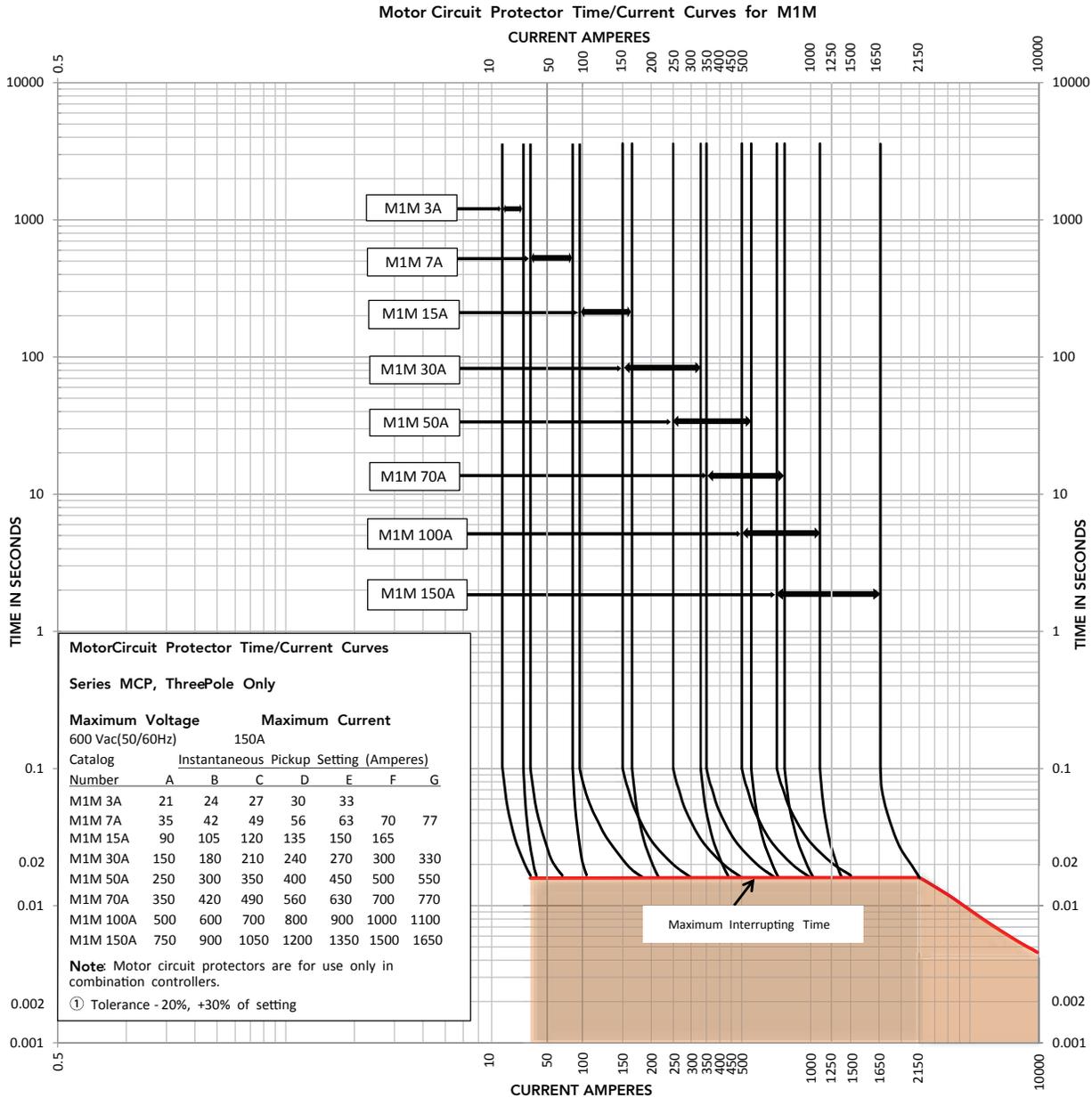
		M6M	
		$I_i$	1200A
Adjustable Electrical Short Circuit Protection	2	2400	
	3	3600	
	4	4800	
	6	7200	
	8	9600	
	10	12000	
	12	14400	



# Molded Case Motor Circuit Protectors

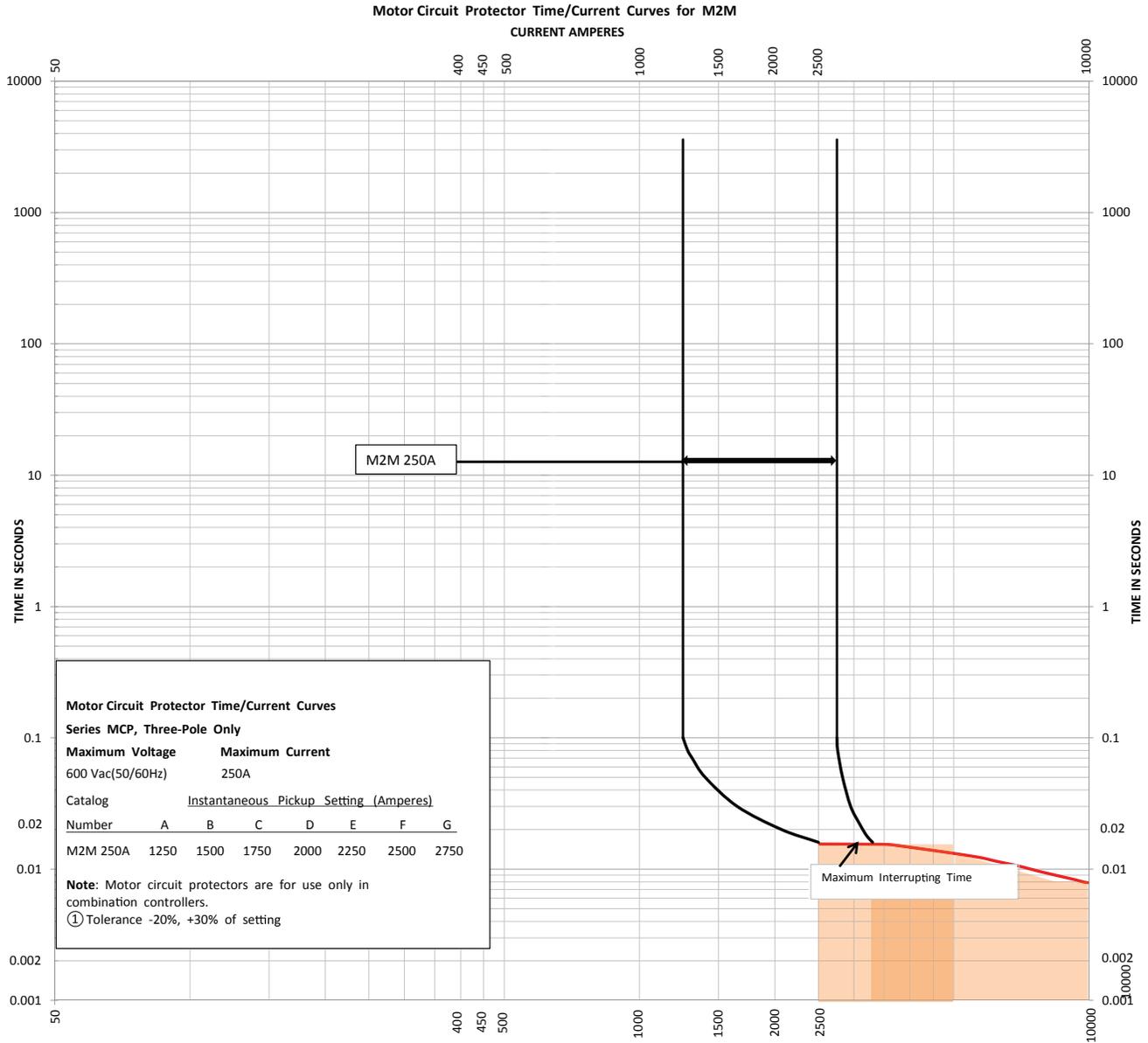
## M1M Trip Curve

B



## Molded Case Motor Circuit Protectors

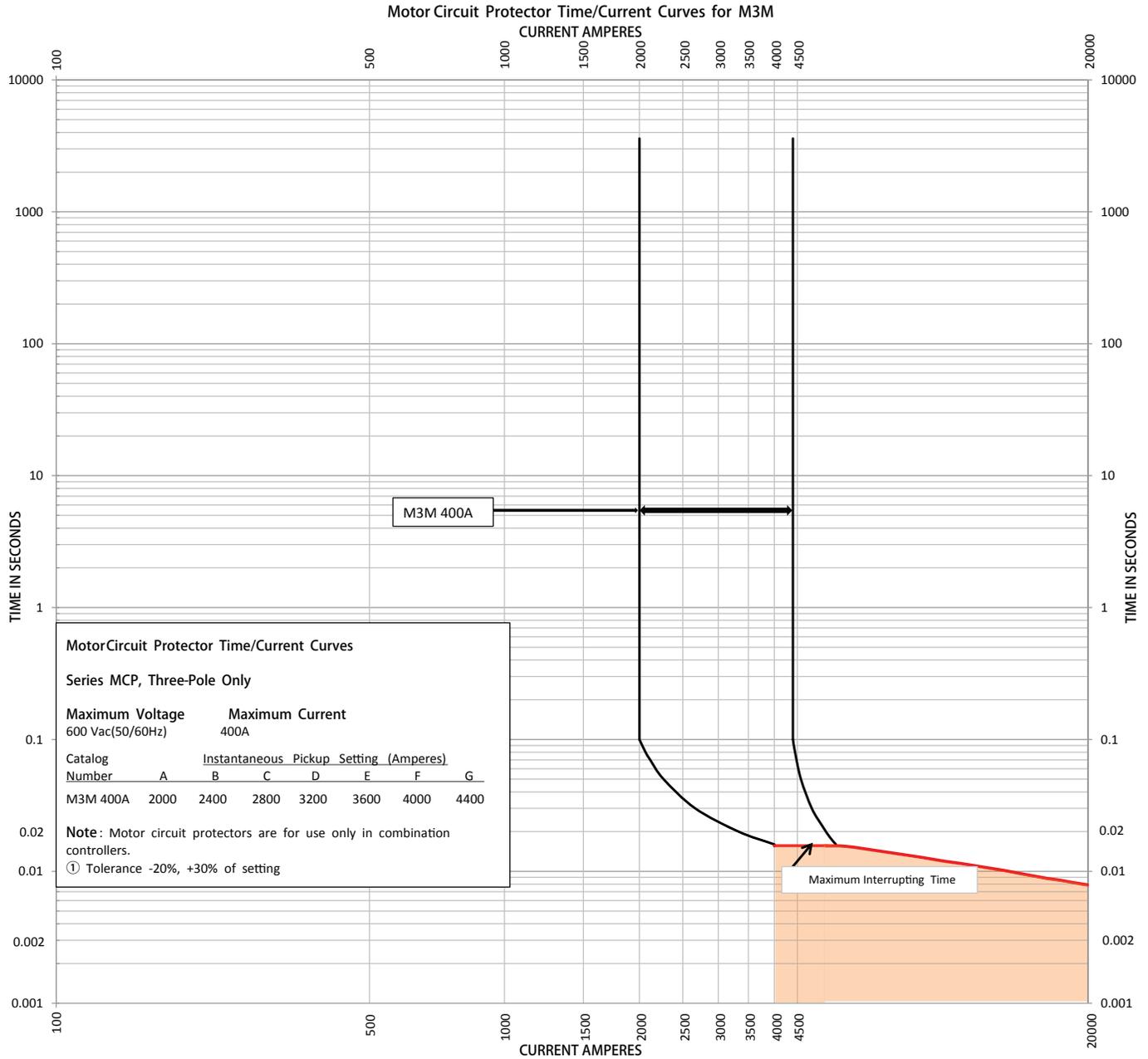
### M2M Trip Curve



# Molded Case Motor Circuit Protectors

## M3M Trip Curve

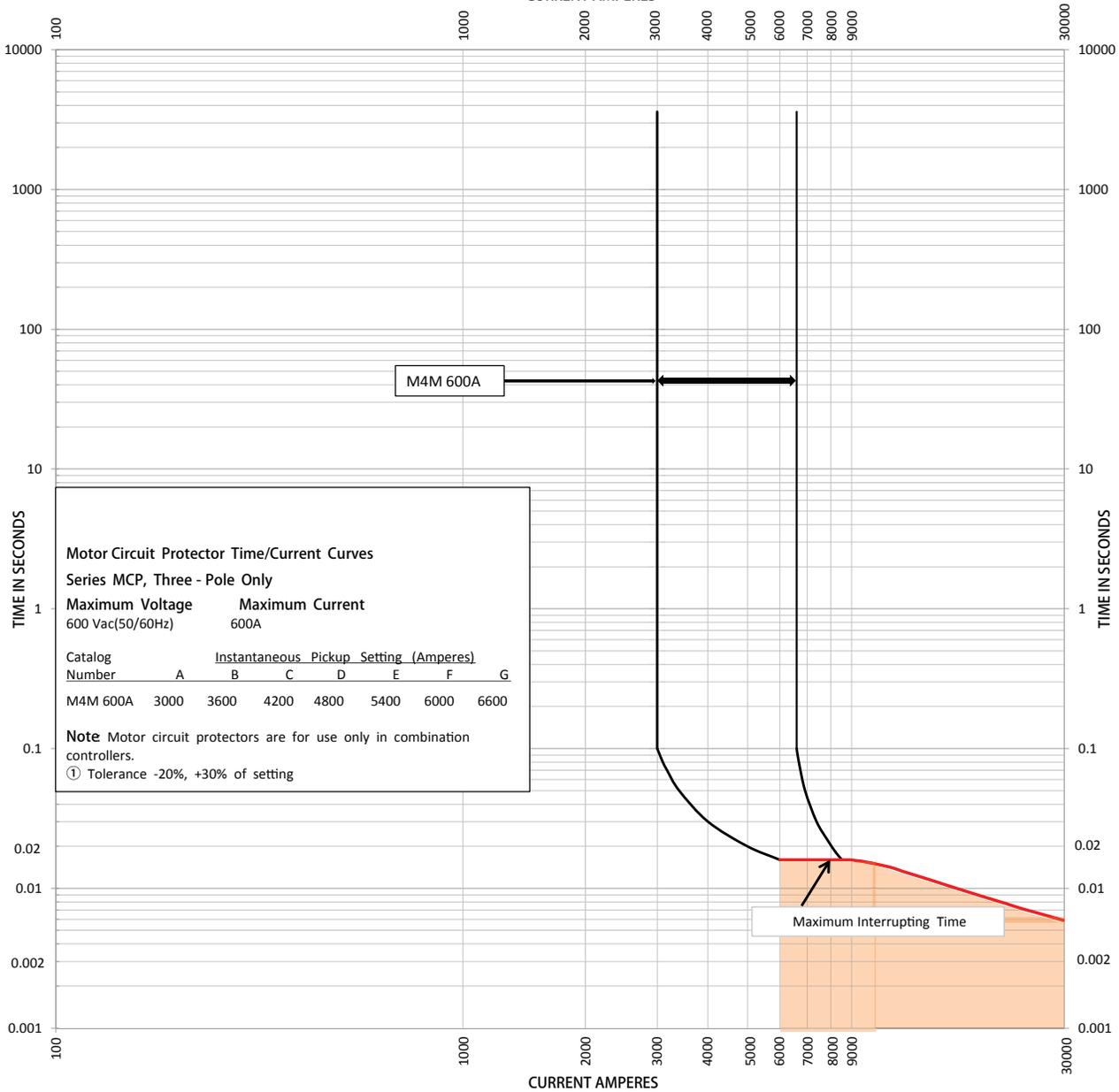
B



# Molded Case Motor Circuit Protectors

## M4M Trip Curve

Motor Circuit Protector Time/Current Curves for M4M  
CURRENT AMPERES



**Motor Circuit Protector Time/Current Curves**  
Series MCP, Three - Pole Only

Maximum Voltage 600 Vac(50/60Hz)  
Maximum Current 600A

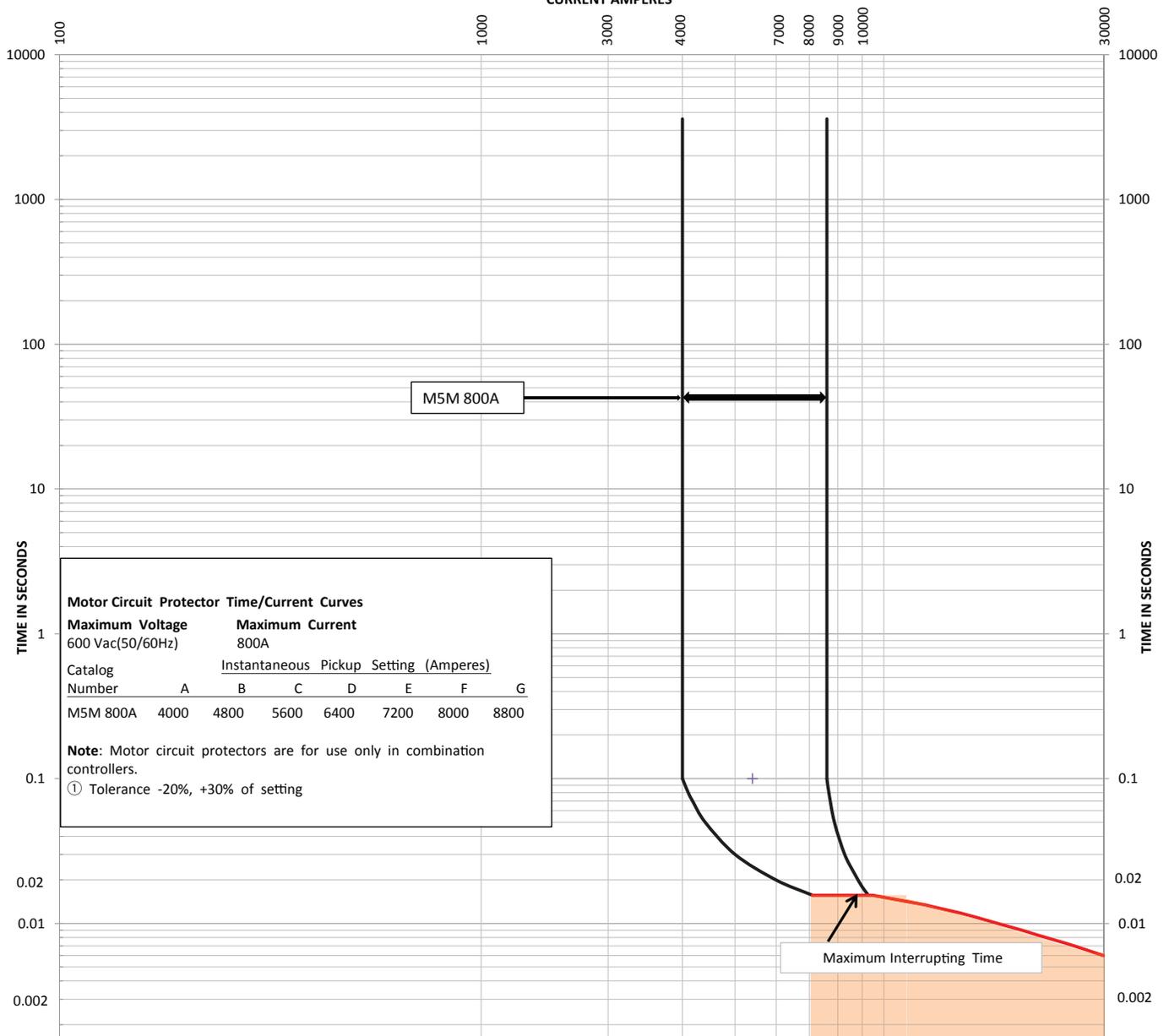
Catalog Number	Instantaneous Pickup Setting (Amperes)						
	A	B	C	D	E	F	G
M4M 600A	3000	3600	4200	4800	5400	6000	6600

**Note** Motor circuit protectors are for use only in combination controllers.  
① Tolerance -20%, +30% of setting

# Molded Case Motor Circuit Protectors

## M5M Trip Curve

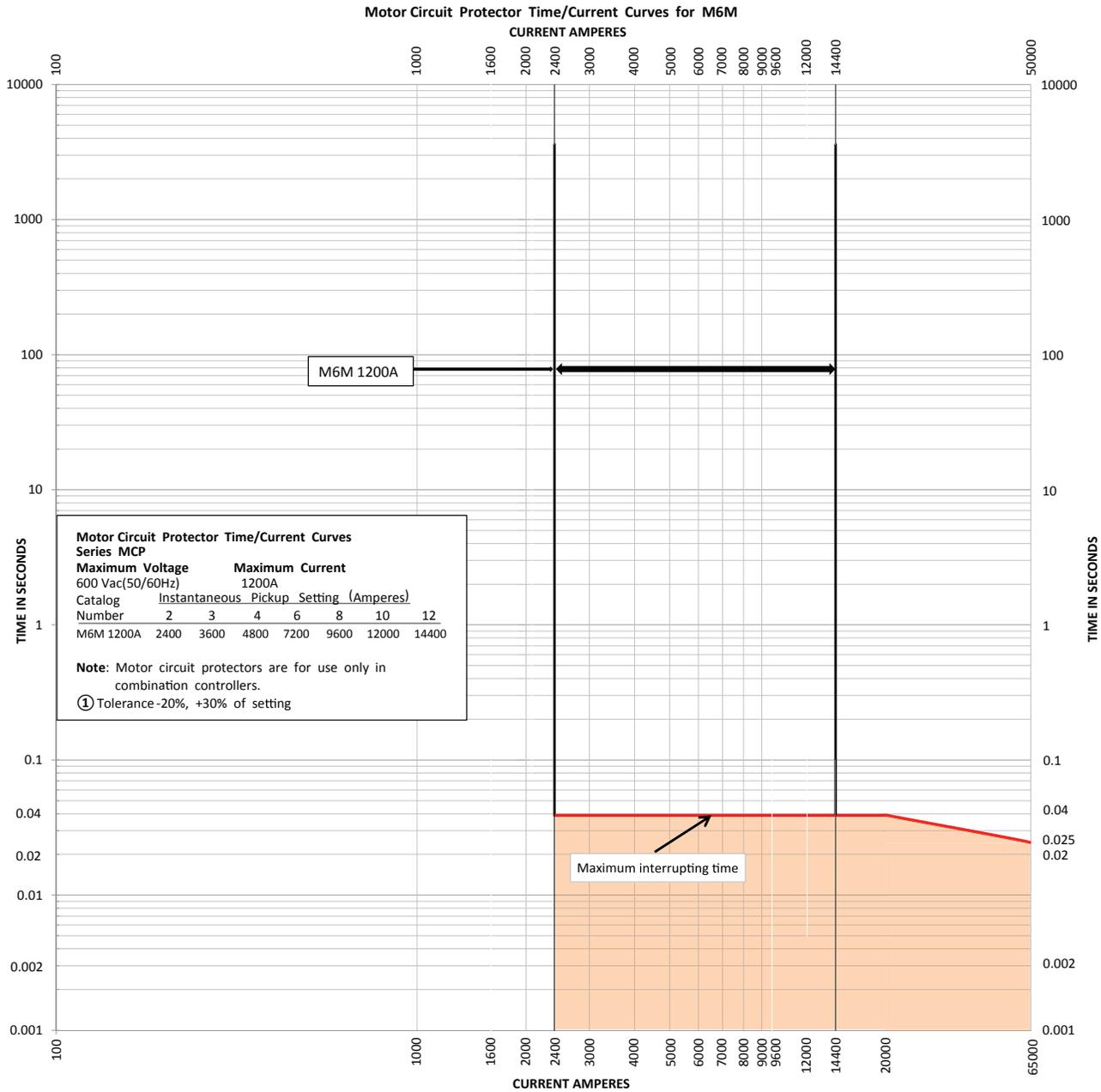
Motor Circuit Protector Time/Current Curves for M5M



B

## Molded Case Motor Circuit Protectors

### M6M Trip Curve



For MCP Dimensions and Mounting Positions, please  
see pages A58-A61.

**B**

# MOLDED CASE SWITCHES



# M1D ~ M6D

## Molded Case Switches

### M1D-M6D Product Overview

# Features

#### Ex9 Series - M Molded Case Switches, 100~1200 A

NOARK Electric offers a complete range of Molded Case Switches in six frame sizes: M1 - 150 A, M2 - 250 A, M3 - 400 A, M4 - 600 A, M5 - 800 A, and M6 - 1,200 A. Each frame size offers a range of interrupting voltage ratings from 240-600 Vac and 250-600 Vdc. The Ex9 Series – M Molded Case Switches are only used for magnetic protection applications mainly as supply circuit protection and emergency-off disconnect switches. The Ex9 Series – M conforms to global standards that include UL 489, CSA C22.2 No 5 and IEC 60947-2.

#### The Ex9 Series – M offers:

- Instantaneous trip ability and a new patented arc extinguishing design
- New patented technology reduces the manual operating force
- High-quality compact modular with energy saving and environmentally friendly design
- Installation flexibility:
  - ✓ Bus Bar Connection
  - ✓ Lug Line/Load Side Connection
  - ✓ Plug-In
  - ✓ Rear Connection
- Wide range of accessories:
  - ✓ Alarm Switch and Auxiliary Contact
  - ✓ Shunt and Under-Voltage Trip
  - ✓ Interlock
  - ✓ NEMA Rotary Handle
  - ✓ NEMA Type Flange Handle
  - ✓ Motor Operator

## Molded Case Switches

### M1D-M6D National and International Standards

#### Certifications

- UL 489 Listed, File Number E355396  
(Standard for connection terminals which allows the user to apply field wiring directly to the breaker)
- Certified for Canada according to CSA standards 22.2 No. 5
- IEC/EN 60947-2
- CE Compliant
- RoHS Compliant



# Molded Case Switches

## M1D-M6D/MV2DPV Product Selection Guide

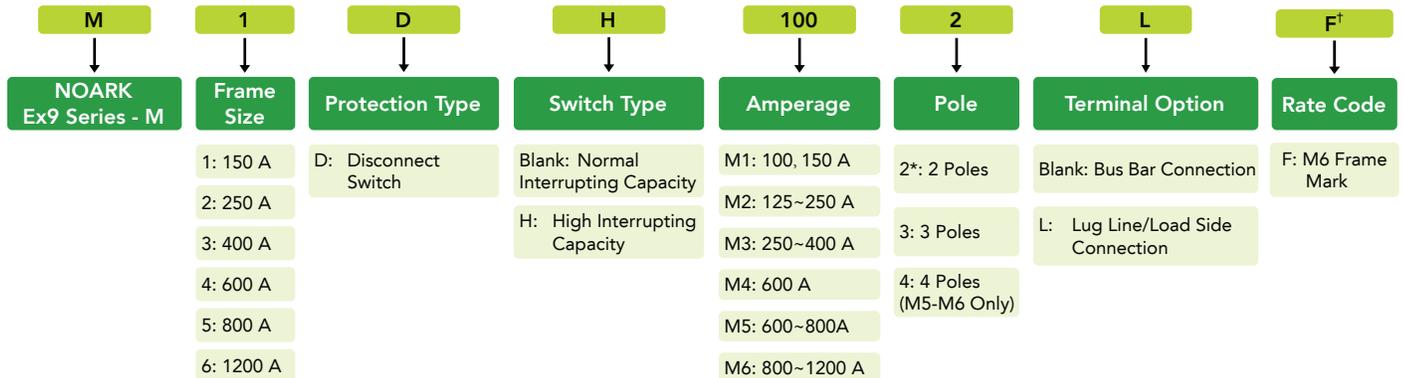
### Label



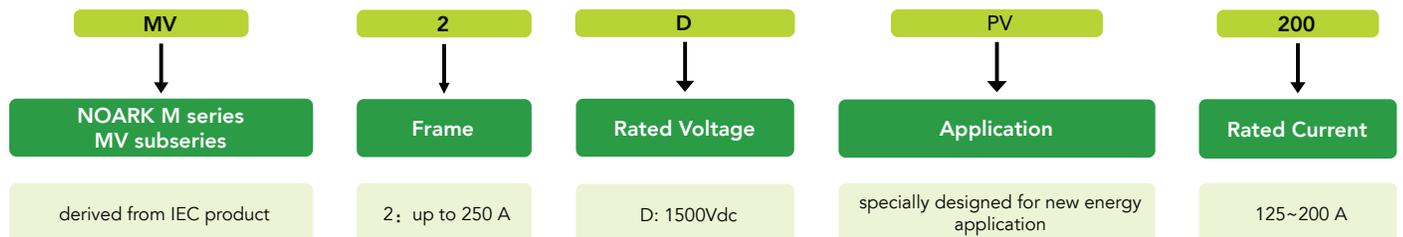
1. Product Series
2. Handle
3. Test Button
4. Warning Label

5. Brand
6. UL Listed Mark
7. CE Mark
8. Rated Current

### Product Selection Guide



\*: Used for M1-M4  
 \*\*: Used for M1-M5  
 †: M6 only



## Molded Case Switches

### M1D Bus Bar, Lug Line/Load Side

- Bus Bar Connection MCS not sold with Bus Bar\* or Terminal Lugs
- Lug Line/Load Side Connection MCS sold with Terminal Lugs
- Plug-In MCS sold with Plug-In Base
- Rear Connection MCS sold with Rear Connection Kit



Rated Amperage (A)		2 Poles		3 Poles	
		Product	Part Number	Product	Part Number
M1D	100	Bus Bar Connection		Bus Bar Connection	
		M1D1002	1100457	M1D1003	1100453
		Lug Line/Load Side Connection (1-Hole)		Lug Line/Load Side Connection (1-Hole)	
		M1D1002L	1100458	M1D1003L	1100454
M1D	150	Bus Bar Connection		Bus Bar Connection	
		M1D1502	1102194	M1D1503	1102195
		Lug Line/Load Side Connection		Lug Line/Load Side Connection	
		M1D1502L	1102196	M1D1503L	1102197
M1DH	100	Bus Bar Connection		Bus Bar Connection	
		M1DH1002	1101775	M1DH1003	1101771
		Lug Line/Load Side Connection (1-Hole)		Lug Line/Load Side Connection (1-Hole)	
		M1DH1002L	1101776	M1DH1003L	1101772
M1DH	150	Bus Bar Connection		Bus Bar Connection	
		M1DH1502	1102201	M1DH1503	1102202
		Lug Line/Load Side Connection		Lug Line/Load Side Connection	
		M1DH1502L	1102203	M1DH1503L	1102204

\*NOTE: Bus Bar Connection not available through NOARK Electric.

# Molded Case Switches

## M2D Bus Bar, Lug Line/Load Side

- Bus Bar Connection MCS not sold with Bus Bar\* or Terminal Lugs
- Lug Line/Load Side Connection MCS sold with Terminal Lugs
- Plug-In MCS sold with
- Plug-In Base
- Rear Connection MCS sold with Rear Connection Kit



Rated Amperage (A)		2 Poles		3 Poles		
		Product	Part Number	Product	Part Number	
M2D			Bus Bar Connection		Bus Bar Connection	
	125	M2D1252	1100698	M2D1253	1100694	
	150	M2D1502	1100706	M2D1503	1100702	
	225	M2D2252	1100465	M2D2253	1100461	
	250	M2D2502	1101983	M2D2503	1101979	
			Lug Line/Load Side Connection (1-Hole)		Lug Line/Load Side Connection (1-Hole)	
	125	M2D1252L	1100699	M2D1253L	1100695	
	150	M2D1502L	1100707	M2D1503L	1100703	
225	M2D2252L	1100466	M2D2253L	1100462		
250	M2D2502L	1101984	M2D2503L	1101980		

Rated Amperage (A)		2 Poles		3 Poles		
		Product	Part Number	Product	Part Number	
M2DH			Bus Bar Connection		Bus Bar Connection	
	125	M2DH1252	1101791	M2DH1253	1101779	
	150	M2DH1502	1101792	M2DH1503	1101780	
	225	M2DH2252	1101793	M2DH2253	1101781	
	250	M2DH2502	1101991	M2DH2503	1101987	
			Lug Line/Load Side Connection (1-Hole)		Lug Line/Load Side Connection (1-Hole)	
	125	M2DH1252L	1101794	M2DH1253L	1101782	
	150	M2DH1502L	1101795	M2DH1503L	1101783	
225	M2DH2252L	1101796	M2DH2253L	1101784		
250	M2DH2502L	1101992	M2DH2503L	1101988		



Rated Amperage (A)	SKU	PN	Description	
MV2DPV	125~200A	MV2DPV200	1102915	1500Vdc 200A Molded Case Switch, 2 Poles, 10kA@1500Vdc

\*NOTE: Bus Bar Connection not available through NOARK Electric.

## Molded Case Switches

### M3D Bus Bar, Lug Line/Load Side

- Bus Bar Connection MCS not sold with Bus Bar\* or Terminal Lugs
- Lug Line/Load Side Connection MCS sold with Terminal Lugs
- Plug-In MCS sold with Plug-In Base
- Rear Connection MCS sold with Rear Connection Kit



Rated Amperage (A)		2 Poles		3 Poles	
		Product	Part Number	Product	Part Number
M3D		Bus Bar Connection		Bus Bar Connection	
	250	M3D2502	1100715	M3D2503	1100710
	400	M3D4002	1100474	M3D4003	1100469
		Lug Line/Load Side Connection (1-Hole)		Lug Line/Load Side Connection (1-Hole)	
	250	M3D2502L	1100716	M3D2503L	1100711
	400	M3D4002L	1100475	M3D4003L	1100470
Rated Amperage (A)		2 Poles		3 Poles	
		Product	Part Number	Product	Part Number
M3DH		Bus Bar Connection		Bus Bar Connection	
	250	M3DH2502	1101815	M3DH2503	1101803
	400	M3DH4002	1101816	M3DH4003	1101804
		Lug Line/Load Side Connection (1-Hole)		Lug Line/Load Side Connection (1-Hole)	
	250	M3DH2502L	1101817	M3DH2503L	1101805
	400	M3DH4002L	1101818		

\*NOTE: Bus Bar Connection not available through NOARK Electric.

# Molded Case Switches

## M4D Bus Bar, Lug Line/Load Side

- Bus Bar Connection MCS not sold with Bus Bar\* or Terminal Lugs
- Lug Line/Load Side Connection MCS sold with Terminal Lugs
- Rear Connection MCS sold with Rear Connection Kit



Rated Amperage (A)		2 Poles		3 Poles	
		Product	Part Number	Product	Part Number
M4D	600	Bus Bar Connection		Bus Bar Connection	
		M4D6002	1100483	M4D6003	1100479
		Lug Line/Load Side Connection		Lug Line/Load Side Connection	
		M4D6002L	1100484	M4D6003L	1100480
Rated Amperage (A)		2 Poles		3 Poles	
		Product	Part Number	Product	Part Number
M4DH	600	Bus Bar Connection		Bus Bar Connection	
		M4DH6002	1101831	M4DH6003	1101827
		Lug Line/Load Side Connection		Lug Line/Load Side Connection	
		M4DH6002L	1101832	M4DH6003L	1101828

\*NOTE: Bus Bar Connection not available through NOARK Electric.

## Molded Case Switches

### M5D Bus Bar, Lug Line/Load Side

- Bus Bar Connection MCS not sold with Bus Bar\* or Terminal Lugs
- Lug Line/Load Side Connection MCS sold with Terminal Lugs
- Rear Connection MCS sold with Rear Connection Kit



Rated Amperage (A)		2 Poles		3 Poles		4 Poles	
		Product	Part Number	Product	Part Number	Product	Part Number
		Bus Bar Connection		Bus Bar Connection		Bus Bar Connection	
M5D	800	M5D8002	1102073	M5D8003	1102075	M5D8004	1102077
		Lug Line/Load Side Connection		Lug Line/Load Side Connection		Lug Line/Load Side Connection	
		M5D8002L	1102074	M5D8003L	1102076	M5D8004L	1102078

Rated Amperage (A)		2 Poles		3 Poles		4 Poles	
		Product	Part Number	Product	Part Number	Product	Part Number
		Bus Bar Connection		Bus Bar Connection		Bus Bar Connection	
M5DH	800	M5DH8002	1102079	M5DH8003	1102081	M5DH8004	1102083
		Lug Line/Load Side Connection		Lug Line/Load Side Connection		Lug Line/Load Side Connection	
		M5DH8002L	1102080	M5DH8003L	1102082	M5DH8004L	1102084

\*NOTE: Bus Bar Connection not available through NOARK Electric.

# Molded Case Switches

## M6D Bus Bar, Lug Line/Load Side

- Bus Bar Connection MCS not sold with Bus Bar\* or Terminal Lugs
- Lug Line/Load Side Connection MCS sold with Terminal Lugs
- Rear Connection MCS sold with Rear Connection Kit



Rated Amperage (A)		3 Poles		4 Poles	
		Product	Part Number	Product	Part Number
M6D	800	Bus Bar Connection		Bus Bar Connection	
		M6D8003F	1101919	M6D8004F	1101925
		Lug Line/Load Side Connection		Lug Line/Load Side Connection	
		M6D8003LF	1101922	M6D8004LF	1101928
M6D	1000	Bus Bar Connection		Bus Bar Connection	
		M6D10003F	1101920	M6D10004F	1101926
		Lug Line/Load Side Connection		Lug Line/Load Side Connection	
		M6D10003LF	1101923	M6D10004LF	1101929
M6D	1200	Bus Bar Connection		Bus Bar Connection	
		M6D12003F	1101921	M6D12004F	1101927
		Lug Line/Load Side Connection		Lug Line/Load Side Connection	
		M6D12003LF	1101924	M6D12004LF	1101930

\*NOTE: Bus Bar Connection not available through NOARK Electric.

## Molded Case Switches

### M1D-M6D Specifications

		M1D/H		M2D/H		M3D/H		M4D/H		M5D/H		M6D
Rated Current (A)		100, 150		125 ~ 250		250, 400		600		800		800~1200
Number of Poles		2, 3								2,3,4		3,4
Switch Type		M1D	M1DH	M2D	M2DH	M3D	M3DH	M4D	M4DH	M5D	M5DH	M6D
Rated Voltage 50/60 Hz	Vac	600										
	Vdc	600										-
<b>Interrupting Capacity* (kA rms)</b>												
Circuit Breaker Ratings UL 489- -C-SA C22.2 (kA rms) Vac 50/60 Hz	240 Vac	100	150	100	150	100	150	100	150	100	150	100
	480 Vac	65	100	65	100	65	100	65	100	65	100	65
	600 Vac	20	25	20	25	25	30	30	50	30	50	42
	500 Vdc 2 Poles	35	50	35	50	50	65	50	65	50	65	-
	600 Vdc 3 Poles	35	50	35	50	50	65	50	65	50	65	-
Trip Current (A)		15xIn		12xIn		12xIn		10xIn		10xIn		15xIn
<b>Accessories</b>												
Alarm Switch												
Auxiliary Contact												
Shunt Trip												
Under-Voltage Trip												
Handle Lock												
Mechanical Interlock												
Motor Operator												
Handle Operator												
Terminal Kits												
<b>Connection</b>												
Bus Bar Connection												
Lug Line/Load Side Connection												
Plug-In												
Rear Connection												

\*NOTE: The interrupting capacity is the fault, at rated voltage, that the molded case switch will withstand without damage when protected by a circuit breaker or fuse with an equal continuous current rating.

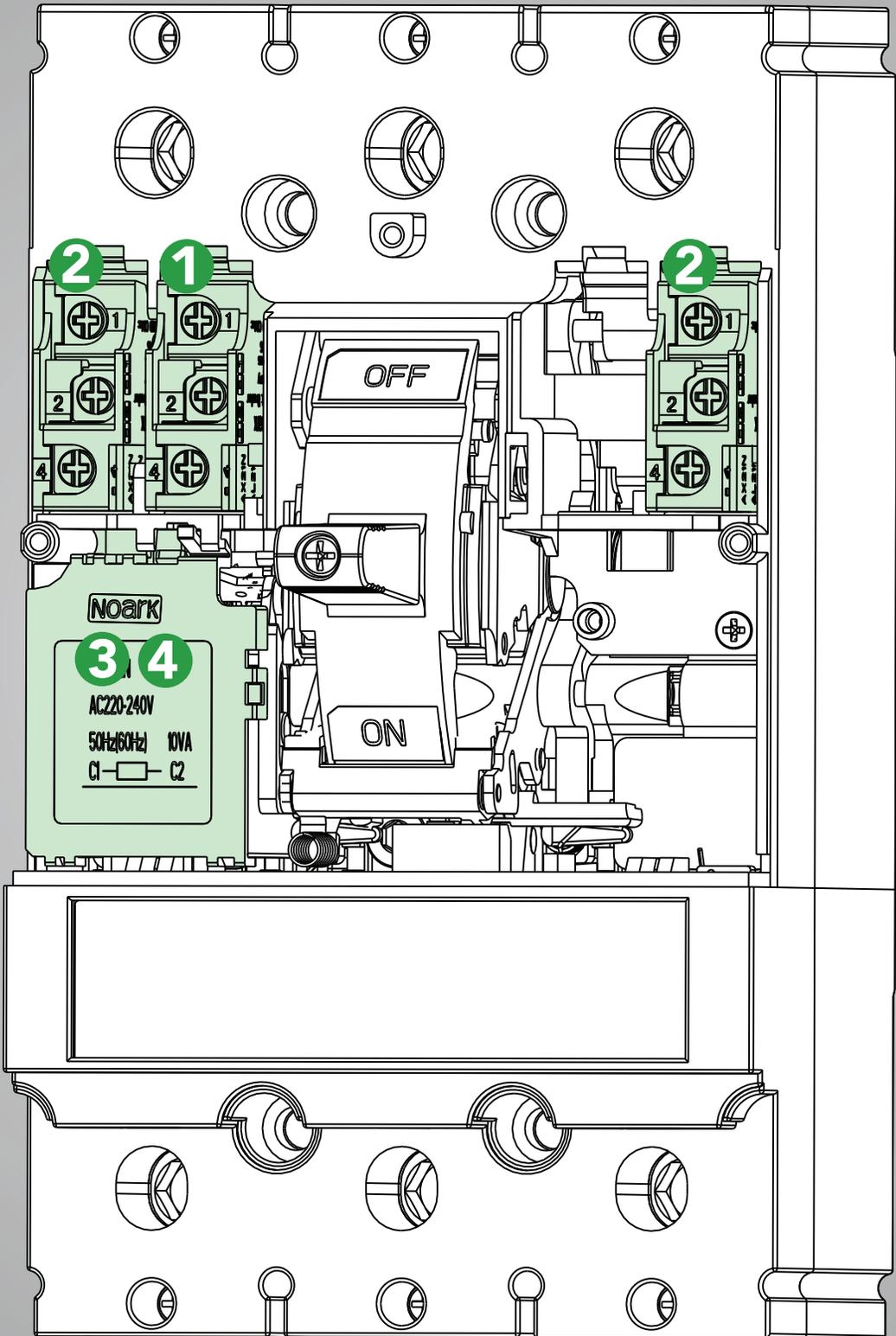
# Molded Case Switches

## M1D-M6D Specifications

	M1D	M2D	M3D	M4D	M5D	M6D	
Insulation Voltage (Vi)	800 Vac						
Impulse Withstand Voltage (Vimp)	8 kVac						
Operational Voltage (Ve) UL	600 Vacxxx						
Utilization Category	A						
Mechanical Operating Cycles	10,000		8,000		3,000		
Electrical Operating Cycles	6,000		5,000		500		
Dimensions LxWxD in (mm)	6.46x3.54x3.33 (164x90x84.5)	7.17x4.13x3.47 (182x105x88)	11.22x5.51x4.59 (285x140x116.5)	12.32x7.68x5.43 (313x195x138)	3P: 16.18x7.68x7.58 (411x195x192.5) 4P: 16.18x10.2x7.58 (411x260x192.5)	3p: 22.64x9.84x15.16 (575x250x385) 4P: 22.64x12.6x15.16 (575x320x385)	
Weight of Unit lb (kg)	2 Poles	3.17 (1.44)	3.75 (1.70)	8.97 (4.07)	20.94 (9.5)	27 (12.15)	-
	3 Poles	3.68 (1.67)	4.41 (2.00)	13.45 (6.1)	25.35 (11.5)	33.18 (15.05)	55.56 (25.2)
	4 Poles	-	-	-	-	43.43 (19.7)	69.67 (31.6)
<b>Connection</b>							
Bus Bar Connection	■						
Lug Line/Load Side Connection	■						

C

# MOLDED CASE ACCESSORIES



# Accessories For MCCB/MCP/MCS

## Accessory Overview

### Internal Accessories



1 Alarm Switch (AL)



2 Auxiliary Contact (AX)



3 Shunt Trip (SHT)



4 Under-Voltage Trip (UVT)

D

### External Accessories



Handle Lock (KLK)



Mechanical Interlock (MIT)



Flange Handle Assembly



Rotary Handle (RHD)  
(Closed Coupled)



NEMA Extended Rotary  
Handle Assembly



Motor Operator

### Connection Hardware



Terminal Lugs (LTC)



Plug-In Base (PIA)



Rear Connection Kit (RCP)

## Accessories For MCCB/MCP/MCS

### National and International Standards

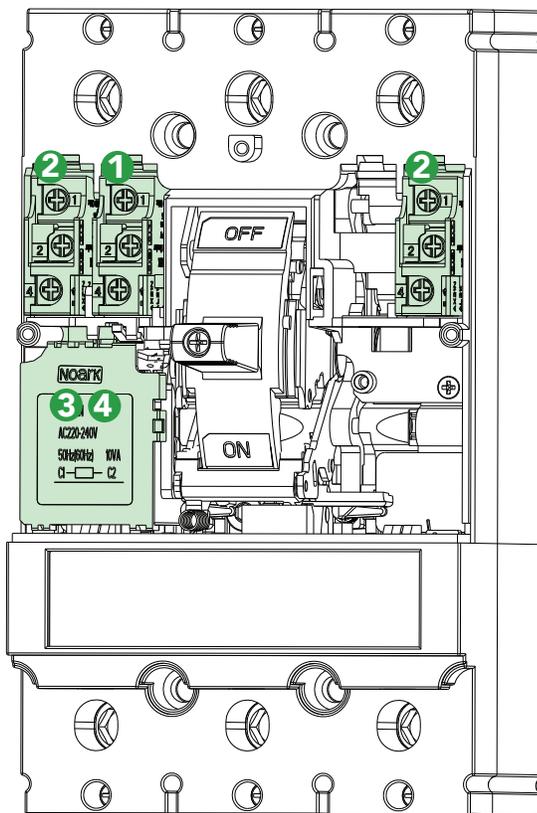
### Certifications

- UL 489 Listed, File Number E355392 For: Alarm Switch, Auxiliary Contact, Shunt Trip, Under-Voltage Trip, Handle Lock, Mechanical Interlock, Motor Operator, Rotary Handle, Extended Rotary Handle, Flange Handle, Plug-In Base, and Rear Connection Kit
- UL 489 Listed, File Number E349009  
For: Terminal Lugs
- Certified for Canada according to CSA standards 22.2 No. 5
- IEC/EN 60947-2
- CE Compliant
- RoHS Compliant
- UL listed, File No. E355392, E484125  
For: Flange Handle Mechanism



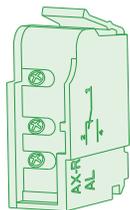
# Accessories For MCCB/MCP/MCS

## Internal Accessories



D

### Alarm Switch (AL)



1

- Function:**
- Sends an alarm signal when the circuit breaker trips
- Type:**
- One NO, one NC

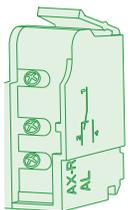
### Shunt Release (SHT)



3

- Function:**
- Allows circuit breaker to be opened remotely
- Type of Power Supply:**
- 100-130 Vac, 220-240 Vac, 380-440 Vac, 480-500 Vac, 24 Vdc, 220-250 Vdc

### Auxiliary Contact (AX)



2

- Function:**
- Indicates the state of a circuit breaker (open/close)
- Type:**
- One NO, one NC
  - Two NO, two NC

### Under-Voltage Release (UVT)



4

- Function:**
- Prevents circuit breaker from closing during an under-voltage situation
- Type of Power Supply:**
- 110-127 Vac, 220-240 Vac, 380-440 Vac, 24-30 Vdc, 48 Vdc, 60 Vdc, 110-125 Vdc, 220-250 Vdc

## Accessories For MCCB/MCP/MCS

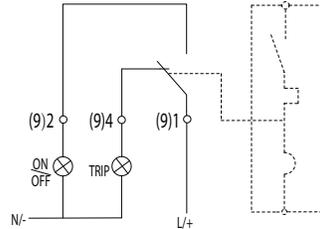
### Internal Accessories: Alarm Switch and Auxiliary Contact



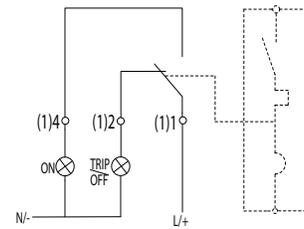
5A @ 240Vac  
 2A @ 480Vac  
 0.25A @ 110Vdc  
 0.25A @ 220Vdc

AL/AX	21	P
Description	Type	Device Category
Alarm Auxiliary Contact	21: for M1-M6	P: UL 489

Accessory Description	Product	Part Number
Alarm Auxiliary Contact	AL/AX21P	1100554



Wiring Diagram of Alarm Contact (Switch)



Wiring Diagram of Auxiliary Contact

AL	23	N
Description	Type	Device Category
Alarm Contact	22V: for MV2DPV	P: NOARK UL 489
	23: for MD3HV	N: UL 489

Accessory Description	Product	Part Number
Alarm Contact	AL22VP	1102919
Auxiliary Contact	AX22VP	1102920
Alarm Contact	AL23N	1103293
Auxiliary Contact	AX23N	1103292
Auxiliary Contact	AX23N2	1103341

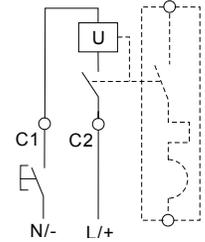
# Accessories For MCCB/MCP/MCS

## Internal Accessories: Shunt Trip



- Response Voltage, Pick-Up: Us 70-110%
- Opening Time: Interrupts Automatically  $\geq 10$  ms,  $\leq 60$  ms

SHT	21	N	A
Description	Type	Device Category	Control Voltage
Shunt Trip	21: for M1 22: for M2-M3, M3HV 22V: for MV2DPV 23: for MD3HV 24: for M4-M5 26: for M6	N: UL 489	A: 100~130 Vac B: 220~240 Vac C: 380~440 Vac D: 480~500 Vac E: 24 Vdc H: 220~250 Vdc



Accessory Description	Type	Voltage	Product	Part Number	
Shunt Trip	M1	100-130 Vac	SHT21NA	1100505	
		220-240 Vac	SHT21NB	1100506	
		380-440 Vac	SHT21NC	1100507	
		480-500 Vac	SHT21ND	1100508	
		24 Vdc	SHT21NE	1100509	
		110-125 Vdc	SHT21NG	1100511	
		220-250 Vdc	SHT21NH	1100512	
		12 Vdc	SHT21NI	1102721	
		M2-M3	100-130 Vac	SHT22NA	1100513
			220-240 Vac	SHT22NB	1100514
			380-440 Vac	SHT22NC	1100515
			480-500 Vac	SHT22ND	1100516
	24 Vdc		SHT22NE	1100517	
	110-125 Vdc		SHT22NG	1100519	
	MV2DPV	220-250 Vdc	SHT22NH	1100520	
		12 Vdc	SHT22NI	1102944	
	MD3HV	12 Vdc	SHT22VNI	1102916	
	M4-M5	100-130 Vac	SHT23NA	1103294	
		220-240 Vac	SHT24NA	1100521	
		380-440 Vac	SHT24NB	1100522	
		480-500 Vac	SHT24NC	1100523	
		24 Vdc	SHT24ND	1100524	
		110-125 Vdc	SHT24NE	1100525	
		220-250 Vdc	SHT24NG	1100527	
12 Vdc		SHT24NH	1100528		
M6		100-130 Vac	SHT24NI	1103306	
		220-240 Vac	SHT26NA	1101168	
		380-440 Vac	SHT26NB	1101169	
		480-500 Vac	SHT26NC	1101170	
	24-30 Vdc	SHT26ND	1101171		
	110-125 Vdc	SHT26NE	1101172		
M2HV	220-250 Vdc	SHT26NG	1101173		
	100-130 Vac	SHT26NH	1101174		
	220-240 Vac	SHT22NJ	1103270		
	380-440 Vac	SHT22NK	1103271		
	480-500 Vac	SHT22NL	1103272		
	24 Vdc	SHT22NM	1103273		
		SHT22NP	1103274		

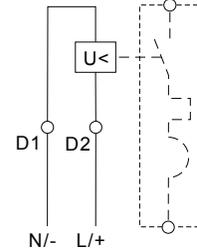
## Accessories For MCCB/MCP/MCS

### Internal Accessories: Under-Voltage Trip



- Response Voltage, Drop:  $U_e$  35-70%
- Response Voltage, Pick-Up:  $U_e$  85-110%
- Opening Time: Interrupts Automatically  $\geq 10$  ms,  $\leq 60$  ms

UVT	21	N	A
Description	Type	Device Category	Control Voltage
Under-Voltage Trip	21: for M1 22: for M2-M3, M3HV 24: for M4-M5 26: for M6	N: UL 489	A: 110~127 Vac B: 220~240 Vac C: 380~440 Vac D: 24~30 Vdc E: 48 Vdc F: 60 Vdc G: 110~125 Vdc H: 220~250 Vdc



Accessory Description	Type	Voltage	Product	Part Number
Under-Voltage Trip	M1	110-127 Vac	UVT21NA	1100529
		220-240 Vac	UVT21NB	1100530
		380-440 Vac	UVT21NC	1100531
		24-30 Vdc	UVT21ND	1100532
		48 Vdc	UVT21NE	1100533
		60 Vdc	UVT21NF	1100534
		110-125 Vdc	UVT21NG	1100535
		220-250 Vdc	UVT21NH	1100536
	M2-M3	110-127 Vac	UVT22NA	1100537
		220-240 Vac	UVT22NB	1100538
		380-440 Vac	UVT22NC	1100539
		24-30 Vdc	UVT22ND	1100540
		48 Vdc	UVT22NE	1100541
		60 Vdc	UVT22NF	1100542
		110-125 Vdc	UVT22NG	1100543
		220-250 Vdc	UVT22NH	1100544
	M4-M5	110-127 Vac	UVT24NA	1100545
		220-240 Vac	UVT24NB	1100546
		380-440 Vac	UVT24NC	1100547
		24-30 Vdc	UVT24ND	1100548
		48 Vdc	UVT24NE	1100549
		60 Vdc	UVT24NF	1100550
		110-125 Vdc	UVT24NG	1100551
		220-250 Vdc	UVT24NH	1100552
M6	220-240 Vac	UVT26NB	1101176	
	24-30 Vdc	UVT26ND	1101179	
	48 Vdc	UVT26NJ	1102769	
	60 Vdc	UVT26NK	1102770	
M2HV	100-127 Vac	UVT22NJ	1103275	
	220-240 Vac	UVT22NK	1103276	
	80-440 Vac	UVT22NL	1103277	
	24-30 Vdc	UVT22NM	1103278	
	48 Vdc	UVT22NP	1103279	
	60 Vdc	UVT22NQ	1103280	
	110-125 Vdc	UVT22NR	1103281	
	220-250 Vdc	UVT22NS	1103282	

# Accessories For MCCB/MCP/MCS

## External Accessories: Handle Lock and Mechanical Interlock



• For 3-pole devices only

KLK	21	N	A
Description	Type	Device Category	Position
Handle Lock (Padlockable Position)	21: for M1	N: UL 489	A: Off
	22: for M2		B: On/Off
	23: for M3		C: On
	24: for M4-M5		
	26: for M6		

Accessory Description	Type	Position	Product	Part Number
Handle Lock	M1	Off	KLK21NA	1100575
		On/Off	KLK21NB	1100576
		On	KLK21NC	1100577
	M2	Off	KLK22NA	1100578
		On/Off	KLK22NB	1100579
		On	KLK22NC	1100580
	M3	Off	KLK23NA	1100581
		On/Off	KLK23NB	1100582
		On	KLK23NC	1100583
	M4-M5	Off	KLK24NA	1100584
		On/Off	KLK24NB	1100585
		On	KLK24NC	1100586
M6	Off	KLK26NA	1101182	



MIT	21	N	A
Description	Type	Device Category	Breaker Distance
Mechanical Interlock	21: for M1	N: UL 489	
	22: for M2		
	23: for M3		
	24: for M4-M5		
	26: for M6		

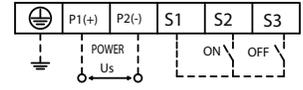
Accessory Description	Type	Product	Part Number
Mechanical Interlock	M1	MIT21NA	1100596
	M2	MIT22NA	1100599
	M3	MIT23NA	1100602
	M4-M5	MIT24NA	1100605
	M6	MIT26NA	1101183

## Accessories For MCCB/MCP/MCS

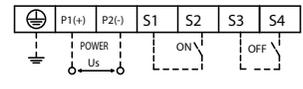
### External Accessories: Motor Operator



MOD	21	N	A
Description	Type	Device Category	Control Voltage
Motor Operator	21: for M1 22: for M2 23: for M3 24: for M4-M5	N: UL 489	A: 120 Vac/dc B: 240 Vac/dc C: 24 Vdc



MOD21N / MOD22N



MOD23N / MOD24N

Accessory Description	Type	Voltage	Product	Part Number
Motor Operator	M1	120 Vac/dc	MOD21NA	1100563
		240 Vac/dc	MOD21NB	1100564
		24 Vdc	MOD21NC	1100565
	M2	120 Vac/dc	MOD22NA	1100566
		240 Vac/dc	MOD22NB	1100567
		24 Vdc	MOD22NC	1100568
	M3	120 Vac/dc	MOD23NA	1100569
		240 Vac/dc	MOD23NB	1100570
		24 Vdc	MOD23NC	1100571
	M4-M5	120 Vac/dc	MOD24NA	1100572
		240 Vac/dc	MOD24NB	1100573
		24 Vdc	MOD24NC	1100574
	M2HV	120 Vac/dc	MOD22ND	1103284
		240 Vac/dc	MOD22NE	1103285
		24 Vdc	MOD22NF	1103286
	M3HV	120 Vac/dc	MOD23ND	1103289
		240 Vac/dc	MOD23NE	1103290
		24 Vdc	MOD23NF	1103291
MD3HVF	24 Vdc	MOD223NG	1103297	
	220 Vdc/ac	MOD223NH	1103298	

Type	Power			
	MOD21N	MOD22N	MOD23N	MOD24N
230 Vac	150 VA	150 VA	300 VA	300 VA
110 Vac	150 VA	150 VA	300 VA	300 VA
220 Vdc	150 W	150 W	300 W	300 W
110 Vdc	150 W	150 W	300 W	300 W
24 Vdc	75 W	75 W	180 W	180 W

	MOD21N	MOD22N	MOD23N	MOD24N
Closing Time	≤500 ms	≤500 ms	≤1000 ms	≤1000 ms
Opening Time	≤500 ms	≤500 ms	≤1000 ms	≤1000 ms
ON-Pulse Minimum Duration	300 ms	300 ms	300 ms	300 ms
OFF-Pulse Minimum Duration	300 ms	300 ms	300 ms	300 ms
Wire Capacity	24~16AWG	24~16AWG	24~16AWG	24~16AWG
Tightening Torque of Terminal	≤8Kg/cm	≤8Kg/cm	≤9Kg/cm	≤9Kg/cm
Mechanical Operating Cycles	10000	10000	8000	8000
Operating Frequency per hour	120	120	120	60

# Accessories For MCCB/MCP/MCS

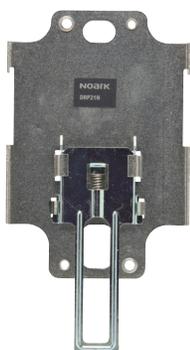
## External Accessories: Rotary Handle and DIN Rail Plate



- Grey/Green or Yellow/Red
- IP 30

RHD	21	N	1
Description	Type	Device Category	Color
Rotary Handle (Closed Coupled)	21: for M1	N: UL 489	1: Grey/Green
	22: for M2		2: Red/Yellow
	23: for M3		
	24: for M4-M5		

Accessory Description	Type	Product	Part Number	
Rotary Handle (Closed Coupled)	Grey/Green	M1	RHD21N1	1100555
		M2	RHD22N1	1100556
		M3	RHD23N1	1100557
		M4	RHD24N1	1100558
	Red/Yellow	M1	RHD21N2	1100613
		M2	RHD22N2	1100614
		M3	RHD23N2	1100615
		M4-M5	RHD24N2	1100616

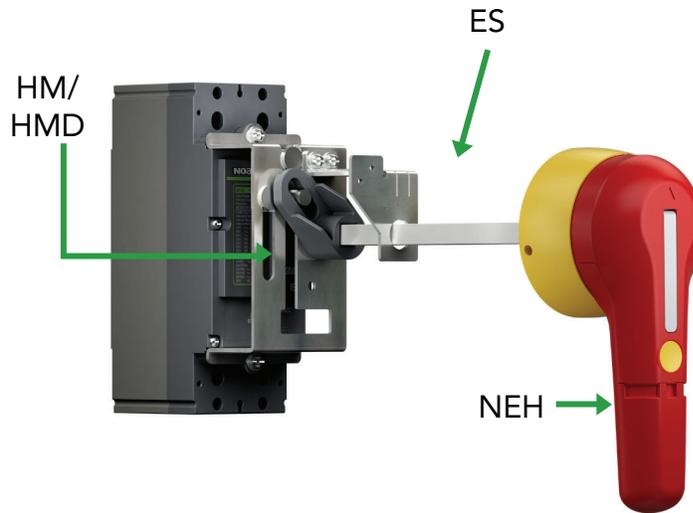


DRP	21	N
Description	Type	Device Category
DIN Rail Plate	21: for M1	
	22: for M2	

Accessory Description	Type	Product	Part Number
DIN Rail Plate	M1	DRP21N	1101164
	M2	DRP22N	1101165

## Accessories For MCCB/MCP/MCS

### External Accessories: NEMA Extended Rotary Handle



NEH	2	B	2
Description	Type	Color	NEMA Degree
NEMA Extended Rotary Handle (Through the Door)	1: Suitable for M1/2 2: Suitable for M1/2 3: Suitable for M3/4/5/6	B:Black/Grey R: Red/Yellow	2: NEMA 4,4X

HM	1	A	ES	20	A
Description	Type	Mechansim Hole	Description	Length	Cross Section
HM ( Handle Operating Mechanism )	1: M1	A : 10×10mm <sup>2</sup>	ES(Extended Shaft)	20: 7.9 inch (200mm)	A : 0.39×0.39 inch (10×10mm)
	2: M2	B : 12×12mm <sup>2</sup>		22: 8.7 inch (220mm)	B : 0.47×0.47 inch (12×12mm)
HMD(Handle Operating Mechanism for 2P frames)	3: M3			26: 10.3 inch (260mm)	C :Breaker side 6×6mm <sup>2</sup> ,handle side 10×10mm <sup>2</sup>
	4: M4/M5			32: 12.6 inch (320mm)	D :Breaker side 10×10mm <sup>2</sup> ,handle side 12×12mm <sup>2</sup>
HOM(Handle Operating Mechanism for M6)	6: M6			50: 19.7 inch (500mm)	

## Accessories For MCCB/MCP/MCS

### External Accessories: NEMA Extended Rotary Handle

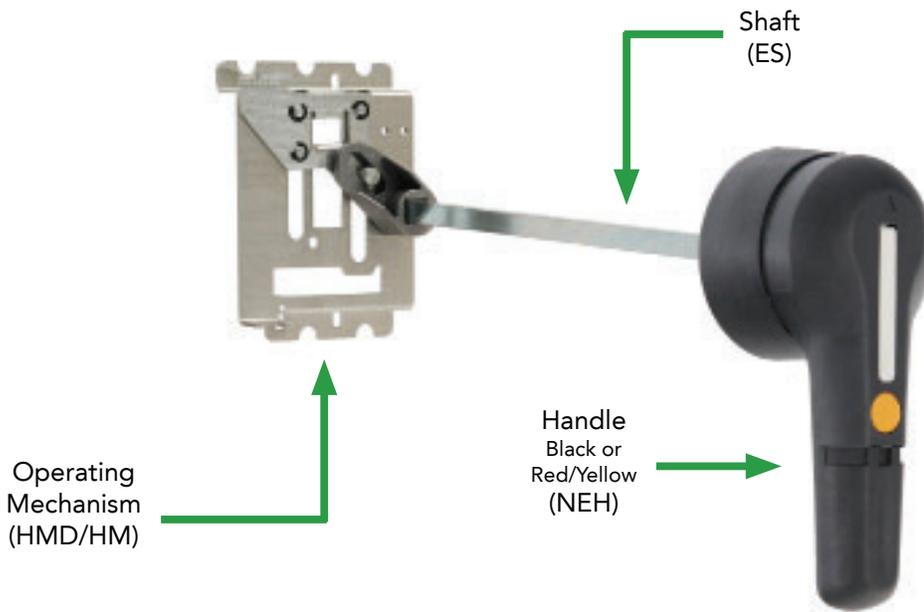
Part Number	Product	Description	Suitable for
1103299	NEH1B2	External rotary handle, 65mm length, Black, IP66	M1/M2
1103300	NEH1R2	External rotary handle, 65mm length, Red, IP66	M1/M2
1102358	NEH2B2	External rotary handle, Black, NEMA 4,4X	M1/M2
1102359	NEH2R2	External rotary handle, Red, NEMA 4,4X	M1/M2
1102360	NEH3B2	External rotary handle, Black, NEMA 4,4X	M3/M4/M5/M6
1102361	NEH3R2	External rotary handle, Red, NEMA 4,4X	M3/M4/M5/M6
1102362	ES20A	Extended Handle Shaft, 200mm, Cross section 10×10mm <sup>2</sup>	M1/M2
1102363	ES20B	Extended Handle Shaft, 200mm, Cross section 12×12mm <sup>2</sup>	M3/M4/M5/M6
1103301	ES20C	Extended Handle Shaft, 200mm, Cross section: breaker end 10×10mm, handle end 6×6mm <sup>2</sup>	M1/M2
1103296	ES22A	Extended Handle Shaft, 220mm, Cross section 10×10mm <sup>2</sup>	M1/M2
1103287	ES26D	Extended Handle Shaft, 260mm, Cross section: breaker end 12×12mm <sup>2</sup> , cabinet end 10×10mm <sup>2</sup>	M3/M4/M5/M6
1102364	ES32A	Extended Handle Shaft, 320mm, Cross section 10×10mm <sup>2</sup>	M1/M2
1102365	ES32B	Extended Handle Shaft, 320mm, Cross section 12×12mm <sup>2</sup>	M3/M4/M5/M6
1103302	ES32C	Extended Handle Shaft, 320mm, Cross section: breaker end 10×10mm, handle end 6×6mm <sup>2</sup>	M1/M2
1102366	ES50A	Extended Handle Shaft, 500mm, Cross section 10×10mm <sup>2</sup>	M1/M2
1102367	ES50B	Extended Handle Shaft, 500mm, Cross section 12×12mm <sup>2</sup>	M3/M4/M5/M6
1103303	ES50C	Extended Handle Shaft, 500mm, Cross section: breaker end 10×10mm, handle end 6×6mm <sup>2</sup>	M1/M2
1102368	HM1A	Handle operating mechanism, Hole size 10×10mm <sup>2</sup>	M1
1102369	HM2A	Handle operating mechanism, Hole size 10×10mm <sup>2</sup>	M2
1102916	HM2C	Handle operating mechanism for MV2DPV, Hole size 8×8mm <sup>2</sup>	MV2DPV
1103283	HM2HVA	Handle operating mechanism for M2HV, Hole size 10×10mm <sup>2</sup>	M2HV
1102370	HM3B	Handle operating mechanism, Hole size 12×12mm <sup>2</sup>	M3
1103288	HM3HVB	Handle operating mechanism for M3HV, Hole size 12×12mm <sup>2</sup>	M3HV
1102371	HM4B	Handle operating mechanism, Hole size 12×12mm <sup>2</sup>	M4/M5
1102765	HMD1A	Operating mechanism for M1 2P frame, Hole size 10×10mm <sup>2</sup>	M1
1102766	HMD2A	Operating mechanism for M2 2P frame, Hole size 10×10mm <sup>2</sup>	M2
1103295	HMD3A	Handle Operating mechanism for MD3HV, 2P, Hole size 10×10mm <sup>2</sup>	MD3HV
1101153	HOM6B	Handle Operating Mechanism, Hole size 12×12mm <sup>2</sup>	M6

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## Accessories For MCCB/MCP/MCS

### External Accessories: NEMA Extended Rotary Handle

Shown: NEH2R2 handle with ES32A extended handle shaft and HM1A operating mechanism.



NEMA extended rotary handle mechanism selection consists of 3 components (sold separately): operating mechanism (HM), shaft (ES), and rotary handle (NEH).

- UL File Numbers E484125 and E355392

## Selection Process

**Step 1.** Identify breaker frame size to select corresponding operating mechanism (HM).

**Step 2.** Select shaft (ES) based on the length needed and diameter required.

**Step 3.** Select handle (NEH) with the matching shaft diameter based on desired color combination and UL rating.

### Step 1

Operating Mechanism		
Select One		
Frame Size	Use Shaft Diameter	Catalog Number
M1 - 3	10×10 mm <sup>2</sup>	HM1A
M1 - 2		HMD1A
M2 - 3		HM2A
M2 - 2	12×12 mm <sup>2</sup>	HMD2A
M3 - 3		HM3B
M4 - 3		HM4B
M5 - 3		HM4B
M6 - 3		HOM6B

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### Step 2

Shaft		
Select One		
Length(mm)	Shaft Diameter	Catalog Number
200	10×10/6×6mm <sup>2</sup>	ES20C
	10×10mm <sup>2</sup>	ES20A
	12×12mm <sup>2</sup>	ES20B
320	10×10/6×6mm <sup>2</sup>	ES32C
	10×10mm <sup>2</sup>	ES32A
	12×12mm <sup>2</sup>	ES32B
500	10×10/6×6mm <sup>2</sup>	ES50C
	10×10mm <sup>2</sup>	ES50A
	12×12mm <sup>2</sup>	ES50B

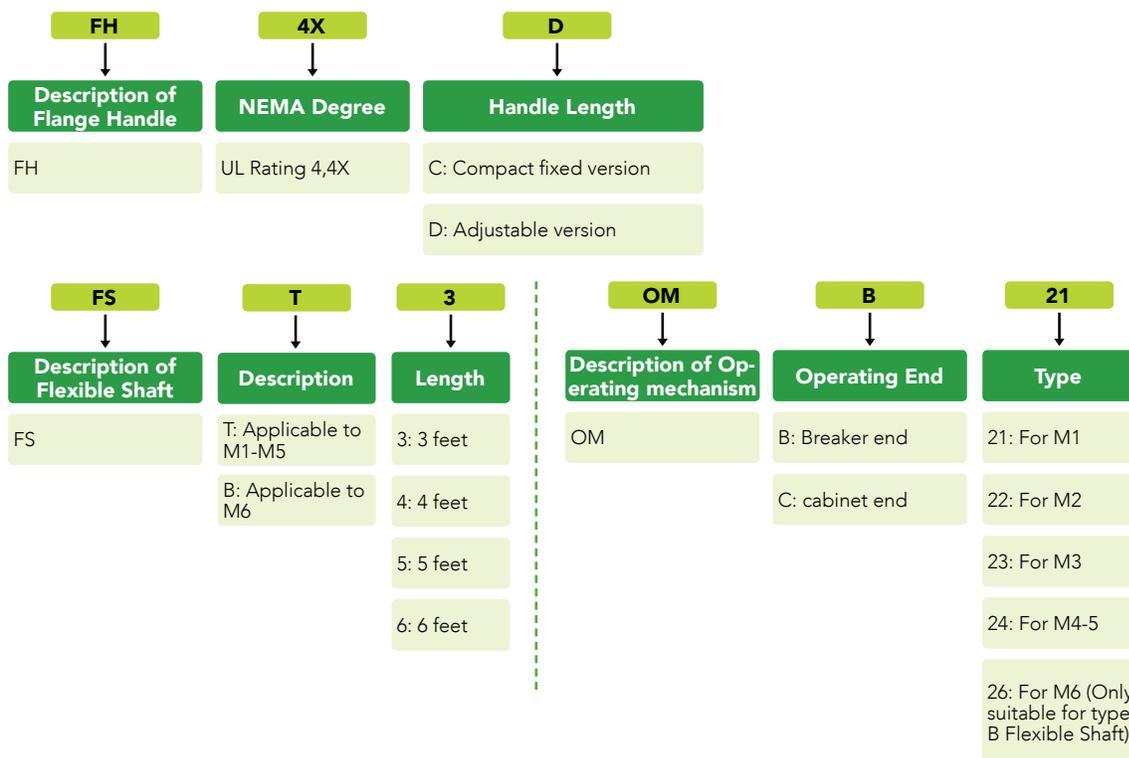
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### Step 3

4/4X Handle		
Select One		
Use Shaft Diameter	color	Catalog Number
6×6 mm <sup>2</sup>	Red/Yellow	NEH1R2
	Black/Grey	NEH1B2
10×10 mm <sup>2</sup>	Red/Yellow	NEH2R2
	Black/Grey	NEH2B2
12×12 mm <sup>2</sup>	Red/Yellow	NEH3R2
	Black/Grey	NEH3B2

# Accessories For MCCB/MCP/MCS

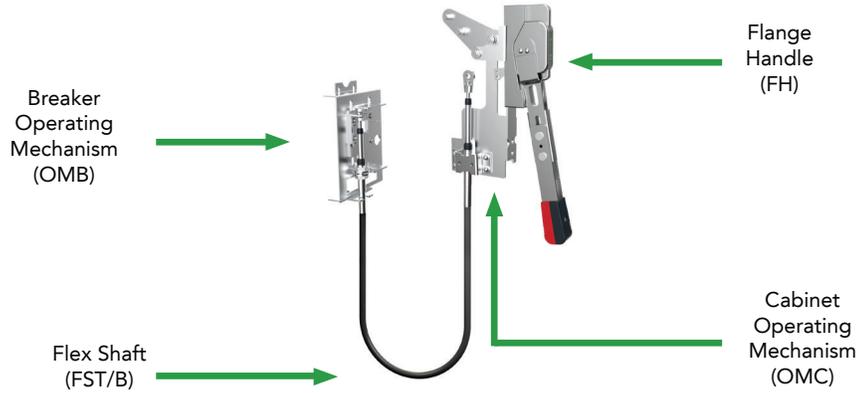
## External Accessories: NEMA Flange Handle Mechanism



Search By Part Number	Product	Description
1102516	FH4XC	Compact fixed flange handle for use with FST, OMB and OMC, UL 4X rating
1102531	FH4XD	Adjustable flange handle for use with FST, OMB and OMC, UL4X rating
1101155	FSB3	Type B Flexible Shaft, 3 inch.
1101156	FSB4	Type B Flexible Shaft, 3 inch.
1101157	FSB5	Type B Flexible Shaft, 5 inch.
1101158	FSB6	Type B Flexible Shaft, 6 inch.
1102517	FST3	Flexible shaft for operating one breaker or two breakers, 3 inch.
1102518	FST4	Flexible shaft for operating one breaker or two breakers, 3 inch.
1102519	FST5	Flexible shaft for operating one breaker or two breakers, 5 inch.
1102520	FST6	Flexible shaft for operating one breaker or two breakers, 6 inch.
1102525	OMB21	Operating Mechanism on breaker end for M1
1102526	OMB22	Operating Mechanism on breaker end for M2
1102527	OMB23	Operating Mechanism on breaker end for M3
1102528	OMB24	Operating Mechanism on breaker end for M4 and M5
1102529	OMB26	Operating Mechanism on breaker end for M6
1102530	OMC	Operating Mechanism on cabinet end

## Accessories For MCCB/MCP/MCS

### External Accessories: NEMA Flange Handle Mechanism



M1-M5 Flange handle mechanism selection is separated into 4 components (sold separately): flange handle (FH), flex shaft (FST), cabinet operating mechanism (OMC) and breaker operating mechanism (OMB) NOARK UL MCCB frame size: M1(15-150A), M2(175-250A), M3(300-400A), M4(500-600A) M5(700-800A).

- UL File Numbers E355392, E484125

## Selection Process

- Step 1.** Select desired flange handle.
- Step 2.** Select cabinet operating mechanism.
- Step 3.** Select breaker operating mechanism based on frame size.
- Step 4.** Select flex shaft\* based on enclosure requirements.

### Step 1

Flange Handle		
Select One		
Frame Size <sup>H</sup>	Handle Type / Length	Catalog Number
M1 - M2 - M3 - M4 - M5 - M6	Compact fixed length (9.57 in) UL 4, 4X Rated	FH4XC
	Adjustable length (11.81 - 13.62 in) UL 4, 4X Rated	FH4XD

### Step 2

Cabinet Operating Mechanism	
Select One	
Frame Size	Catalog Number
M1 - M2 - M3 - M4 - M5 - M6	OMC

### Step 3

Breaker Operating Mechanism	
Select one or two items	
Frame Size	Catalog Number
M1	OMB21
M2	OMB22
M3	OMB23
M4 - M5	OMB24

Breaker Operating Mechanism	
Suitable for M6, Select one	
Frame Size	Catalog Number
M6	OMB26

### Step 4

Flex Shaft*	
Select one or two items	
Catalog Number	Length
FST3	3 feet
FST4	4 feet
FST5	5 feet
FST6	6 feet

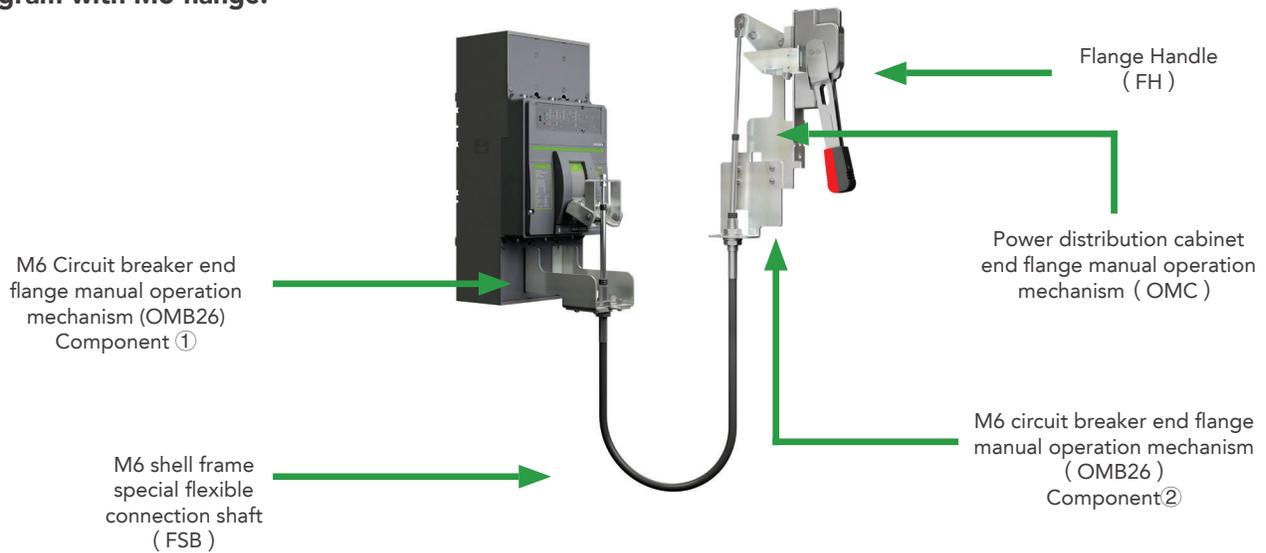
Type B Flex Shaft*	
Select One	
Catalog Number	Length
FSB3	3 feet
FSB4	4 feet
FSB5	5 feet
FSB6	6 feet

\* When selecting the length of shaft, ensure minimum bending radius of 6 inches is maintained to operate properly. Contact NOARK if additional lengths are needed.  
The construction of OMB varies depending on breakers being coupled with

# Accessories For MCCB/MCP/MCS

## External Accessories: Neutral Current Sensor

Manual operation mechanism diagram with M6 flange:



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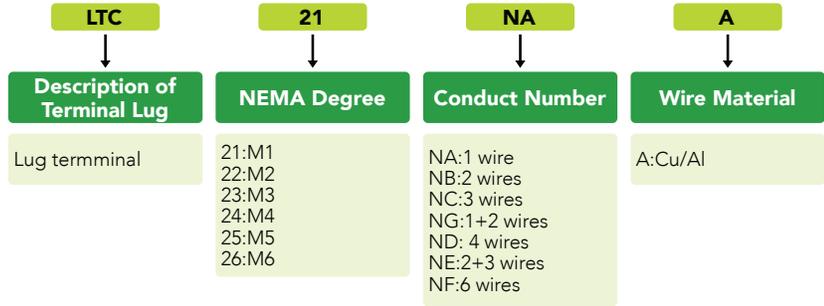
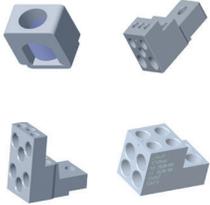


NCS	26	N
Description	Type	Number of Components
Neutral Current Sensor	26: for M6	UL489 certified

Accessory Description	Product	Part Number
Neutral Current Sensor for M6 3P4W	NCS26N	1103203

## Accessories For MCCB/MCP/MCS

### Connection Hardware: Terminal Lugs



PN	SKU	Breaker Frame	Wire Qty Each Pole	DESCRIPTION	Wire Size Range
1102584	LTC21NAA	M1	1	Terminal lug ,one wire connection for M1	14AWG~3/0AWG, (1) Cu wire or 12AWG~3/0 AWG, (1) Al wire
1102585	LTC21NCA	M1	3	Terminal lug ,three wires connection for M1	14 AWG~2 AWG, (3) Cu wire or 12 AWG~2 AWG, (3) Al wire
1102586	LTC21NFA	M1	6	Terminal lug ,six wires connection for M1	14AWG~6 AWG, (6) Cu wire or 12 AWG~6 AWG, (6) Al wire
1102587	LTC22NAA	M2	1	Terminal lug ,one wire connection for M2	3AWG~300kcmil, (1) Cu/Al wire
1102588	LTC22NCA	M2	3	Terminal lug ,three wires connection for M2	10AWG~2/0 AWG, (3) Cu/Al wire
1102589	LTC22NGA	M2	3	Terminal lug ,three wires connection for M2 .One big ,two small	3AWG~2/0 AWG, (1) Cu/Al wire and 12AWG~1 AWG, (2) Cu/Al wire
1102590	LTC22NFA	M2	6	Terminal lug ,six wires connection for M2	12AWG~6 AWG, (6) Cu/Al wire
1102591	LTC23NAA	M3	1	Terminal lug ,one wire connection for M3	4/0 AWG -600 kcmil, (1) Cu/Al wire
1102592	LTC23NBA	M3	2	Terminal lug ,two wires connection for M3	3AWG~250 kcmil, (2) Cu/Al wire
1102593	LTC23NCA	M3	3	Terminal lug ,three wires connection for M3	3AWG~250kcmil, (3) Cu/Al wire
1102594	LTC23NEA	M3	5	Terminal lug ,five wires connection for M3.Two big ,three small	12 AWG~1AWG, (3) Cu/Al wire and 3AWG~3/0AWG, (2) Cu/Al wire
1102595	LTC23NFA	M3	6	Terminal lug ,six wires connection for M3.	12AWG~3AWG, (6) Cu/Al wire
1102596	LTC24NBA	M4	2	Terminal lug ,two wires connection for M4	2/0AWG~500 kcmil, (2) Cu/Al wire
1102597	LTC24NCA	M4	3	Terminal lug ,three wires connection for M4	2/0AWG~250 kcmil, (3) Cu/Al wire
1102598	LTC24NEA	M4	5	Terminal lug ,five wires connection for M4	12AWG~1AWG, (3) Cu/Al wire and 3AWG~3/0AWG, (2) Cu/Al wire
1102622	LTC25NBA	M5	2	Terminal lug ,two wires connection for M5	(2) 250kcmil-600kcmil, Cu/Al Wire
1102623	LTC25NCA	M5	3	Terminal lug ,three wires connection for M5	(3) 4/0AWG-500kcmil, Cu/Al Wire
1102624	LTC26NCA	M6	3	Terminal lug ,three wires connection for M6	(3) 3/0AWG-750kcmil, Cu/Al Wire
1102625	LTC26NDA	M6	4	Terminal lug,four wires connection for M6	(4) 3/0AWG-500kcmil, Cu/Al Wire

# Accessories For MCCB/MCP/MCS

## Connection Hardware: Terminal Lugs

PN	Terminal Lug	SKU	Description
1102584		LTC21NAA	Terminal lug ,one wire connection for M1
1102585		LTC21NCA	Terminal lug ,three wires connection for M1
1102586		LTC21NFA	Terminal lug ,six wires connection for M1
1102587		LTC22NAA	Terminal lug ,one wire connection for M2
1102588		LTC22NCA	Terminal lug ,three wires connection for M2
1102589		LTC22NGA	Terminal lug ,three wires connection for M2 .One big ,two small
1102590		LTC22NFA	Terminal lug ,six wires connection for M2
1102591		LTC23NAA	Terminal lug ,one wire connection for M3
1102592		LTC23NBA	Terminal lug ,two wires connection for M3
1102593		LTC23NCA	Terminal lug ,three wires connection for M3
1102594		LTC23NEA	Terminal lug ,five wires connection for M3.Two big ,three small
1102595		LTC23NFA	Terminal lug ,six wires connection for M3
1102596		LTC24NBA	Terminal lug ,two wires connection for M4
1102597		LTC24NCA	Terminal lug ,three wires connection for M4
1102598		LTC24NEA	Terminal lug ,five wires connection for M4.Two big ,three small
1102622		LTC25NBA	Terminal lug ,two wires connection for M5
1102623		LTC25NCA	Terminal lug ,three wires connection for M5
1102624		LTC26NCA	Terminal lug ,three wires connection for M6
1102625		LTC26NDA	Terminal lug ,four wires connection for M6

D

## Accessories For MCCB/MCP/MCS

### Connection Hardware: Terminal Lugs

#### Installed Lugs onto Breakers with Lug Connection version - SKUs with L-suffix

Breaker Ratings	Premounted Lugs PN	Premounted Lugs SKU	Descriptions
All M1 series	1102584	LTC21NAA	Standard lug configuration for M1 series. Each pole one wire
All M2 series	1102587	LTC22NAA	Standard lug configuration for M2 series. Each pole one wire
All M3 series	1102591	LTC23NAA	Standard lug configuration for M3 series. Each pole one wire
All M4 series	1102596	LTC24NBA	Standard lug configuration for M4 series. Each pole two wires
M5 series (600A/700A)	1102622	LTC25NBA	Standard lug configuration of M5 ,for current rating 600A,700A. Each pole two wires
M5 series (800A)	1102623	LTC25NCA	Standard lug configuration of M5 ,for current rating 800A. Each pole three wires
M6 series (800A/1000A)	1102624	LTC26NCA	Standard lug configuration of M6 ,for current rating 800A,1000A. Each pole three wires
M6 series (1200A)	1102625	LTC26NDA	Standard lug configuration of M6 ,for current rating 1200A. Each pole four wires

# Accessories For MCCB/MCP/MCS

## Connection Hardware: Terminal Cover and Plug-In Base



PN	SKU	Applicable Products	Description
1102599	TC21N	M1	Extended terminal cover for M1
1102600	TC22N	M2	Extended terminal cover for M2
1101186	TC23NB	M3	Extended terminal cover suitable for LTC23NBA
1102601	TC23N	M3	Extended terminal cover suitable for LTC23NCA, LTC23NEA and LTC23NFA
1102602	TC24N	M4	Extended terminal cover for M4

D



Accessory Description	Type	Product	Part Number
Phase Barrier	M1	PHS21	852546
	M2	PHS22	852547
	M3	PHS23	852548
	M4-M5	PHS24	852549
	M6	PHS26	852550

- For a 2-pole frame, 2 pcs of PHS are needed for the line/load sides.
- For a 3-pole frame, 4 pcs of PHS are needed for the line/load sides.
- For a 4-pole frame, 6 pcs of PHS are needed for the line/load sides.



PIA	21	N
Description	Type	Device Category
Plug-In Base	21: for M1	N: UL 489
	22: for M2	
	23: for M3	

Accessory Description	Type	Product	Part Number
Plug-In Base (3 Pole Only)	M1	PIA21N	1100591
	M2	PIA22N	1100592
	M3	PIA23N	1100593

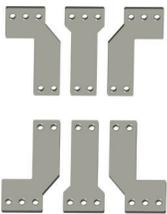
## Accessories For MCCB/MCP/MCS

### Rear Connection Kit and Connecting Copper Bar



RCP	21	N
Description	Type	Certification
Rear Connection Kit	21: for M1	N: UL 489
	22: for M2	
	23: for M3	
	24: for M4	

Accessory Description	Type	Product	Part Number
Rear Connection Kit	M1	RCP21N	1100587
	M2	RCP22N	1100588
	M3	RCP23N	1100589
	M4	RCP24N	1100590



EB	26	6
Description	Type	Number of Components
Extended Connecting Copper Bar	26: for M6	6: 6 pcs of Copper Bar

Accessory Description	Type	Product	Part Number
Extended Connecting	M6	EB266	1102671

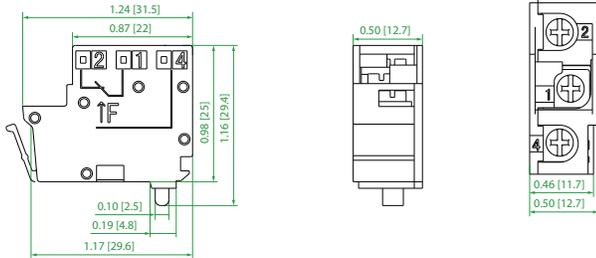
# Accessories For MCCB/MCP/MCS

## Internal Accessory Dimensions

### AL21N / AX21N

Alarm Switch / Auxiliary Contact

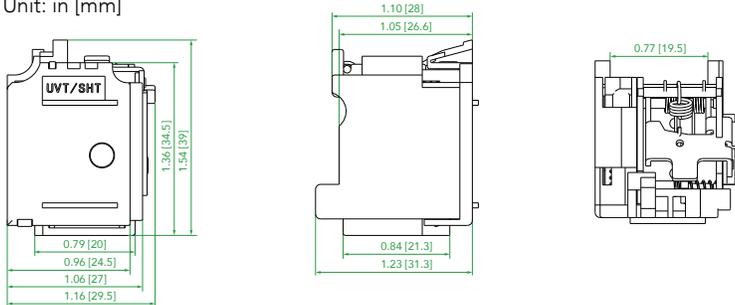
Unit: in [mm]



### SHT21N / UVT21N

Shunt Trip / Under-Voltage Trip for M1

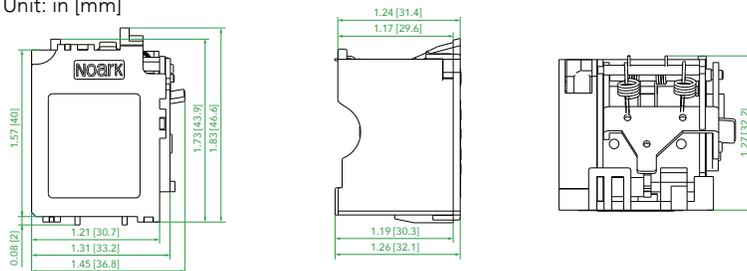
Unit: in [mm]



### SHT22N-24N / UVT22N-24N

Shunt Trip / Under-Voltage Trip for M2-M4

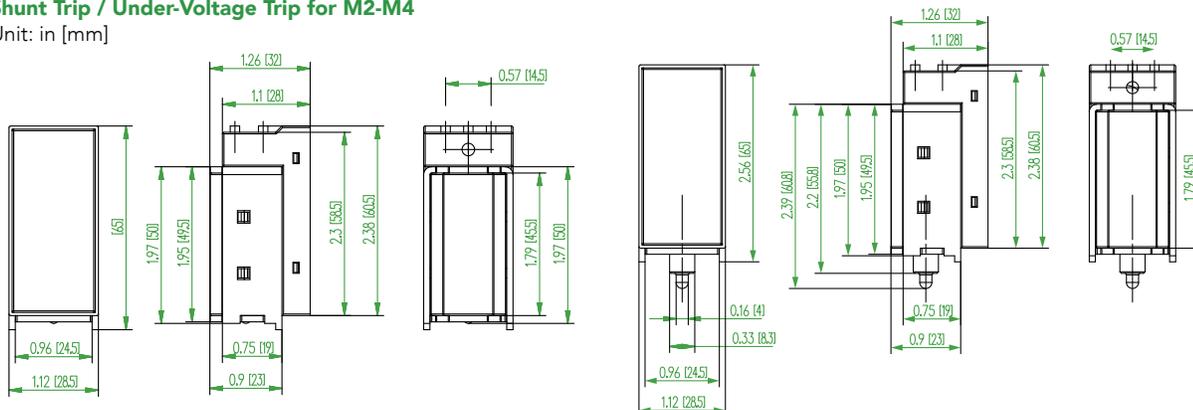
Unit: in [mm]



### SHT26N / UVT26N

Shunt Trip / Under-Voltage Trip for M2-M4

Unit: in [mm]

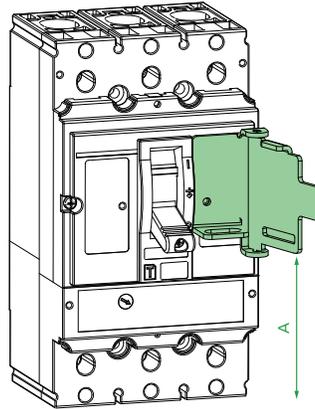


## Accessories For MCCB/MCP/MCS

### External Accessory Dimensions

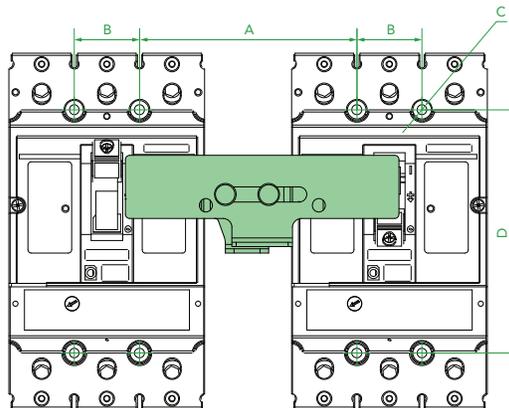
**KLK** • For 3-pole devices only  
**Handle Lock**  
 Unit: in [mm]

Handle Lock	A
KLK21N	5.71 [145]
KLK22N	6.50 [165]
KLK23N	8.46 [215]
KLK24N	10.51 [267]
KLK26N	6.59 [167.5]

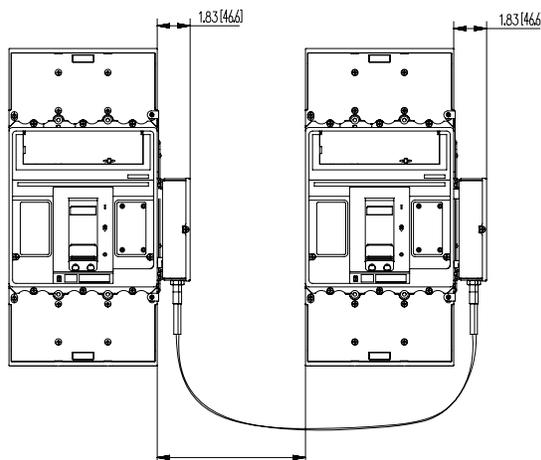


**MIT**  
**Mechanical Interlock**  
 Unit: in [mm]

Mechanical Interlock	A	B	C	D
MIT21N	3.94 [100]	1.18 [30]	ø0.18 [ø4.5]	4.41 [112]
MIT22N	4.53 [115]	1.38 [35]	ø0.22 [ø5.5]	4.92 [125]
MIT23N	5.63 [143]	1.77 [45]	ø0.22 [ø5.5]	7.91 [201]
MIT24N	8.03 [204]	2.56 [65]	ø0.26 [ø6.5]	9.25 [235]



**MIT26N**  
**Mechanical Interlock**  
 Unit: in [mm]



The minimum distance is 1.97[50]  
 The maximum distance is 59.06[1500]

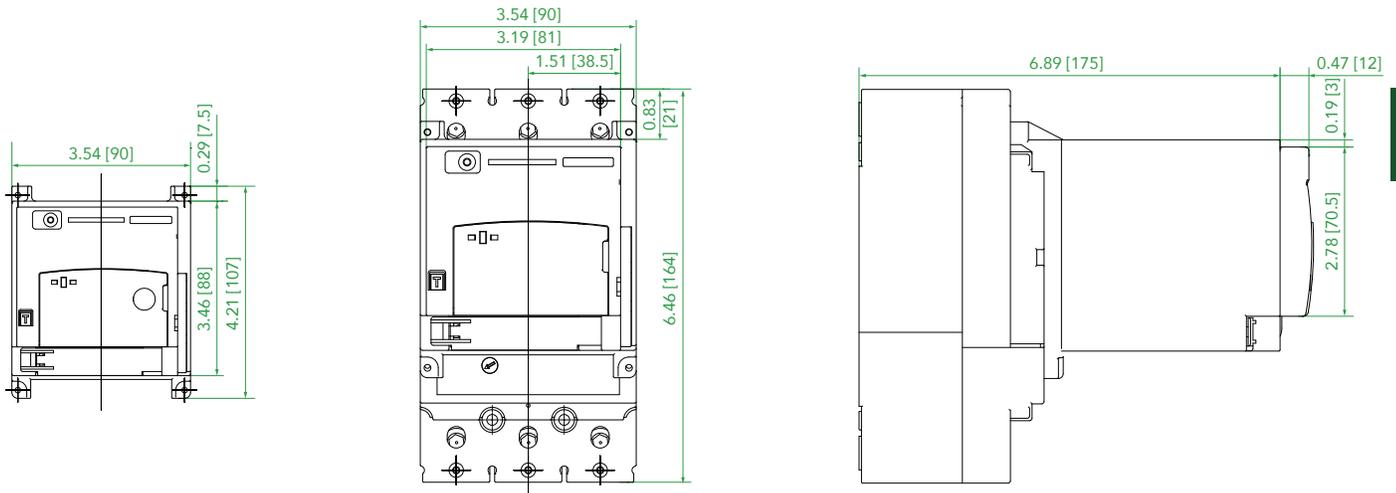
# Accessories For MCCB/MCP/MCS

## External Accessory Dimensions

### MOD21N

Motor Operator for M1

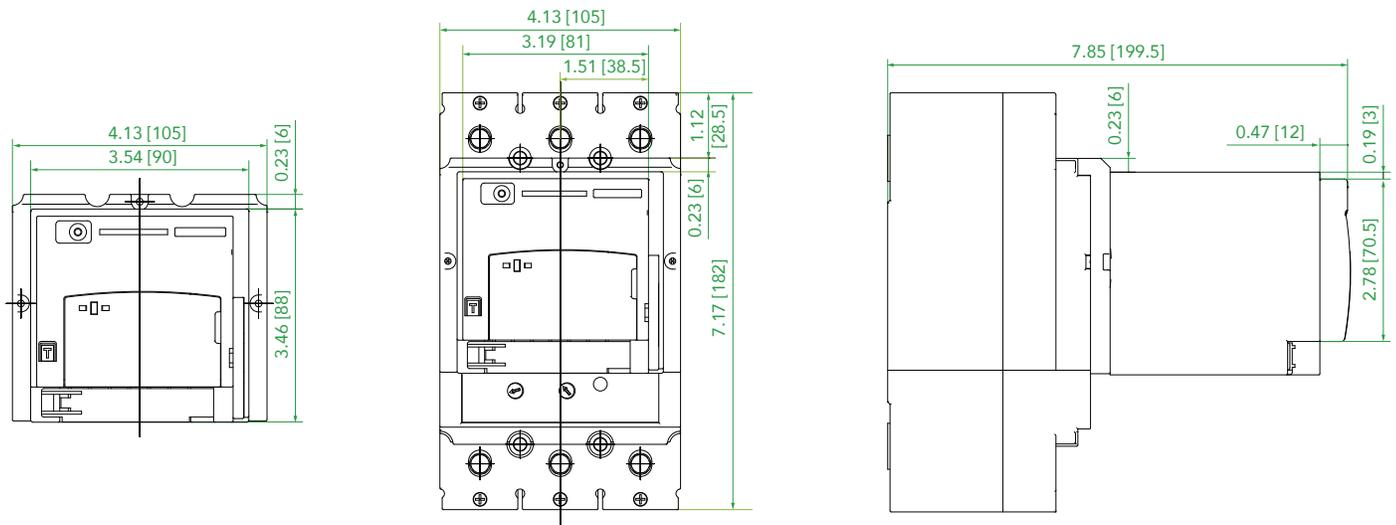
Unit: in [mm]



### MOD22N

Motor Operator for M2

Unit: in [mm]



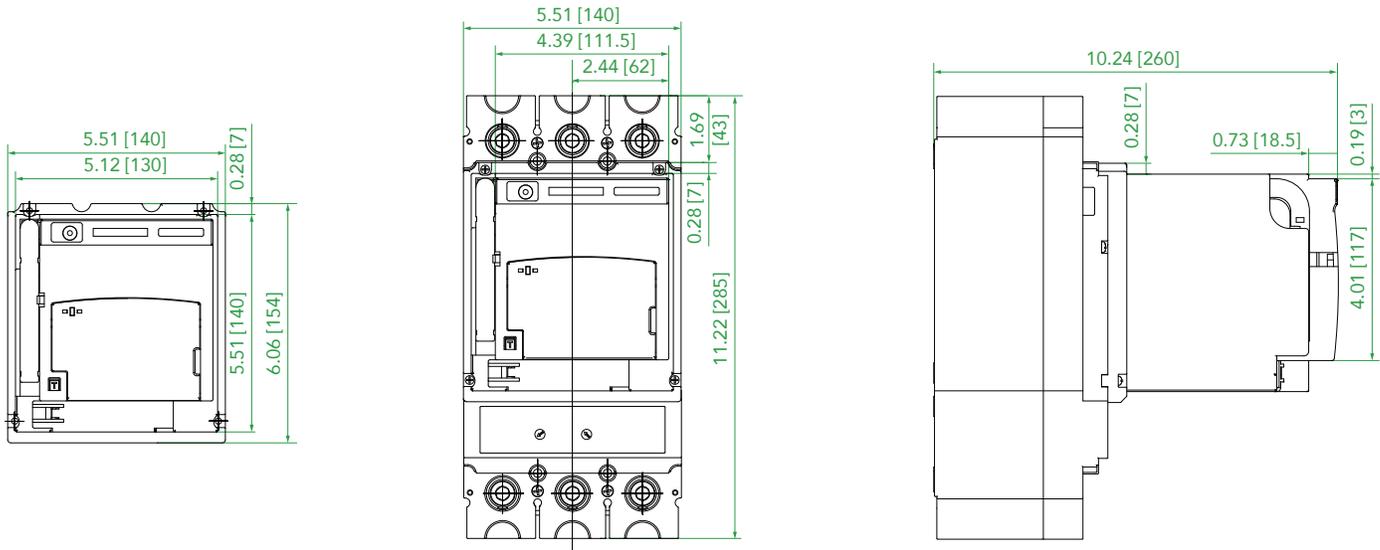
## Accessories For MCCB/MCP/MCS

### External Accessory Dimensions

#### MOD23N

Motor Operator for M3

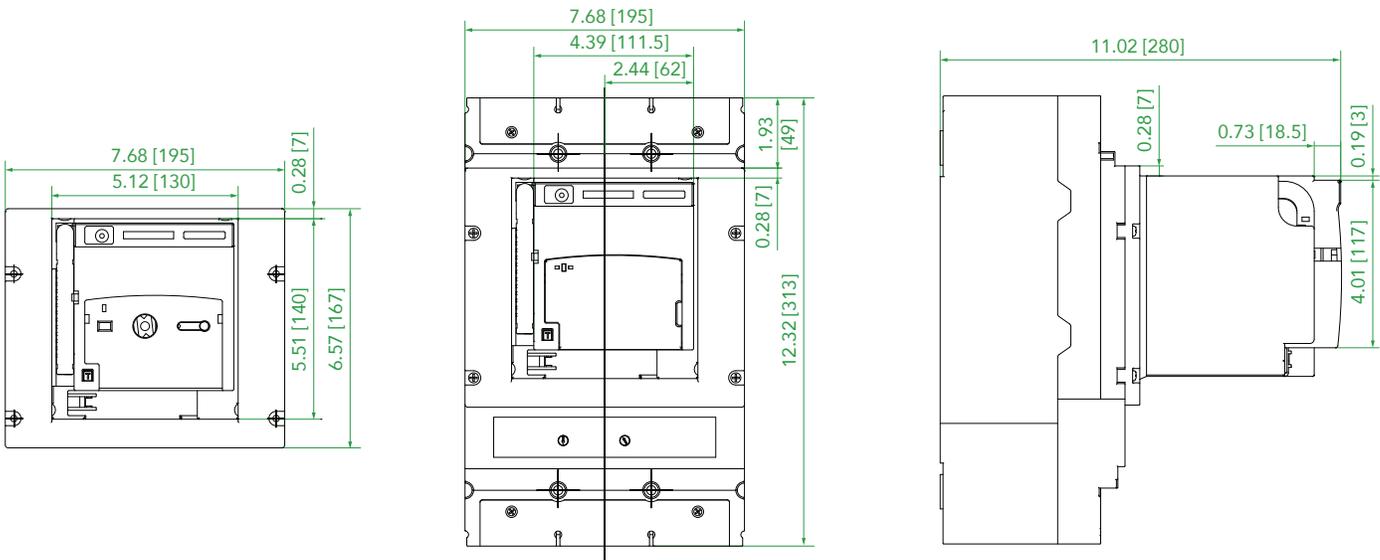
Unit: in [mm]



#### MOD24N

Motor Operator for M4

Unit: in [mm]



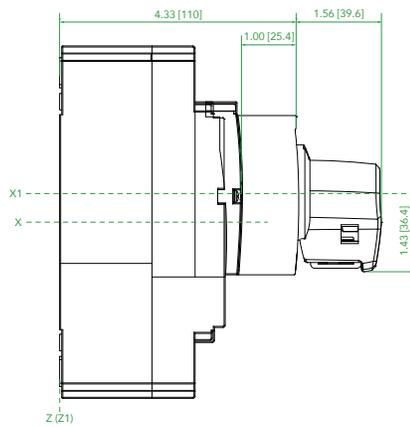
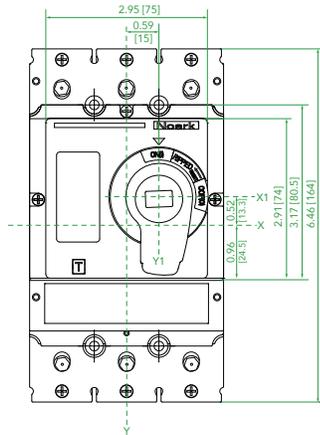
# Accessories For MCCB/MCP/MCS

## External Accessory Dimensions

### RHD21N

Rotary Handle for M1

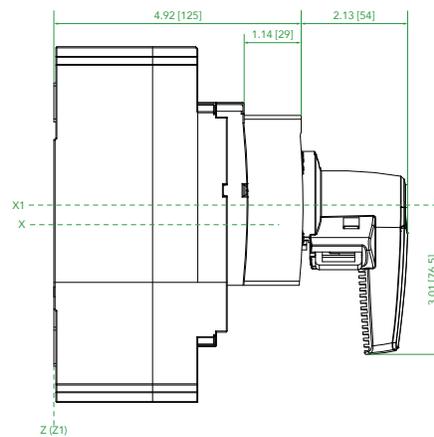
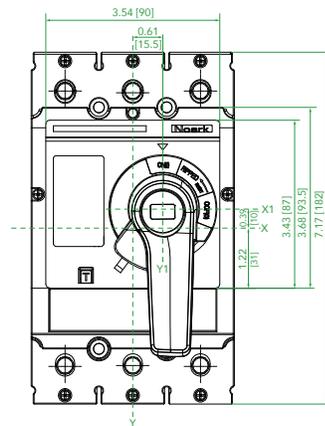
Unit: in [mm]



### RHD22N

Rotary Handle for M2

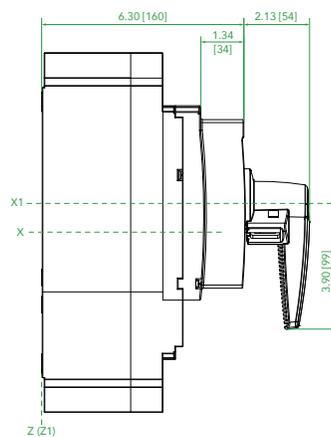
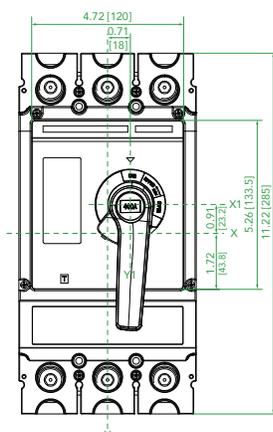
Unit: in [mm]



### RHD23N

Rotary Handle for M3

Unit: in [mm]



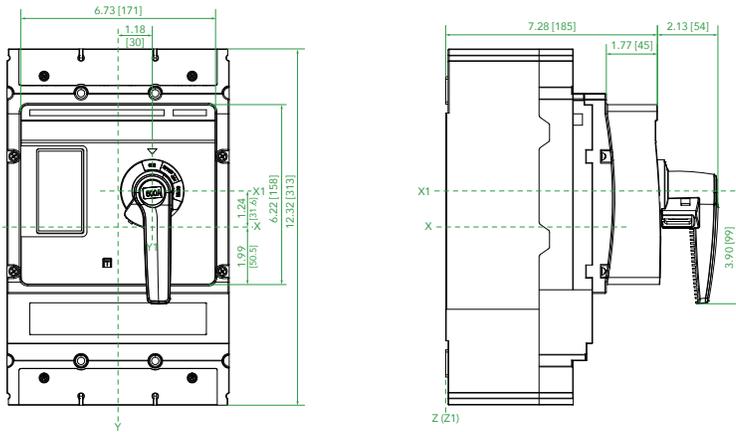
## Accessories For MCCB/MCP/MCS

### External Accessory Dimensions

#### RHD24N

##### Rotary Handle for M4

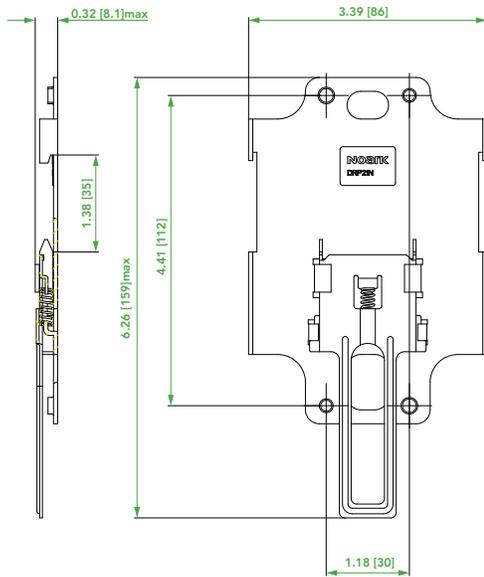
Unit: in [mm]



#### DRP21N

##### Din Rail Plate for M1

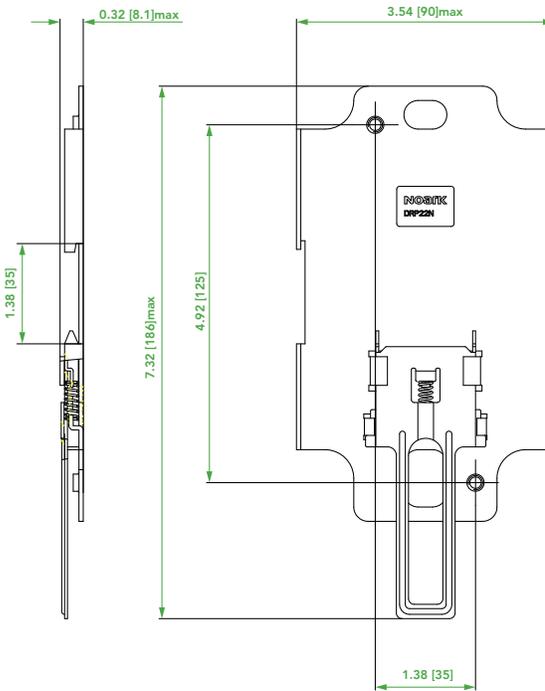
Unit: in [mm]



#### DRP22N

##### Din Rail Plate for M2

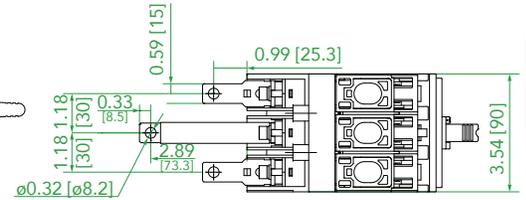
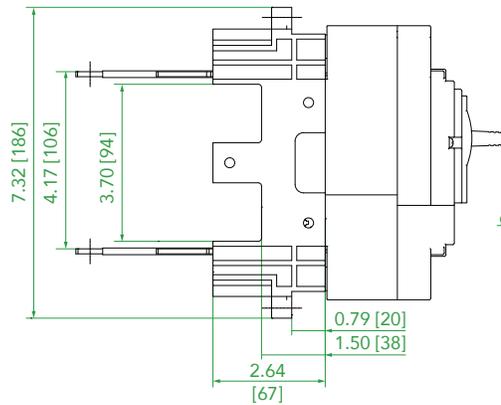
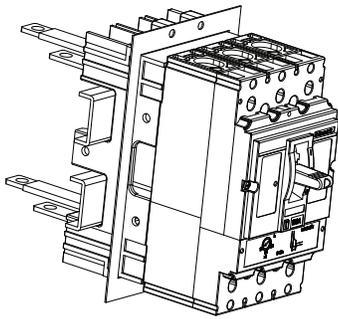
Unit: in [mm]



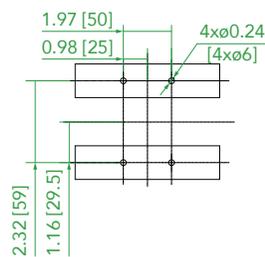
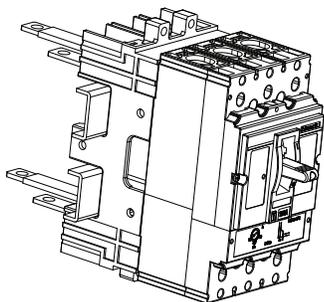
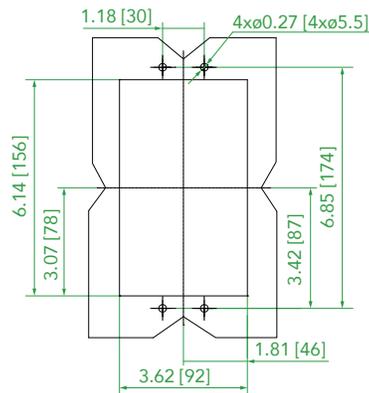
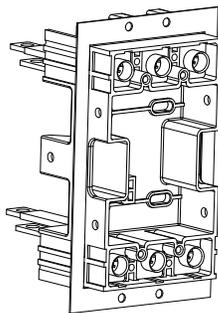
# Accessories For MCCB/MCP/MCS

## Connection Hardware Dimensions

**PIA21N**  
 Plug-In Base for M1  
 Unit: in [mm]



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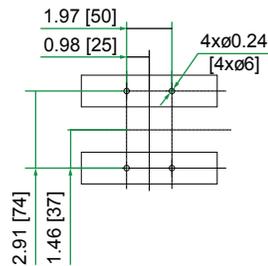
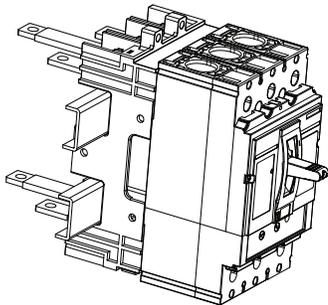
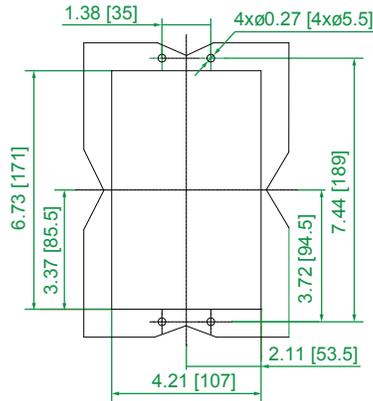
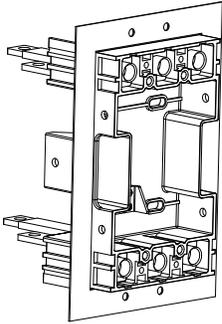
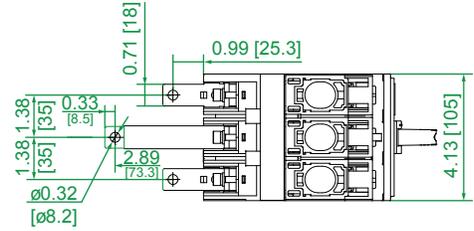
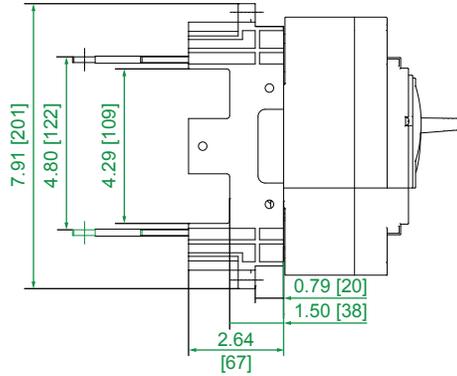
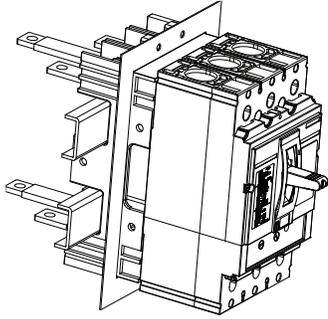
## Accessories For MCCB/MCP/MCS

### Connection Hardware Dimensions

#### PIA22N

Plug-In Base for M2

Unit: in [mm]



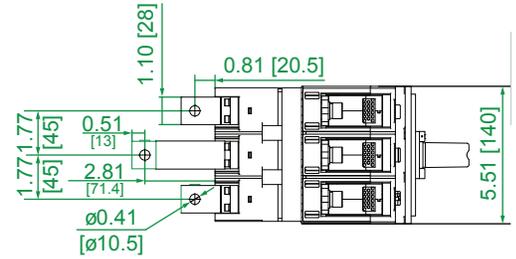
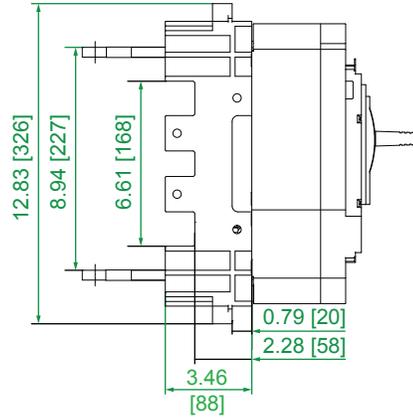
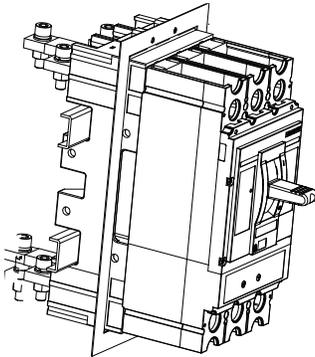
# Accessories For MCCB/MCP/MCS

## Connection Hardware Dimensions

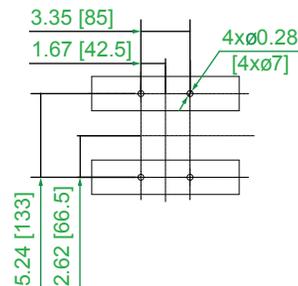
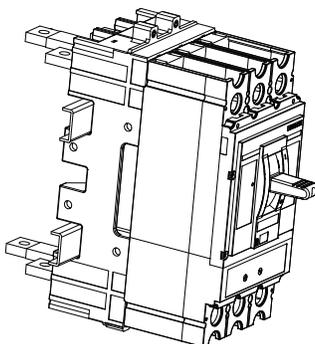
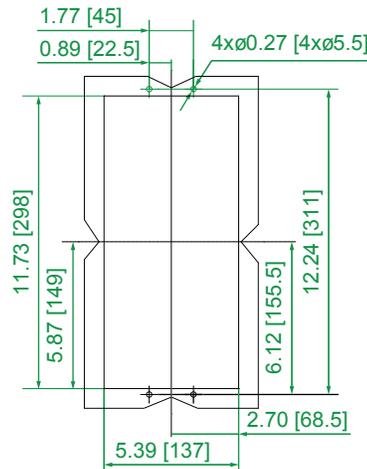
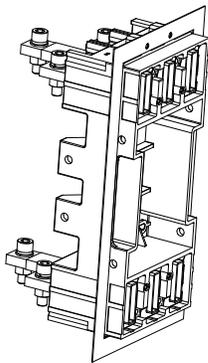
### PIA23N

Plug-In Base for M3

Unit: in [mm]



D



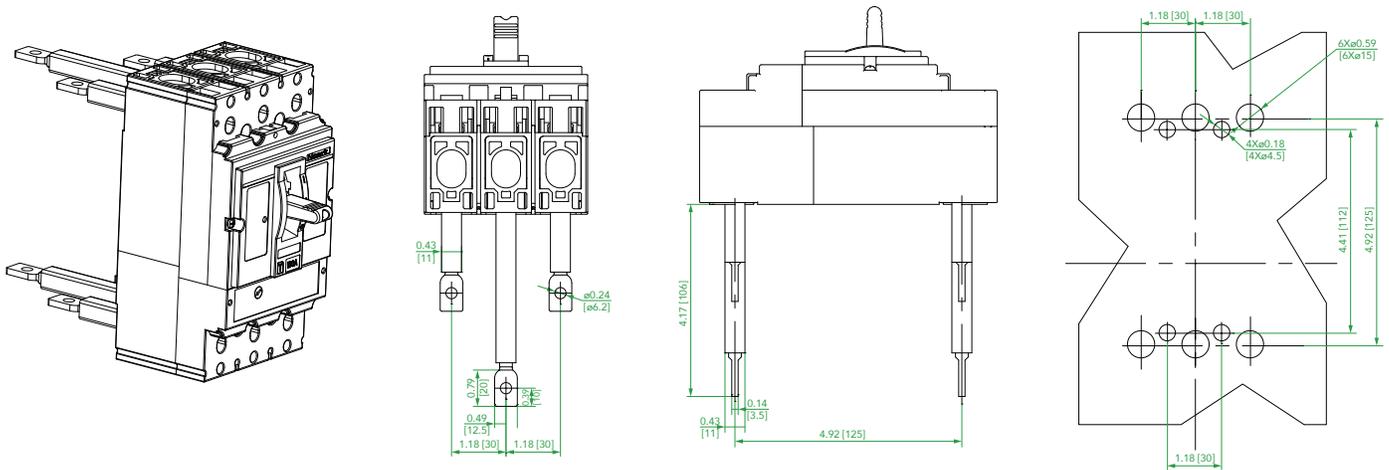
## Accessories For MCCB/MCP/MCS

### Connection Hardware Dimensions

#### RCP21N

Rear Connection Kit for M1

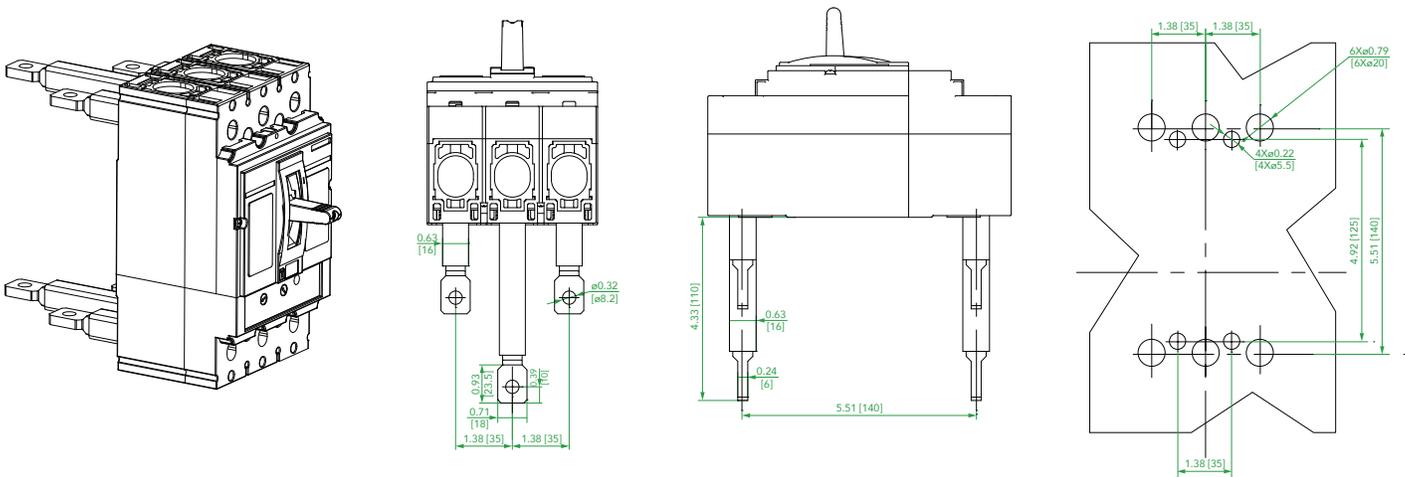
Unit: in [mm]



#### RCP22N

Rear Connection Kit for M2

Unit: in [mm]



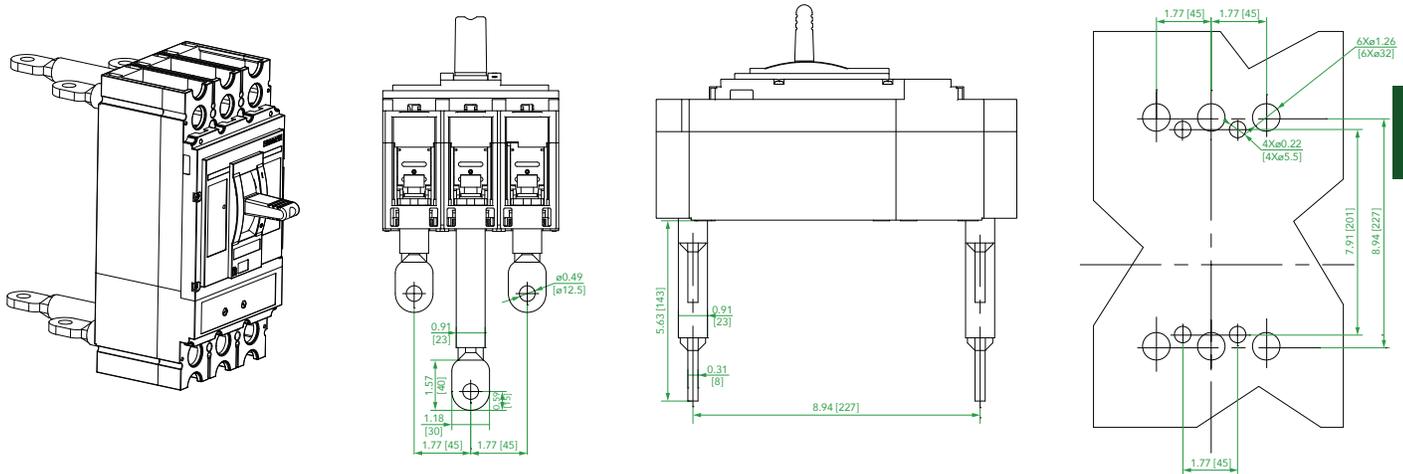
# Accessories For MCCB/MCP/MCS

## Connection Hardware Dimensions

### RCP23N

Rear Connection Kit for M3

Unit: in [mm]

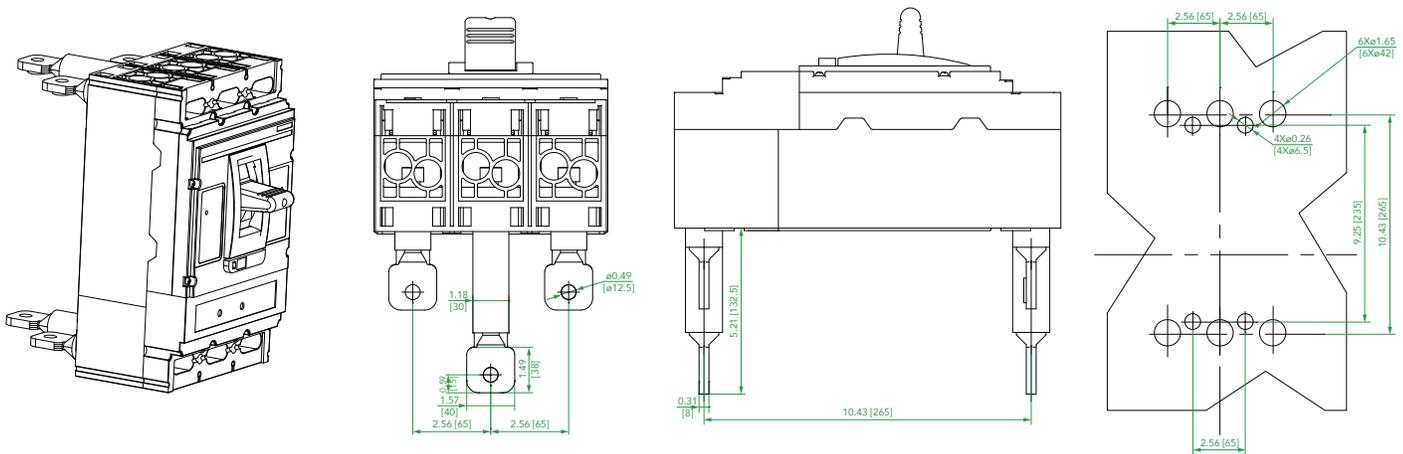


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### RCP24N

Rear Connection Kit for M4

Unit: in [mm]

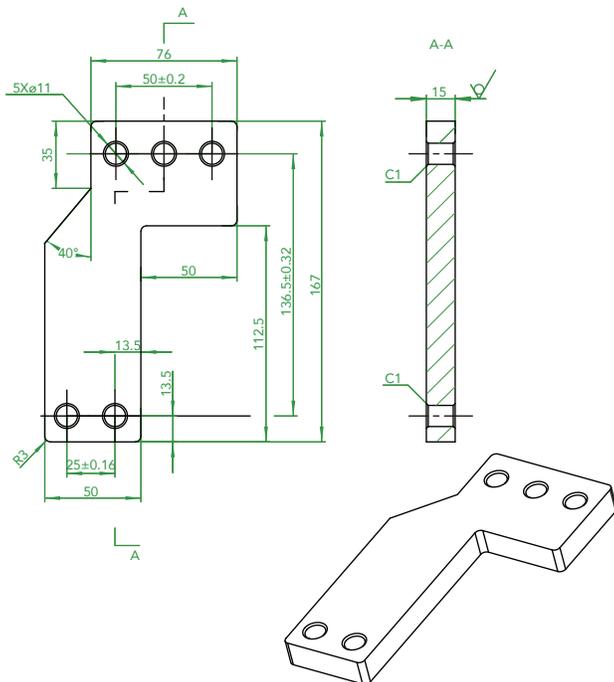
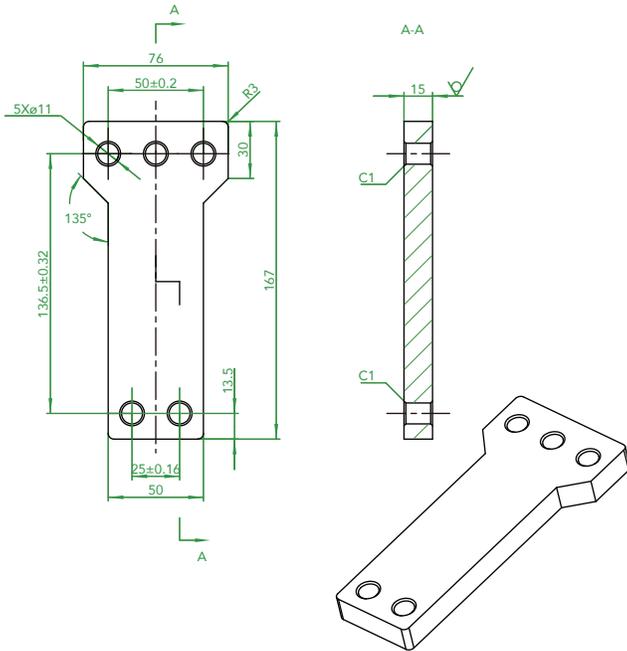


## Accessories For MCCB/MCP/MCS

### Connection Hardware Dimensions

#### EB266

Unit: in [mm]

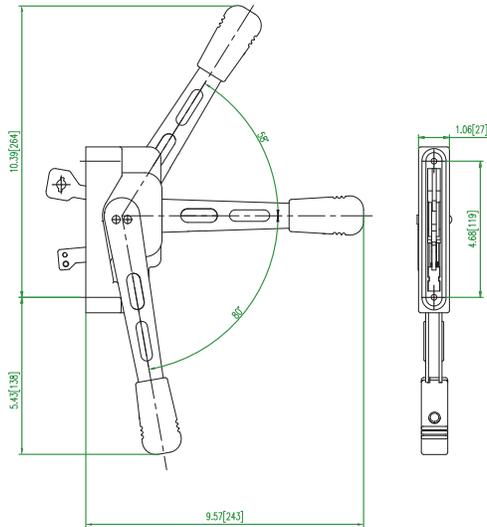


# Accessories For MCCB/MCP/MCS

## Flange Handle Mechanism Dimensions

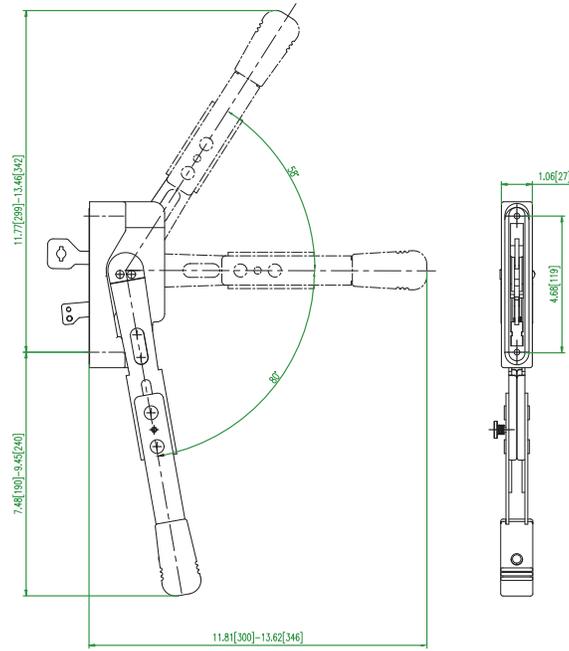
### FH4XC

Unit: in [mm]



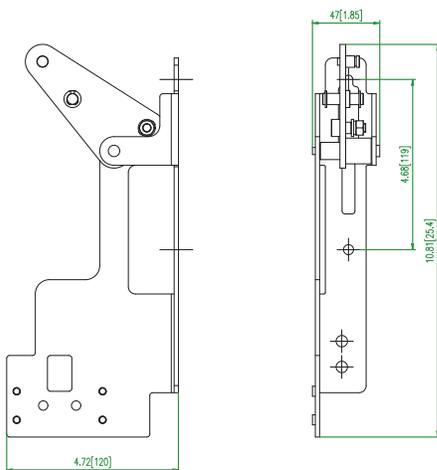
### FH4XD

Unit: in [mm]



### OMC

Unit: in [mm]

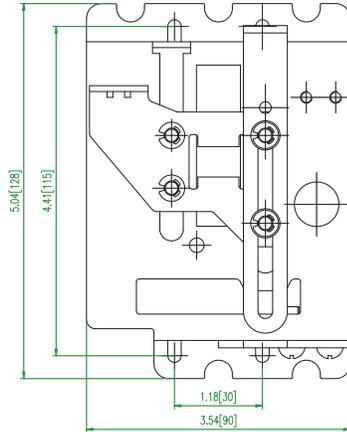


## Accessories For MCCB/MCP/MCS

### Flange Handle Mechanism Dimensions

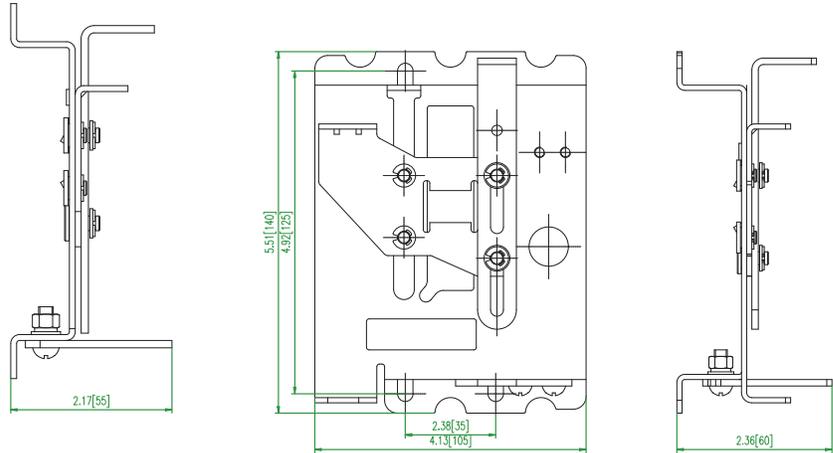
#### OMB21

Unit: in [mm]



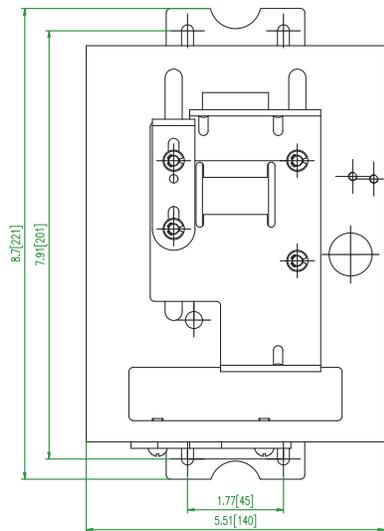
#### OMB22

Unit: in [mm]



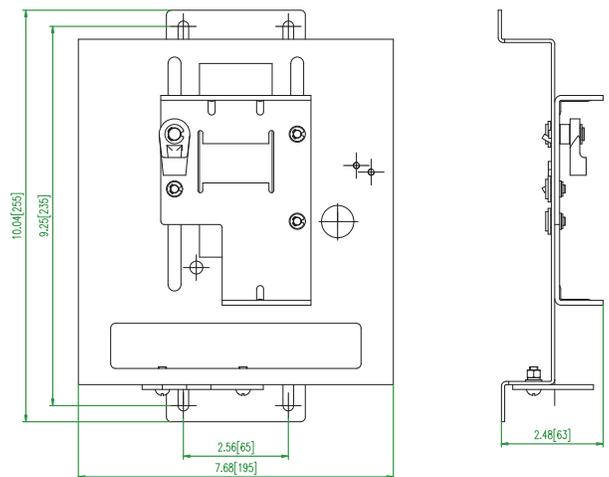
#### OMB23

Unit: in [mm]



#### OMB24

Unit: in [mm]

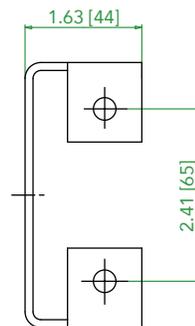
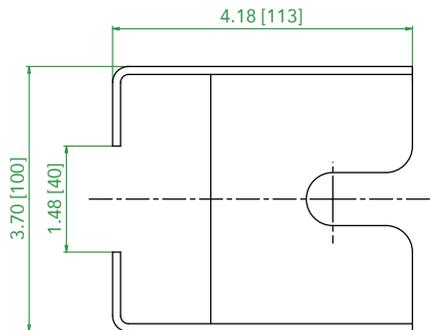
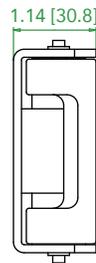
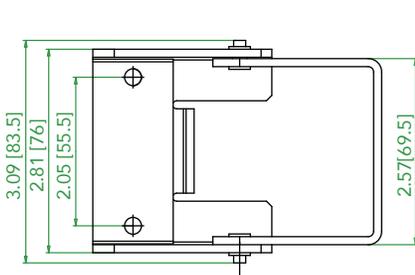


# Accessories For MCCB/MCP/MCS

## Flange Handle Mechanism Dimensions

### OMB26

Unit: in [mm]



D

## Accessories For MCCB/MCP/MCS

### Neutral Current Sensor Dimensions

**NCS26N**  
Unit: in [mm]

