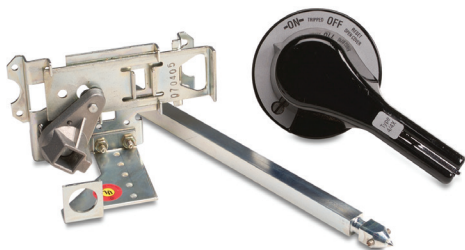# 3P Series Molded Case Circuit Breakers Accessories
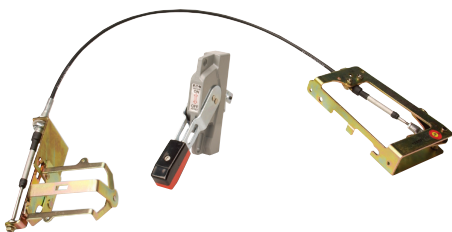
Field Mountable Accessories

GHMVD12B

HM1R12X

F0S03C

Rotary Handles

A rotary handle is available for each frame size of molded case circuit breaker.

The C-Series rotary handle (HM) is available for F, K, & L frame molded case breakers. These robust and durable handles include the following features:

- Suitable for use with NEMA 4/4X enclosures
- Handle, shaft, and mechanism made from all metal parts
- Large handle easily accommodates gloves
- Heavy Duty Metal locking hasp
- Door interlock and defeater
- Standard ON/OFF/Trip markings and a 45-degree rotation
- UL 489, CSA

The Universal rotary series handles (HMV) is available for G, F, K, & L frame molded case breakers. These handles include the following features:

- Suitable for use with NEMA 1/12 enclosures
- Composite Nylon handle with metal shaft, and mechanism
- Large handle easily accommodates gloves
- Access Handle Lock-Off by pressing arrow on handle insert
- Door interlock and defeater
- Global ON/OFF markings (I/ON, O/OFF) and TRIP indication on handle plus 90-degree rotation
- UL 489, IEC 947-1/-2, CSA

Rotary Handle Accessory Selection Guide

Part Number	Price	Description
GHMVD06B	$110.00	NEMA 1/12 black rotary handle for G-Frame MCCB. Shaft length: 6in [152.4 mm]
GHMVD12B	$123.00	NEMA 1/12 black rotary handle for G-Frame MCCB. Shaft length: 12in [304.8 mm]
FHMVD12B	$123.00	NEMA 1/12 black rotary handle for F-Frame MCCB. Shaft length: 12in [304.8 mm]
HM1R12X	$173.00	NEMA 4/4X black rotary handle for F-Frame MCCB. Shaft length: 12in [304.8 mm]
HM1R24X	$194.00	NEMA 4/4X black rotary handle for F-Frame MCCB. Shaft length: 24in [609.6 mm]
KHMVD12B	$175.00	NEMA 1/12 black rotary handle for K-Frame MCCB. Shaft length: 12in [304.8 mm]
HM3R12X	$212.00	NEMA 4/4X black rotary handle for K-Frame MCCB. Shaft length: 12in [304.8 mm]
HM3R24X	$237.00	NEMA 4/4X black rotary handle for K-Frame MCCB. Shaft length: 24in [609.6 mm]
LHMVD12B	$202.00	NEMA 1/12 black rotary handle for L-Frame MCCB. Shaft length: 12in [304.8 mm]
HM4R12X	$276.00	NEMA 4/4X black rotary handle for L-Frame MCCB. Shaft length: 12in [304.8 mm]
HM4R24X	$292.00	NEMA 4/4X black rotary handle for L-Frame MCCB. Shaft length: 24in [609.6 mm]

Flex Shaft™ Flexible Handle

Meeting crucial time limits for shutdown procedures is easier with an externally mounted handle. The flexible handle makes it possible to operate the circuit breaker externally and can be used in enclosures of varying depths and heights. It can be used with NEMA 1, NEMA 3R and NEMA 12 enclosures, and it accepts up to three padlock shackles. Each item includes a painted steel handle, breaker operating mechanism, and cable.

Note: A minimum bending radius of four inches is necessary for proper operation.

Flex Shaft™ Flexible Handle Accessory Selection Guide

Part Number	Price	Description
F0S03C	$473.00	NEMA 1/12 flex shaft cable operator for G-Frame MCCB. Cable length: 3ft [0.91 m]
F0S06C	$529.00	NEMA 1/12 flex shaft cable operator for G-Frame MCCB. Cable length: 6ft [1.83 m]
F1S03C	$529.00	NEMA 1/12 flex shaft cable operator for F-Frame MCCB. Cable length: 3ft [0.91 m]
F1S06C	$573.00	NEMA 1/12 flex shaft cable operator for F-Frame MCCB. Cable length: 6ft [1.83 m]
F3S03C	$631.00	NEMA 1/12 flex shaft cable operator for K-Frame MCCB. Cable length: 3ft [0.91 m]
F3S06C	$662.00	NEMA 1/12 flex shaft cable operator for K-Frame MCCB. Cable length: 6ft [1.83 m]
F4S04C	$721.00	NEMA 1/12 flex shaft cable operator for L-Frame MCCB. Cable length: 4ft [1.22 m]
F4S06C	$829.00	NEMA 1/12 flex shaft cable operator for L-Frame MCCB. Cable length: 6ft [1.83 m]

3P Series Molded Case Circuit Breakers Accessories

F0S03HP

High Performance Flex Shaft™ Flange Handles

These two-position flange handles feature external front mounting. Models are available for NEMA 1/3R/12 and 4/4X enclosures and for G-frame, F-frame, K-frame or L-frame model MCCBs. All models are lockable in the OFF position and are defeatable. The Flex Shaft handle will accept up to three padlock shackles, each with a maximum diameter of 0.375 in [9.5 mm]. Each item includes a high-strength nylon handle, breaker operating mechanism, and cable.

Flange Handle Accessory Selection Guide		
Part Number	**Price**	**Description**
F0S03HP	$309.00	3ft [0.91 m] cable length, NEMA 1/3R/12. For use with G-frame model MCCBs.
F0S06HP	$352.00	6ft [1.83 m] cable length, NEMA 1/3R/12. For use with G-frame model MCCBs.
F1S03HP	$352.00	3ft [0.91 m] cable length, NEMA 1/3R/12. For use with F-frame model MCCBs.
F1S06HP	$379.00	6ft [1.83 m] cable length, NEMA 1/3R/12. For use with F-frame model MCCBs.
F3S03HP	$429.00	3ft [0.91 m] cable length, NEMA 1/3R/12. For use with K-frame model MCCBs.
F3S06HP	$450.00	6ft [1.83 m] cable length, NEMA 1/3R/12. For use with K-frame model MCCBs.
F4S04HP	$504.00	4ft [1.22 m] cable length, NEMA 1/3R/12. For use with L-frame model MCCBs.
F4S06HP	$580.00	6ft [1.83 m] cable length, NEMA 1/3R/12. For use with L-frame model MCCBs.
F0S03HPX	$340.00	3ft [0.91 m] cable length, NEMA 4/4X. For use with G-frame model MCCBs.
F0S06HPX	$387.00	6ft [1.83 m] cable length, NEMA 4/4X. For use with G-frame model MCCBs.
F1S03HPX	$387.00	3ft [0.91 m] cable length, NEMA 4/4X. For use with F-frame model MCCBs.
F1S06HPX	$418.00	6ft [1.83 m] cable length, NEMA 4/4X. For use with F-frame model MCCBs.
F3S03HPX	$473.00	3ft [0.91 m] cable length, NEMA 4/4X. For use with K-frame model MCCBs.
F3S06HPX	$496.00	6ft [1.83 m] cable length, NEMA 4/4X. For use with K-frame model MCCBs.
F4S04HPX	$543.00	4ft [1.22 m] cable length, NEMA 4/4X. For use with L-frame model MCCBs.
F4S06HPX	$625.00	6ft [1.83 m] cable length, NEMA 4/4X. For use with L-frame model MCCBs.

Note: A minimum bending radius of four inches is necessary for proper operation.

For the latest prices, please check AutomationDirect.com.

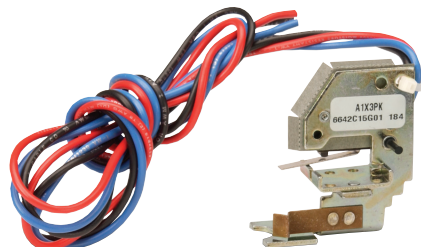# 3P Series Molded Case Circuit Breakers Accessories

Field Mountable Accessories

A1X3PK

Auxiliary Contact

The auxiliary contact provides circuit breaker contact status information by monitoring the position of the molded cross bar which contains the moving contact arms. The auxiliary switch is used for remote indication and interlock system verification, and consists of one SPDT switch housed in a plug-in module. Each SPDT switch has one 'a' and one 'b' contact. When the circuit breaker contacts are open, the 'a' contact is open and the 'b' contact is closed.

Note: Field installable auxiliary contacts are not available for the G and F frame breakers.

For G and F frame auxiliary contacts, order breakers with -AUX as part of the part number. Please see G and F-frame sections for available selections.
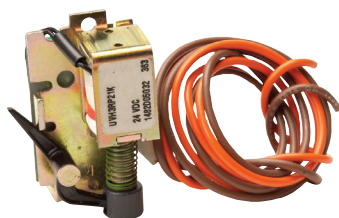
Auxiliary Contact Accessory Selection Guide

Part Number	Price	Description
A1X3PK	$310.00	Field installable auxiliary contact for K-Frame MCCB, SPDT, 18" pigtail leads
A1X4PK	$318.00	Field installable auxiliary contact for L-Frame MCCB, SPDT, 18" pigtail leads

K-Frame Electrical Ratings [1,2]

	Max Volts	Frequency	Max Amperes	Dielectric Withstand Voltage	Notes
K-Frame Auxiliary Switch	600	50/60 Hz	6	2500	1. Endurance: 5000 electrical operations plus 1000 mechanical operatons. 2. Pigtail wire size: 18 AWG (0.82 mm²) 3. Non-inductive load
	125	DC	0.50[3]		
	250	DC	0.25[3]		

L-Frame Electrical Ratings [1,2]

	Max Volts	Frequency	Max Amperes	Dielectric Withstand Voltage	Notes
L-Frame Auxiliary Switch	600	50/60 Hz	6	2500	1. Endurance: 5000 electrical operations plus 1000 mechanical operatons. 2. Pigtail wire size: 18 AWG (0.82 mm²) 3. Non-inductive load
	125	DC	0.50[3]		
	250	DC	0.25[3]		

UVH3LP21K

Undervoltage Release

This product monitors a voltage (typically a line voltage) and trips the circuit breaker when the voltage falls to between 70% and 35% of the solenoid coil rating. It consists of a continuous rated solenoid, with a plunger and tripping lever mounted in a plug-in module.

Note: The undervoltage release is a pre-installed accessory on G-Frame and F-Frame breakers.

Undervoltage Release Accessory Selection Guide

Part Number	Price	Description
UVH3LP08K	$481.00	Field installable 110 - 127 VAC undervoltage release for K-Frame MCCB
UVH4LP08K	$513.00	Field installable 110 - 127 VAC undervoltage release for L-Frame MCCB
UVH3LP21K	$481.00	Field installable 24 VDC undervoltage release for K-Frame MCCB
UVH4LP21K	$550.00	Field installable 24 VDC undervoltage release for L-Frame MCCB

	Supply Voltage	Dropout Voltage		Pickup Voltage	VA	Notes
		Min	Max	Max		
K-Frame Undervoltage Release Mechanism	24 VDC	8.4	16.8	20.4	3.1	1. Endurance: 5000 electrical operations plus 1000 mechanical operatons. 2. 50/60 Hz
	110 VAC[2]				1.8	
	120 VAC[2]	44.5	77.0	93.5	2.1	
	127 VAC[2]				2.4	

	Supply Voltage	Dropout Voltage		Pickup Voltage	VA	Notes
		Min	Max	Max		
L-Frame Undervoltage Release Mechanism	24 VDC	8.4	16.8	20.4	3.1	1. Endurance: 5000 electrical operations plus 1000 mechanical operatons. 2. 50/60 Hz
	110 VAC[2]				1.8	
	120 VAC[2]	44.5	77.0	93.5	2.1	
	127 VAC[2]				2.4	

3P Series Molded Case Circuit Breakers Accessories

Field Mountable Accessories

Shunt Trip

The Shunt Trip provides remote controlled tripping of the circuit breaker. Consisting of an intermittent rated solenoid with a tripping plunger and a cutoff switch assembled to a plug-in module, shunt trip coils are designed to be applied at specific AC or DC voltages.

SNT3P04K

Shunt Trip Accessory Selection Guide		
Part Number	**Price**	**Description**
SNT3P11K	$481.00	Field installable 110/240 VAC / 110/125 VDC shunt trip for K-Frame MCCB.
SNT4RP11K	$550.00	Field installable 110/240 VAC shunt trip for L-Frame MCCB
SNT3P04K	$481.00	Field installable 12/24 VAC/DC shunt trip for K-Frame MCCB
SNT4RP03K	$550.00	Field installable 12/24 VAC/DC shunt trip for L-Frame MCCB

	Supply Voltage	Min Operating Voltage	VA	Supply Voltage	Min Operating Voltage	VA	Notes
	VAC 50/60 Hz			VDC			
K-Frame Shunt Trip	12	9	45	12	8.4	35	1. Endurance: 5000 electrical operations plus 1000 mechanical operatons. 2. Approx. unlatching time: 6 ms Approx. total circuit breaker contact opening time: 8 ms
	24		200	24		170	
	110	60	100	110	77	110	
	120		120	120	77	130	
	127		140	125	77	140	
	208		420	–	–	–	
	220		470	–	–	–	
	240		550	–	–	–	

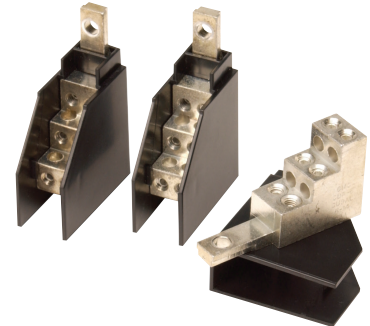|	Supply Voltage	Min Operating Voltage	VA	Supply Voltage	Min Operating Voltage	VA	Notes
	VAC 50/60 Hz			VDC			
L-Frame Shunt Trip	12	9	45	12	9	35	1. Endurance: 5000 electrical operations plus 1000 mechanical operatons. 2. Approx. unlatching time: 6 ms Approx. total circuit breaker contact opening time: 18 ms
	24		200	24		170	
	110	60	100	–	–	–	
	120		120	–	–	–	
	127		140	–	–	–	
	208		420	–	–	–	
	220		470	–	–	–	
	240		550	–	–	–	

3P Series Molded Case Circuit Breakers Accessories

Field Mountable Accessories

Six-wire Connector

This is a field installable multi-wire connector which allows six wires to be connected to the load side (OFF) end terminals. It is used to distribute the load from the circuit breaker to multiple devices without the use of separate distribution terminal blocks. UL listed for copper only as used on the load side (OFF) end. Includes mounting hardware, insulators and tin-plated aluminum connectors.

Six-wire Connector Accessory Selection Guide		
Part Number	Price	Description
3TA100G6K	$87.00	For G-Frame MCCBs. Pkg. of 3. Wire size: 14 - 6 AWG, copper
3TA150F6K	$87.00	For F-Frame MCCBs. Pkg. of 3. Wire size: 14 - 6 AWG, copper

3TA100G6K

Multi-Wire Box Type Wiring Lug

These multi-wire lugs allow for cost and space savings within a panel and allow for improved short-circuit ratings by eliminating the need for power distribution blocks. Designed for load-side mounting. Choose for G-frame, F-frame, or K-frame model MCCBs. Mounting hardware and insulators included. Package of 3.
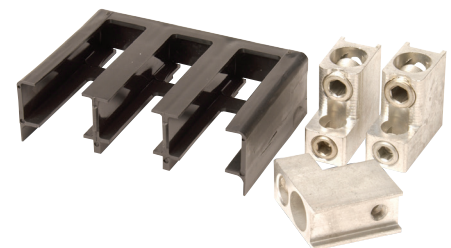
Multi-Wire Box Type Wiring Lug Selection Guide		
Part Number	Price	Description
3TA100G3K	$72.00	100A, 3 openings, #14-2 AWG copper only. For use with G-frame model MCCBs.
3TA150F3K	$80.00	225A, 3 openings, #14-2 AWG copper only. For use with F-frame model MCCBs.
3TA400K3K	$161.00	400A, 3 openings, #14-2/0 AWG copper only. For use with K-frame model MCCBs.
3TA400K6K	$161.00	400A, 6 openings, #14-3 AWG copper only. For use with K-frame model MCCBs.

3TA100G3K

Replacement Lug Kit

Line and load terminals provide wire connecting capabilities for specific ranges of continuous current ratings and wire types. Replacement lugs will accept wire types Cu/Al as standard.

Replacement Lug Kit Accessory Selection Guide		
Part Number	Price	Description
3TA225FD	$129.00	Replacement lug kit for F-Frame MCCB. Wire range (1) #4-4/0 (25-95 mm²). Package of (3) terminals.
3TA401K	$135.00	Replacement lug kit for K-Frame MCCB. Wire range (2) 2/0-250 kcmil or (1) 2/0-500 kcmil (70-240 mm²). 3-pole kit (one terminal per pole and one terminal cover).
3TA603LDK	$166.00	Replacement lug kit for L-Frame MCCB. 3-pole kit (one terminal per pole and one terminal cover). Wire range 400-500 AWG (185-240 m²), 2 conductors.

Note: G-frame terminals are factory-installed only. No replacement terminals available.

3TA401K

Din Rail Mounting Clip

Din Rail Mount Clip Accessory Selection Guide		
Part Number	Price	Description
GDIN	$15.00	Clip for mounting G-Frame to 35 mm Din rail. Mounting hardware included. Pkg of 1

GDIN

3P Series Molded Case Circuit Breakers Accessories

Field Mountable Accessories

NEMA 12 Safety Door Hardware

Type C361 door interlocking safety handle kits are designed for use with AutomationDirect 3P series MCCBs and flexible handle when mounted in an SDN12, or equivalent, enclosure. These handles secure the SDN12 enclosure, protecting against unauthorized entry while the MCCB is in the ON position. Use them on enclosures with right-side flanges only and material thickness from 16 gauge through 3/16 in. All mounting hardware is included for enclosures up to 40in [101.6 cm] tall. The addition of the C361KR roller kit is necessary for enclosures taller than 40in [101.6 cm] that require a 3-point latch. See SDN12 Enclosures section for enclosure specifications.

Handle in OFF position

Release Screw

Safety Handle shown on enclosure

Safety Door Hardware Selection Guide		
Part Number	*Price*	*Description*
C361KJ4	$360.00	Handle length: 4in [10.16 cm]. Mounting hardware included for enclosures up to 40in [101.6 cm] tall. For taller enclosures that require a 3-point latch, the C361KR (purchase separately) will also be needed.
C361KJ6	$378.00	Handle length: 6in [15.24 cm]. Mounting hardware included for enclosures up to 40in [101.6 cm] tall. For taller enclosures that require a 3-point latch, the C361KR (purchase separately) will also be needed.
C361KR	$77.00	Door interlocking safety roller kit for use with the C361KJ4 and C361KJ6 safety handle kits when the SDN12 series enclosure is taller than 40in [101.6 cm] and 3-point latching is required. Kit includes roller and all hardware.

Note: The 1/4" x 1/2" standard mill rectangular locking bar is not supplied with these kits. The bar is supplied with the enclosures.