

Motor Circuit Protectors

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Motor Circuit Protectors (MCP)

Product Description

Designated as Eaton's Types GMCP and HMCP, the instantaneous-only motor circuit protector (MCP) is available in ratings from 3 A to 1200 A for motor starter sizes 0 through 8.

An innovative design of internal components allows higher MCP-starter combination interrupting ratings. The MCP is marked to permit proper electrical application within the assigned equipment ratings.

Standards and Certifications

The MCP is designed to comply with the applicable requirements of Underwriters Laboratories Standard UL 489, Canadian Standards Association Standard C22.2 No. 5.1, and International Electrotechnical Commission Recommendations IEC 157-1.

The MCP is a recognized component (UL File E7819) and complies with the applicable requirements of Underwriters Laboratories Standard UL 489. It is also designed to comply with the applicable requirements of Canadian Standards Association Standard C22.2 No. 5.1, International Electrotechnical Commission Recommendations IEC 157-1, and nameplates bear the CE marking.



Note: Interrupting ratings are dependent on starter it is used with.

Catalog Number Selection

This information is presented only as an aid to understanding catalog numbers. It is not to be used to build catalog numbers for circuit breakers or trip units.

Motor Circuit Protector

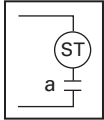
HMCP 003 A0 C			
Motor Circuit Protective Type	Continuous Ampere Rating	Magnetic Trip Range/ NEMA Starter Size	Suffix
HMCP = Three-pole	003	A0 = 9–30/0	C = Non-aluminum terminals
HM2P = Two-pole ^①	007	C0 = 21–70/0	W = Without terminals
HMCP3 = Three-pole	015	E0 = 45–150/0	X = Load terminals only
	025	D0 = 40–60/0	Y = Line terminals only
	030	H1 = 90–300/1	S = Stainless steel terminals (150A frame only)
	050	G2 = 80–120/2	No Suffix: Standard terminals on line and load
	070	K2 = 50–500/2	
	100	J2 = 115–170/2	
	150	M2 = 210–700/2	
	250	L3 = 160–240/3	
	400	R3 = 300–1000/3	
		T4 = 450–1500/4	
		U4 = 750–2500/4	
		A5 = 350–700/5	
		C5 = 450–900/5	
		D5 = 500–1000/5	
		F5 = 625–1250/5	
		G5 = 750–1500/5	
		J5 = 875–1750/5	
		K5 = 1000–2000/5	
		L5 = 1125–2250/5	
		W5 = 1250–2500/5	
		N5 = 1500–3000/5	
		R5 = 1750–3500/5	
		X5 = 2000–4000/5	
		Y5 = 2250–4500/5	
	600	L6 = 1800–6000/6 (electronic)	
		X6 = 500–2500/6 (electronic)	
		Y6 = 1000–4000/6 (electronic)	
	800	X7 = 1600–6400/7 (electronic)	
	1200	Y8 = 2400–9600/8 (electronic)	

Motor Circuit Protector

GMCP 003 A0 C			
Motor Circuit Protective Device	Continuous Ampere Rating	Magnetic Trip Range/NEMA Starter Size	Suffix
GMCP = Three-pole	003	A0 = 15–30/0	C = Non-aluminum terminals
	007	C0 = 35–70/0	
	015	E0 = 75–150/0	
	030	H1 = 150–300/1	
	050	K2 = 250–500/2	
	060	J2 = 300–600/2	
	063	M2 = 320–630/2	

Note

^① On J- and K-Frame HMCPs only.

Shunt Trip**Shunt Trip****G-Frame Shunt Trip (LH Three-Pole Only)**

Electrical Ratings				
Volts	Frequency	Amperes	Suffix Number	Catalog Number
120	50/60 Hz	1.1	S1	1373D62G01
240	50/60 Hz	2.1	S2	1373D62G02
12	DC	2.8	S3	1373D62G15
24	DC	5.7	S4	1373D62G16
24	60 Hz	—	S7	1373D62G20

F-Frame and HMCP (F) Shunt Trip

Voltage Rating (AC Frequency = 50/60 Hz)	Factory Mounted Connection Type and Location			Factory Installation Kit ^①		
	18-Inch (457.2 mm) Pigtail Leads ^②			Terminal Block	Pigtail Leads	Terminal Block
	Same Side	Rear ^③	Opposite Side	Same Side		
	Suffix Number	Suffix Number	Suffix Number	Suffix Number	Catalog Number	Catalog Number
Left-Pole Mounting AC/DC Ratings						
12–24 Vac or Vdc	S01	S02	S03	S04	SNT1LP03K	SNT1LT03K
48–127 Vac or 48–60 Vdc ^④	S05	S06	S07	S08	SNT1LP08K	SNT1LT08K
208–380 Vac or 110–127 Vdc	S09	S10	S11	S12	SNT1LP12K	SNT1LT12K
415–600 Vac or 220–250 Vdc	S13	S14	S15	S16	SNT1LP18K	SNT1LT18K
Right- or Neutral-Pole Mounting AC/DC Ratings ^⑤						
12–24 Vac or Vdc	S17	S18	S19	S20	SNT1RP03K	SNT1RT03K ^⑥
48–127 Vac or 48–60 Vdc ^④	S21	S22	S23	S24	SNT1RP08K	SNT1RT08K ^⑥
208–380 Vac or 110–127 Vdc	S25	S26	S27	S28	SNT1RP12K	SNT1RT12K ^⑥
415–600 Vac or 220–250 Vdc	S29	S30	S31	S32	SNT1RP18K	SNT1RT18K ^⑥

Notes

^① Not listed with Underwriters Laboratories, for field installation.

^② Pigtail wire size: 18 AWG (0.82 mm²).

^③ Standard pigtail lead exit location.

^④ 120 Vac marked suitable for ground fault protection devices.

^⑤ Standard mounting location.

^⑥ Not for use on four-pole circuit breakers.

G-Frame circuit breakers are factory sealed. Underwriters Laboratories requires that internal accessories be installed at the factory.

Internal accessories are UL listed for factory installation under E7819.

Where local codes and standards permit and UL listing is not required, internal accessories can be field installed.

Accessory installation should be done before the circuit breaker is mounted and connected.

J-Frame and HMCP (J) Shunt Trip

Voltage Rating (AC Frequency = 50/60 Hz)	Factory Mounted Connection Type and Location 18-Inch (457.2 mm) Pigtail Leads			Terminal Block Same Side Suffix Number	Field Mounted Field Installation Kits ①	
	Same Side	Rear ②	Opposite Side		Pigtail Leads	Terminal Block
	Suffix Number	Suffix Number	Suffix Number		Catalog Number	Catalog Number
	Left-Pole Mounting AC/DC Ratings ②					
12–24 Vac or Vdc	S41	S42	S43	S44	SNT2P04K	SNT2T04K
48–60 Vac or Vdc	S49	S50	S51	S52	SNT2P06K	SNT2T06K
110–240 Vac or 110–125 Vdc ③	S09	S10	S11	S12	SNT2P11K	SNT2T11K
380–440 Vac or 220–250 Vdc	S13	S14	S15	S16	SNT2P14K	SNT2T14K
480–600 Vac	S17	S18	S19	S20	SNT2P18K	SNT2T18K
Right- or Neutral-Pole Mounting AC/DC Ratings						
12–24 Vac or Vdc	S45	S46	S47	S48	SNT2P04K	SNT2T04K ④
48–60 Vac or Vdc	S53	S54	S55	S56	SNT2P06K	SNT2T06K ④
110–240 Vac or 110–125 Vdc ③	S29	S30	S31	S32	SNT2P11K	SNT2T11K ④
380–440 Vac or 220–250 Vdc	S33	S34	S35	S36	SNT2P14K	SNT2T14K ④
480–600 Vac	S37	S38	S39	S40	SNT2P18K	SNT2T18K ④

K-Frame and HMCP (K) Shunt Trip

Voltage Rating (AC Frequency = 50/60 Hz)	Factory Mounted Connection Type and Location 18-Inch (457.2 mm) Pigtail Leads				Field Mounted Field Installation Kits ^①	
				Terminal Block	Pigtail Leads	Terminal Block
	Same Side	Rear ^②	Opposite Side	Same Side		
	Suffix Number	Suffix Number	Suffix Number	Suffix Number	Catalog Number	Catalog Number
Left-Pole Mounting AC/DC Ratings ^②						
12–24 Vac or Vdc	S41	S42	S43	S44	SNT3P04K	SNT3T04K
48–60 Vac or Vdc	S49	S50	S51	S52	SNT3P06K	SNT3T06K
110–240 Vac or 110–125 Vdc ^③	S09	S10	S11	S12	SNT3P11K	SNT3T11K
380–440 Vac or 220–250 Vdc	S13	S14	S15	S16	SNT3P14K	SNT3T14K
480–600 Vac	S17	S18	S19	S20	SNT3P18K	SNT3T18K
Right- or Neutral-Pole Mounting AC/DC Ratings ^{⑤⑥}						
12–24 Vac or Vdc	S45	S46	S47	S48	SNT3P04K	SNT3T04K ^④
48–60 Vac or Vdc	S53	S54	S55	S56	SNT3P06K	SNT3T06K ^④
110–240 Vac or 110–125 Vdc ^③	S29	S30	S31	S32	SNT3P11K	SNT3T11K ^④
380–440 Vac or 220–250 Vdc	S33	S34	S35	S36	SNT3P14K	SNT3T14K ^④
480–600 Vac	S37	S38	S39	S40	SNT3P18K	SNT3T18K ^④

Notes

- ① Listed with Underwriters Laboratories for field installation under E64983.
- ② Standard mounting location—leads exit rear of breaker.
- ③ Suitable for use with Class 1 ground fault sensing element.
- ④ Not for use on four-pole circuit breakers.
- ⑤ For use with KT (thermal-magnetic) trip units only.
- ⑥ Breakers with K-Frame OPTIM 550 can only accept accessories in left pole.

L-, HMCP (L) and (M) Frames and Shunt Trip

Voltage Rating (AC Frequency = 50/60 Hz)	Factory Mounted Connection Type and Location 18-Inch (457.2 mm) Pigtail Leads				Field Mounted Field Installation Kits ^①	
	Same Side Suffix Number	Rear ^② Suffix Number	Opposite Side Suffix Number	Terminal Block Same Side Suffix Number	Pigtail Leads Catalog Number	Terminal Block Catalog Number
Left-Pole Mounting AC/DC Ratings ^②						
12–24 Vac or Vdc	S01	S02	S03	S04	SNT4LP03K	SNT4LT03K
48–60 Vac	S05	S06	S07	S08	SNT4LP05K	SNT4LT05K
48–60 Vdc	S85	S86	S87	—	SNT4LP23K	SNT4LT23K
110–240 Vac	S09	S10	S11	S12	SNT4LP11K	SNT4LT11K
110–125 Vdc	S41	S42	S43	S44	SNT4LP26K	SNT4LT26K
380–440 Vac or 220–250 Vdc	S13	S14	S15	S16	SNT4LP14K	SNT4LT14K
480–600 Vac	S17	S18	S19	S20	SNT4LP18K	SNT4LT18K
Right-Pole Mounting AC/DC Ratings ^③						
12–24 Vac or Vdc	S21	S22	S23	S24	SNT4RP03K	SNT4RT03K
48–60 Vac	S25	S26	S27	S28	SNT4RP05K	SNT4RT05K
48–60 Vdc	S88	S89	S90	—	SNT4RP23K	SNT4RT23K
110–240 Vac	S29	S30	S31	S32	SNT4RP11K	SNT4RT11K
110–125 Vdc	S45	S46	S47	S48	SNT4RP26K	SNT4RT26K
380–440 Vac or 220–250 Vdc	S33	S34	S35	S36	SNT4RP14K	SNT4RT14K
480–600 Vac	S37	S38	S39	S40	SNT4RP18K	SNT4RT18K

Notes

^① Listed with Underwriters Laboratories, for field installation under E64983.

^② Standard mounting location—leads exit rear of breaker.

^③ For use with LT (thermal-magnetic) three-pole trip units only.