

## Motor Circuit Protectors



*Motor Circuit Protectors*

## Product Description

Designated as Eaton's Cutler-Hammer 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. 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.

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.

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.

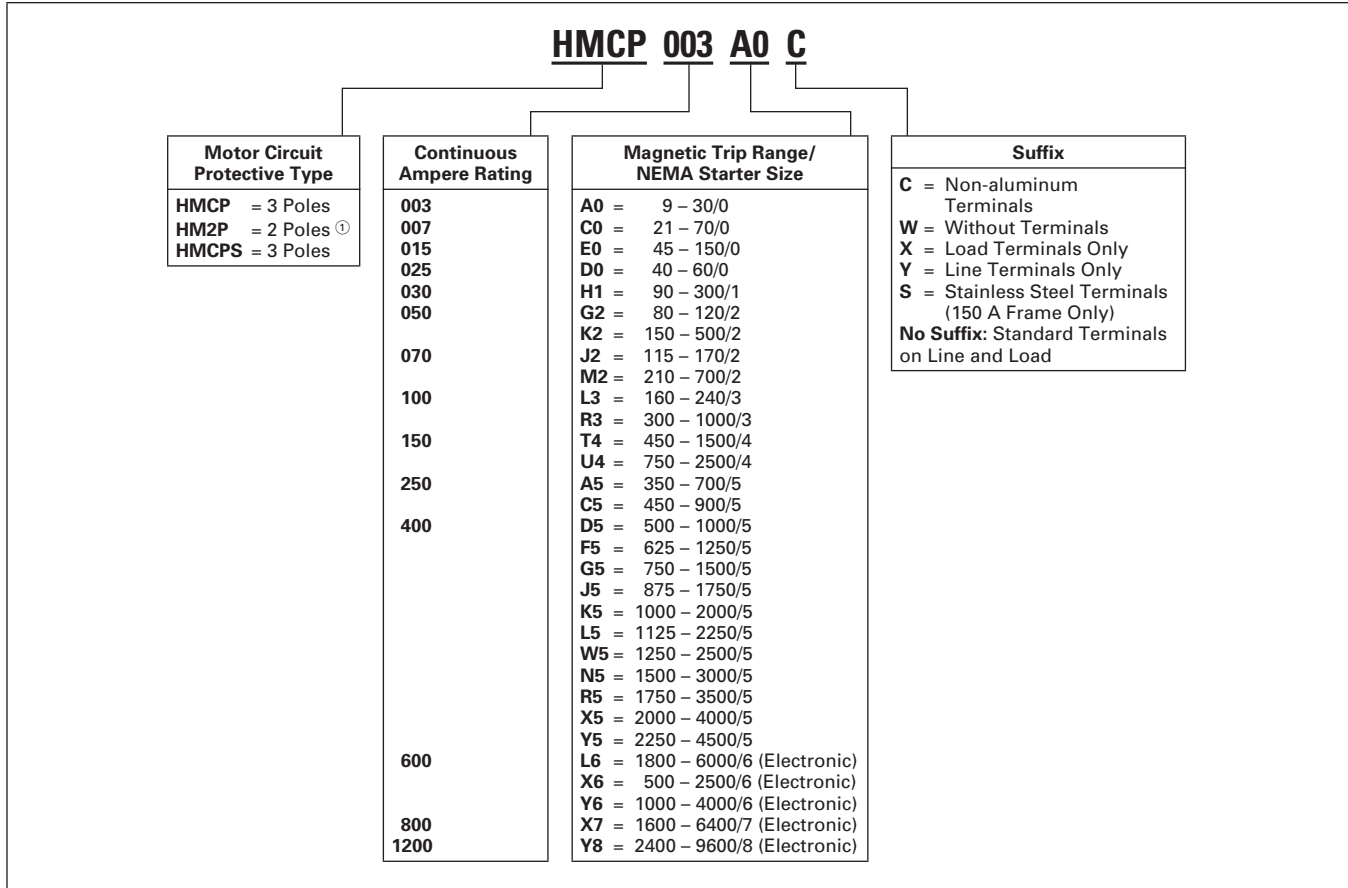
**Note:** Interrupting ratings are dependent on starter it is used with.

Product Selection

Product Selection

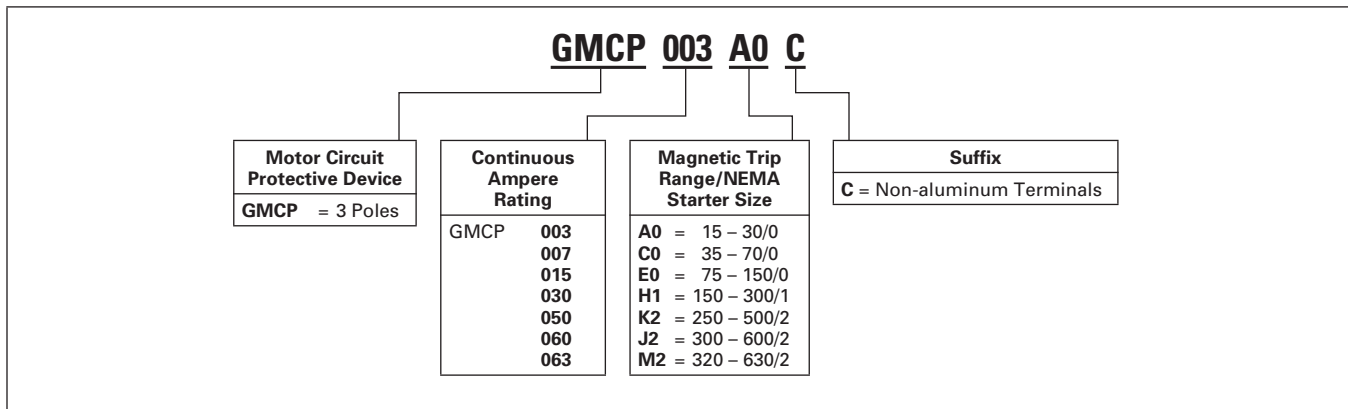
This information is presented only as an aid to understanding catalog numbers. It is not to be used to build catalog numbers for circuit breakers or trip units.

Table 12-287. Motor Circuit Protector Catalog Numbering System



① On J- and K-Frame HMCPs only.

Table 12-288. Motor Circuit Protector Catalog Numbering System



**Product Selection**

**G-Frame**

**Table 12-289. 480 Vac Maximum, 600Y/347 Vac**

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) ①	MCP Trip Setting	MCP Catalog Number	Price U.S. \$
0	3	A	1.1 – 1.2	15	GMCP003A0C	
		B	1.3 – 1.5	18		
		C	1.6 – 1.7	21		
		D	1.8 – 1.9	24		
		E	2.0 – 2.2	27		
		F	2.3 – 2.5	30		
0	7	A	2.6 – 3.1	35	GMCP007C0C	
		B	3.2 – 3.6	42		
		C	3.7 – 3.9	49		
		D	4.3 – 4.7	56		
		E	4.8 – 5.2	63		
		F	5.3 – 5.7	70		
0	15	A	5.7 – 6.8	75	GMCP015E0C	
		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		
1	30	A	11.5 – 13.7	150	GMCP030H1C	
		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		
2	50	A	19.3 – 22.9	250	GMCP050K2C	
		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		
3	60	A	23.1 – 27.5	300	GMCP060J2C	
		B	27.7 – 32.2	360		
		C	32.3 – 36.7	420		
		D	36.9 – 41.4	480		
		E	41.5 – 46.0	540		
		F	46.2 – 50.5	600		
3	63	A	24.2 – 32.1	320	GMCP063M2C	
		B	29.1 – 34.8	380		
		C	33.9 – 39.4	440		
		D	38.8 – 46.4	500		
		E	43.6 – 48.9	570		
		F	48.5 – 53.7	630		

① Motor FLA ranges are typical. The corresponding trip setting is at 13 x the minimum FLA value shown. Where a 13 x setting is required for an intermediate FLA value, alternate Cam settings and/or MCP ratings should be used.

**Note:** All GMCP 3 – 63 A come with line and load steel body terminals for Cu only wire. Refer to **Table 12-120** on **Page 12-71** under Optional Terminal Types.

**Note:** UL recognized and CSA approved.

## Accessories

**Modifications for GMCP**

Internal accessories must be factory installed.

**Table 12-290. Internal Accessories** ①

Type Accessory	Electrical Ratings			Contact Arrangement	Factory Suffix	Style Number	Adder U.S. \$
	Volts	Frequency	Amperes				
Shunt Trip ②	120	50/60 Hz	1.1	—	S5	1373D62G18	
Shunt Trip ②	240	50/60 Hz	2.1	—	S6	1373D62G19	
Auxiliary Switch ③	240	50/60 Hz	6.0	1A/1B	A3	1288C74G03	
Auxiliary Switch ③	240	50/60 Hz	6.0	2A/2B	A6	1288C73G03	
Alarm Switch ③	240	50/60 Hz	6.0	Make/Break	B3	1288C75G03	
Auxiliary Switch/Alarm Switch Combination ③	240	50/60 Hz	6.0	1A/1B Make/Break	B13	1288C76G09	

① Only one accessory may be installed in GMCP.

② LH only.

③ RH only.

**Note:** No UVR available on GMCP.**Table 12-291. External Mounted Accessories**

Description	Number Units in Package	Style Number	Price U.S. \$
Lock Dog (Non-padlockable)	1	1294C01H01	
Mounting Hardware	1	624B375G23	
DIN Rail Adapter ④	10	1225C79G02	

④ For use with standard 35 mm DIN rail such as, 35 x 7.5 or 15 mm per DIN EN50022.

**Table 12-292. Vari-Depth Handle Mechanism** ⑤

Description	Catalog Number	Price U.S. \$
For Type 1 use	HRGMV11L	
For Type 3R, 4X, 12 use	HRGMV14L	
Close Coupled Black with Gray Handle	HRGMC10	
Close Coupled Red with Yellow Handle	HRGMC30	

⑤ For use with GMCP only.

**Modifications for HMCP**See Internal Accessories starting on **Page 12-231**.

**F-Frame**

**F-Frame**

**Table 12-293. 600 Vac Maximum, 250 Vdc Maximum**

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) ①	MCP Trip Setting ②	MCP Catalog Number	Price U.S. \$
0	3	A	.69 – .91	9	HMCP003A0C	
		B	.92 – 1.0	12		
		C	1.1 – 1.2	15		
		D	1.3 – 1.5	18		
		E	1.6 – 1.7	21		
		F	1.8 – 1.9	24		
		G	2.0 – 2.2	27		
		H	2.3 – 2.5	30		
0	7	A	1.5 – 2.0	21	HMCP007C0C	
		B	2.1 – 2.5	28		
		C	2.6 – 3.1	35		
		D	3.2 – 3.6	42		
		E	3.7 – 3.9	49		
		F	4.3 – 4.7	56		
		G	4.8 – 5.2	63		
		H	5.3 – 5.7	70		
0	15	A	3.4 – 4.5	45	HMCP015E0C	
		B	4.6 – 5.6	60		
		C	5.7 – 6.8	75		
		D	6.9 – 7.9	90		
		E	8.0 – 9.1	105		
		F	9.2 – 10.3	120		
		G	10.4 – 11.4	135		
		H	11.5 – 12.6	150		
1	30	A	6.9 – 9.1	90	HMCP030H1C	
		B	9.2 – 11.4	120		
		C	11.5 – 13.7	150		
		D	13.8 – 16.0	180		
		E	16.1 – 18.3	210		
		F	18.4 – 20.6	240		
		G	20.7 – 22.9	270		
		H	23.0 – 25.2	300		
2	50	A	11.5 – 15.2	150	HMCP050K2C	
		B	15.3 – 19.1	200		
		C	19.2 – 22.9	250		
		D	23.0 – 26.8	300		
		E	26.9 – 30.6	350		
		F	30.7 – 34.5	400		
		G	34.6 – 38.3	450		
		H	38.4 – 42.1	500		

**Table 12-293. 600 Vac Maximum, 250 Vdc Maximum (Continued)**

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) ①	MCP Trip Setting ②	MCP Catalog Number	Price U.S. \$
2	70	A	16.1 – 21.4	210	HMCP070M2C	
		B	21.5 – 26.8	280		
		C	26.9 – 32.2	350		
		D	32.3 – 37.5	420		
		E	37.6 – 42.9	490		
		F	43.0 – 48.3	560		
		G	48.4 – 53.7	630		
		H	53.8 – 59.1	700		
3	100	A	23.0 – 30.6	300	HMCP100R3C	
		B	30.7 – 38.3	400		
		C	38.4 – 46.0	500		
		D	46.1 – 53.7	600		
		E	53.8 – 61.4	700		
		F	61.5 – 69.1	800		
		G	69.2 – 76.8	900		
		H	76.9 – 84.5	1000		
4	150	A	34.6 – 46.0	450	HMCP150T4C	
		B	46.1 – 57.5	600		
		C	57.6 – 69.1	750		
		D	69.2 – 80.6	900		
		E	80.7 – 92.2	1050		
		F	92.3 – 103.7	1200		
		G	103.8 – 115.2	1350		
		H	115.3 – 126.7	1500		
4	150	A	57.0 – 75.0	750	HMCP150U4C	
		B	76.0 – 95.0	1000		
		C	96.0 – 114.0	1250		
		D	115.0 – 130.7	1500		
		E	③	1750		
		F	③	2000		
		G	③	2250		
		H	③	2500		

- ① Motor FLA ranges are typical. The corresponding trip setting is at 13 x the minimum FLA value shown. Where a 13 x setting is required for an intermediate FLA value, alternate Cam settings and/or MCP ratings should be used.
- ② For dc applications, actual trip levels are approximately 40% higher than values shown.
- ③ Settings above 130 amperes are for special applications. NEC Article 430-110(a) requires the ampere rating of the disconnecting means to be not less than 115% of the motor full load ampere rating.

**Note:** HMCP 3 – 100 A come with line and load steel body terminals, 3T100FB. HMCP 150 A come with line and load steel body terminals, 3T150FB.

Low Magnetic Protection — F-Frame

**Special Low Magnetic Protection Application MCP**

Table 12-294. 600 Vac Maximum, 250 Vdc Maximum

Cont. Amps	Cam Setting	MCP Trip Setting ①	MCP Catalog Number	Price U.S. \$
25	A	40	HMCP025D0C	
	B	43		
	C	46		
	D	49		
	E	52		
	F	55		
	G	58		
	H	60		
50	A	80	HMCP050G2C	
	B	87		
	C	93		
	D	98		
	E	103		
	F	109		
	G	115		
	H	120		
70	A	115	HMCP070J2C	
	B	122		
	C	130		
	D	139		
	E	145		
	F	153		
	G	160		
	H	170		
100	A	160	HMCP100L3C	
	B	174		
	C	185		
	D	196		
	E	207		
	F	218		
	G	229		
	H	240		

① For dc applications, actual trip levels are approximately 40% higher than values shown.

Note: HMCP 25 – 100 A come with line and load steel body terminals, 3T100FB.

**MCPs for Application with Motor Starters Equipped with Electronic Overload Relays**

Table 12-295. 600 Vac Maximum, 250 Vdc Maximum

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) ②	MCP Trip Setting ③	MCP Catalog Number	Price U.S. \$
0	3	A	.69 – .91	9	HMCP003A0C	
		B	.92 – 1.0	12		
		C	1.1 – 1.2	15		
		D	1.3 – 1.5	18		
		E	1.6 – 1.7	21		
		F	1.8 – 1.9	24		
		G	2.0 – 2.2	27		
		H	2.3 – 2.5	30		
0	7	A	1.5 – 2.0	21	HMCP007C0C	
		B	2.1 – 2.5	28		
		C	2.6 – 3.1	35		
		D	3.2 – 3.6	42		
		E	3.7 – 3.9	49		
		F	4.3 – 4.7	56		
		G	4.8 – 5.2	63		
		H	5.3 – 5.7	70		

Table 12-295. 600 Vac Maximum, 250 Vdc Maximum (Continued)

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) ②	MCP Trip Setting ③	MCP Catalog Number	Price U.S. \$
0	15	A	3.4 – 4.5	45	HMCP015E0C	
		B	4.6 – 5.6	60		
		C	5.7 – 6.8	75		
		D	6.9 – 7.9	90		
		E	8.0 – 9.1	105		
		F	9.2 – 10.3	120		
		G	10.4 – 11.4	135		
		H	11.5 – 12.6	150		
1	30	A	6.9 – 9.1	90	HMCP030H1C	
		B	9.2 – 11.4	120		
		C	11.5 – 13.7	150		
		D	13.8 – 16.0	180		
		E	16.1 – 18.3	210		
		F	18.4 – 20.6	240		
		G	20.7 – 22.9	270		
		H	23.0 – 25.2	300		
2	50	A	11.5 – 15.2	150	HMCP050K2C	
		B	15.3 – 19.1	200		
		C	19.2 – 22.9	250		
		D	23.0 – 26.8	300		
		E	26.9 – 30.6	350		
		F	30.7 – 34.5	400		
		G	34.6 – 38.3	450		
		H	38.4 – 42.1	500		
3	100	A	23.0 – 30.6	300	HMCP100R3C	
		B	30.7 – 38.3	400		
		C	38.4 – 46.0	500		
		D	46.1 – 53.7	600		
		E	53.8 – 61.4	700		
		F	61.5 – 69.1	800		
		G	69.2 – 76.8	900		
		H	76.9 – 84.5	1000		
4	150	A	34.6 – 46.0	450	HMCP150T4C	
		B	46.1 – 57.5	600		
		C	57.6 – 69.1	750		
		D	69.2 – 80.6	900		
		E	80.7 – 92.2	1050		
		F	92.3 – 103.7	1200		
		G	103.8 – 115.2	1350		
		H	115.3 – 126.7	1500		
4	150	A	57.0 – 75.0	750	HMCP150U4C	
		B	76.0 – 95.0	1000		
		C	96.0 – 114.0	1250		
		D	115.0 – 130.7	1500		
		E	④	1750		
		F	④	2000		
		G	④	2250		
		H	④	2500		

② Motor FLA ranges are typical. The corresponding trip setting is at 13 x the minimum FLA value shown. Where a 13 x setting is required for an intermediate FLA value, alternate cam settings and/or MCP ratings should be used.

③ For dc applications, actual trip levels are approximately 40% higher than values shown.

④ Settings above 130 amperes are for special applications. NEC Article 430-110(a) requires the ampere rating of the disconnecting means to be not less than 115% of the motor full load ampere rating.

Note: HMCP 3 – 100 A come with line and load steel body terminals, 3T100FB. HMCP 150 A come with line and load steel body terminals, 3T150FB.

**Product Description**

**Type ELC Current Limiter Attachment (Size 0 – 4)**



*Type ELC Current Limiter Attachment*

**Product Description**

Eaton’s Cutler-Hammer Type ELC current limiter attachment for the MCP is designed to provide increased interrupting capacity. The combination may be used for the application up to 200,000 A symmetrical at 600 Vac, making the MCP suitable for use in network distribution systems or other applications where unusually high fault currents are available. The current limiter connects to the load end of the MCP and is provided with terminals suitable for copper or aluminum conductors. (See **Table 12-296.**)

Limiters are coordinated with the MCP so that normal fault currents are interrupted automatically by the MCP without any damage to the limiter. Only the rare very high fault is opened by the limiter. Faults that are interrupted by the limiter also magnetically trip the MCP, opening all three poles, preventing single-phase operation.

Each of the three poles of the type ELC limiter is equipped with an indicator that extends when a fault is interrupted by the limiter.

**Table 12-296. Type ELC Current Limiter Terminal Wire Sizes <sup>①</sup>**

Type ELC Current Limiter Maximum Amperes	Wire Range AWG	Metric (mm <sup>2</sup> )
<b>Standard Aluminum Terminals</b>		
50	14 – 2	2.5 – 35
100	1 – 4/0	50 – 95
150	1 – 4/0	50 – 95
<b>Non-standard Terminals (Steel)</b>		
50	14 – 2 <sup>②</sup>	2.5 – 35
100	—	—
150	—	—

<sup>①</sup> Terminal wire connectors are UL listed for standard stranded wire sizes as defined in UL 486A or UL 486B.

<sup>②</sup> Optional on special order for copper cable only.

**Table 12-297. ELC Current Limiter Attachment**

MCP Rating (Amperes)	Catalog Number	Price U.S. \$
3	ELC3003R	
7	ELC3007R	
15	ELC3015R	
30	ELC3030R	
50	ELC3050R	
100	ELC3100R	
150	ELC3150R	

## J-Frame

## J-Frame

Table 12-298. 600 Vac Maximum, 250 Vdc Maximum

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) ①	MCP Trip Setting ②	MCP Catalog Number ③	Price U.S. \$
4	250	A	27.0 – 30.7	350	HMCP250A5C	
4		B	30.8 – 33.8	400		
4		C	33.9 – 36.9	440		
5		D	37.0 – 40.3	480		
5		E	40.4 – 43.8	525		
5		F	43.9 – 46.9	570		
5		G	47.0 – 50.7	610		
5		H	50.8 – 53.8	660		
5		I	53.9 – 57.2	700		
5	250	A	34.7 – 38.8	450	HMCP250C5C	
5		B	38.9 – 43.4	505		
5		C	43.5 – 47.6	565		
5		D	47.7 – 52.2	620		
5		E	52.3 – 56.5	680		
5		F	56.6 – 60.7	735		
5		G	60.8 – 64.9	790		
5		H	65.0 – 69.2	845		
5		I	69.3 – 73.5	900		
5	250	A	38.5 – 43.4	500	HMCP250D5C	
5		B	43.5 – 48.0	565		
5		C	48.1 – 53.0	625		
5		D	53.1 – 57.6	690		
5		E	57.7 – 62.3	750		
5		F	62.4 – 67.3	810		
5		G	67.4 – 71.9	875		
5		H	72.0 – 76.9	935		
5		I	77.0 – 81.6	1000		
5	250	A	48.1 – 53.8	625	HMCP250F5C	
5		B	53.9 – 59.9	700		
5		C	60.0 – 66.1	780		
5		D	66.2 – 72.3	860		
5		E	72.4 – 78.4	940		
5		F	78.5 – 83.8	1020		
5		G	83.9 – 89.9	1090		
5		H	90.0 – 96.1	1170		
5		I	96.2 – 102.0	1250		
5	250	A	57.7 – 64.6	750	HMCP250G5C	
5		B	64.7 – 71.9	840		
5		C	72.0 – 79.2	935		
5		D	79.3 – 86.5	1030		
5		E	86.6 – 93.8	1125		
5		F	93.9 – 101.1	1220		
5		G	101.2 – 108.4	1315		
5		H	108.5 – 115.3	1410		
5		I	115.4 – 122.4	1500		

Table 12-298. 600 Vac Maximum, 250 Vdc Maximum (Continued)

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) ①	MCP Trip Setting ②	MCP Catalog Number ③	Price U.S. \$
5	250	A	67.4 – 75.3	875	HMCP250J5C	
5		B	75.4 – 83.8	980		
5		C	83.9 – 92.3	1090		
5		D	92.4 – 100.7	1200		
5		E	100.8 – 109.2	1310		
5		F	109.3 – 117.6	1420		
5		G	117.7 – 126.1	1530		
5		H	126.2 – 134.6	1640		
5		I	134.7 – 142.8	1750		
5	250	A	77.0 – 86.6	1000	HMCP250K5C	
5		B	86.6 – 96.1	1125		
5		C	96.2 – 105.7	1250		
5		D	105.8 – 115.3	1375		
5		E	115.4 – 124.9	1500		
5		F	125.0 – 134.6	1625		
5		G	134.7 – 144.2	1750		
5		H	144.3 – 153.8	1875		
5		I	153.9 – 163.3	2000		
5	250	A	86.6 – 97.3	1125	HMCP250L5C	
5		B	97.4 – 108.4	1265		
5		C	108.5 – 118.8	1410		
5		D	118.9 – 129.9	1545		
5		E	130.0 – 140.7	1690		
5		F	140.8 – 151.5	1830		
5		G	151.6 – 162.3	1970		
5		H	162.4 – 173.0	2110		
5		I	173.1 – 183.6	2250		
5	250	A	96.2 – 108.0	1250	HMCP250W5C	
5		B	108.1 – 119.9	1405		
5		C	120.0 – 132.3	1560		
5		D	132.4 – 144.2	1720		
5		E	144.3 – 156.1	1875		
5		F	156.2 – 168.0	2030		
5		G	168.1 – 179.9	2185		
5		H	180.0 – 192.3	2340		
5		I	192.4 – 204.0	2500		

① Motor FLA ranges are typical. The corresponding trip setting is at 13 times the minimum FLA value shown. Where a 13 times setting is required for an intermediate FLA value, alternate cam settings and/or MCP ratings should be used.

② For dc applications, actual trip levels are approximately 40% higher than values shown.

③ Three-pole catalog numbers shown. Two-pole catalog numbers begin with HM2P in place of HMCP.

**Note:** All HMCP and HM2P 250 A come with line and load steel body terminals, T250KB. (With suffix "C", without "C" comes with TA250KB.)



**K-Frame**

**K-Frame**

**Table 12-299. 600 Vac Maximum, 250 Vdc Maximum**

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) ①	MCP Trip Setting ②	MCP Catalog Number ③	Price U.S. \$
4	400	A	27.0 – 30.7	350	HMCP400A5C	
4		B	30.8 – 33.8	400		
4		C	33.9 – 36.9	440		
5		D	37.0 – 40.3	480		
5		E	40.4 – 43.8	525		
5		F	43.9 – 46.9	570		
5		G	47.0 – 50.7	610		
5		H	50.8 – 53.8	660		
5		I	53.9 – 57.2	700		
5	400	A	38.5 – 43.4	500	HMCP400D5C	
5		B	43.5 – 48.0	565		
5		C	48.1 – 53.0	626		
5		D	53.1 – 57.6	690		
5		E	57.7 – 62.3	750		
5		F	62.4 – 67.3	810		
5		G	67.4 – 71.9	875		
5		H	72.0 – 76.9	935		
5		I	77.0 – 81.6	1000		
5	400	A	48.1 – 53.8	625	HMCP400F5C	
5		B	53.9 – 59.9	700		
5		C	60.0 – 66.1	780		
5		D	66.2 – 72.3	860		
5		E	72.4 – 78.4	940		
5		F	78.5 – 83.8	1020		
5		G	83.9 – 89.9	1090		
5		H	90.0 – 96.1	1170		
5		I	96.2 – 102.0	1250		
5	400	A	57.7 – 64.6	750	HMCP400G5C	
5		B	64.7 – 71.9	840		
5		C	72.0 – 79.2	935		
5		D	79.3 – 86.5	1030		
5		E	86.6 – 93.8	1125		
5		F	93.9 – 101.1	1220		
5		G	101.2 – 108.4	1315		
5		H	108.5 – 115.3	1410		
5		I	115.4 – 122.4	1500		
5	400	A	67.4 – 75.3	875	HMCP400J5C	
5		B	75.4 – 83.8	980		
5		C	83.9 – 92.3	1090		
5		D	92.4 – 100.7	1200		
5		E	100.8 – 109.2	1310		
5		F	109.3 – 117.6	1420		
5		G	117.7 – 126.1	1530		
5		H	126.2 – 134.6	1640		
5		I	134.7 – 142.8	1750		
5	400	A	77.0 – 86.5	1000	HMCP400K5C	
5		B	86.6 – 96.1	1125		
5		C	96.2 – 105.7	1250		
5		D	105.8 – 115.3	1375		
5		E	115.4 – 124.9	1500		
5		F	125.0 – 134.6	1625		
5		G	134.7 – 144.2	1750		
5		H	144.3 – 153.8	1875		
5		I	153.9 – 163.3	2000		
5	400	A	86.6 – 97.3	1125	HMCP400L5C	
5		B	97.4 – 108.4	1265		
5		C	108.5 – 118.8	1410		
5		D	118.9 – 129.9	1545		
5		E	130.0 – 140.7	1690		
5		F	140.8 – 151.5	1830		
5		G	151.6 – 162.3	1970		
5		H	162.4 – 173.0	2110		
5		I	173.1 – 183.6	2250		

**Table 12-299. 600 Vac Maximum, 250 Vdc Maximum (Continued)**

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) ①	MCP Trip Setting ②	MCP Catalog Number ③	Price U.S. \$
5	400	A	96.2 – 108.0	1250	HMCP400W5C	
5		B	108.1 – 119.9	1405		
5		C	120.0 – 132.3	1560		
5		D	132.4 – 144.2	1720		
5		E	144.3 – 156.1	1875		
5		F	156.2 – 168.0	2030		
5		G	168.1 – 179.9	2185		
5		H	180.0 – 192.3	2340		
5		I	192.4 – 204.0	2500		
5	400	A	115.4 – 129.9	1500	HMCP400N5C	
5		B	130.0 – 144.2	1690		
5		C	144.3 – 158.4	1875		
5		D	158.5 – 173.0	2060		
5		E	173.1 – 187.6	2250		
5		F	187.7 – 201.9	2440		
5		G	202.0 – 216.1	2625		
5		H	216.2 – 230.7	2810		
5		I	230.8 – 244.9	3000		
5	400	A	134.7 – 151.5	1750	HMCP400R5C	
5		B	151.6 – 168.4	1970		
5		C	168.5 – 185.3	2190		
5		D	185.4 – 201.9	2410		
5		E	202.0 – 218.8	2625		
5		F	218.9 – 235.7	2845		
5		G	235.8 – 252.6	3065		
5		H	252.7 – 269.2	3285		
5		I	269.3 – 285.7	3500		
5	400	A	153.9 – 173.0	2000	HMCP400X5C	
5		B	173.1 – 192.3	2250		
5		C	192.4 – 211.5	2500		
5		D	211.6 – 230.7	2750		
5		E	230.8 – 249.9	3000		
5		F	250.0 – 269.2	3250		
5		G	269.3 – 288.4	3500		
5		H	288.5 – 307.6	3750		
5		I	307.7 – 326.9	4000		
5	400	A	173.1 – 194.5	2250	HMCP400Y5C	
5		B	194.6 – 216.1	2530		
5		C	216.2 – 237.6	2810		
5		D	237.7 – 259.5	3090		
5		E	259.6 – 281.1	3375		
5		F	281.2 – 302.6	3655		
5		G	302.7 – 324.1	3935		
5		H	324.2 – 346.1	4215		
5		I	346.2 – 368.1	4500		

- ① Motor FLA ranges are typical. The corresponding trip setting is at 13 x the minimum FLA value shown. Where a 13 x setting is required for an intermediate FLA value, alternate cam settings and/or MCP ratings should be used.
- ② For dc applications, actual trip levels are approximately 40% higher than values shown.
- ③ Three-pole Catalog Numbers shown. Two-pole Catalog Numbers begin with **HM2P** in place of **HMCP**.

**Note:** All HMCP and HM2P 400A come with aluminum body terminals, 3TA400K. Catalog numbers with suffix "C" as shown above come with copper body terminals 3T400K.

## L-Frame

## L-Frame

Table 12-300. 600 Vac Maximum ①

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) ②	MCP Trip Setting	MCP Catalog Number	Price U.S. \$
6	600	A	138.5 – 184.5	1800	HMCP600L6W	
6		B	184.6 – 230.7	2400		
6		C	230.8 – 276.8	3000		
6		D	276.9 – 323.0	3600		
6		E	323.1 – 369.1	4200		
6		F	369.2 – 415.3	4800		
6		G	415.4 – 461.4	5400		
6		H	461.5 – 507.7	6000		
6	600	A	38.5 – 46.1	500	HMCP600X6W	
6		B	46.2 – 61.4	600		
6		C	61.5 – 76.8	800		
6		D	76.9 – 96.1	1000		
6		E	96.2 – 115.3	1250		
6		F	115.4 – 153.7	1500		
6		G	153.8 – 192.2	2000		
6		H	192.3 – 230.7	2500		
6	600	A	76.9 – 96.1	1000	HMCP600Y6W	
6		B	96.2 – 115.3	1250		
6		C	115.4 – 153.7	1500		
6		D	153.8 – 192.2	2000		
6		E	192.3 – 230.7	2500		
6		F	230.8 – 269.1	3000		
6		G	269.2 – 307.6	3500		
6		H	307.7 – 346.1	4000		

① Equipped with electronic trip device.

② Motor FLA ranges are typical. The corresponding trip setting is at 13X the minimum FLA value shown. Where a 13X setting is required for an intermediate FLA value, alternate cam settings and/or MCP ratings should be used.

**Note:** All HMCP 600 A come without terminals. For Terminals, see Table 12-226 on Page 12-134.

N-Frame

N-Frame

Table 12-301. 600 Vac Maximum ①

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) ②	MCP Trip Setting	MCP Catalog Number	Price U.S. \$
7	800	A	123.1 – 184.5	1600	HMCP800X7W	
7		B	184.6 – 246.1	2400		
7		C	246.2 – 307.6	3200		
7		D	307.7 – 369.1	4000		
7		E	369.2 – 430.7	4800		
7		F	430.8 – 492.2	5600		
7		G	492.3 – 553.7	6400		
8	1200	A	184.6 – 276.8	2400	HMCP12Y8W	
8		B	276.9 – 369.1	3600		
8		C	369.2 – 461.4	4800		
8		D	461.5 – 553.7	6000		
8		E	553.8 – 646.1	7200		
8		F	646.2 – 738.4	8400		
8		G	738.5 – 830.7	9600		

① Equipped with electronic trip device.

② Motor FLA ranges are typical. The corresponding trip setting is at 13X the minimum FLA value shown. Where a 13X setting is required for an intermediate FLA value, alternate cam settings and/or MCP ratings should be used.

**Note:** All HMCP 800 A and 1200 A come without terminals. For Terminals, see **Table 12-293** on **Page 12-181**.

Table 12-302. F-Frame HMCP with Earth Leakage Ground Fault — 480 Volts

Continuous Amperes	3-Pole Catalog Number	Price U.S. \$
3	ELHMCP003A0C	
7	ELHMCP007C0C	
15	ELHMCP015E0C	
25	ELHMCP025X0C	
30	ELHMCP030H1C	
50	ELHMCP050K2C	
70	ELHMCP070M2C	
100	ELHMCP100R3C	
150	ELHMCP150T4C	
150	ELHMCP150U4C	
3	ELHMCP003A0LC	
7	ELHMCP007C0LC	
15	ELHMCP015E0LC	
25	ELHMCP025D0C	
30	ELHMCP030H1LC	
70	ELHMCP070J2C	
100	ELHMCP100L3C	
50	ELHMCP050G2C	
70	ELHMCP070J2C	
100	ELHMCP100K3C	

Table 12-303. J and K-Frame HMCP with Earth Leakage Ground Fault — 480 Volts

Continuous Amperes	3-Pole Catalog Number	Price U.S. \$
250	ELHMCP250A5	
	ELHMCP250C5	
	ELHMCP250D5	
	ELHMCP250F5	
	ELHMCP250G5	
	ELHMCP250J5	
	ELHMCP250K5	
400	ELHMCP250L5	
	ELHMCP250W5	
	ELHMCP400D5	
	ELHMCP400F5	
	ELHMCP400G5	
	ELHMCP400J5	
	ELHMCP400K5	

HMCPs for Application with Motor Starters Equipped with Electronic Overload Relays

3	ELHMCP003A0C	
7	ELHMCP007C0C	
15	ELHMCP015E0C	
30	ELHMCP030H1C	
50	ELHMCP050K2C	
100	ELHMCP100R3C	
150	ELHMCP150T4C	
150	ELHMCP150U4C	