

## Motor Circuit Protectors

2



## 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.

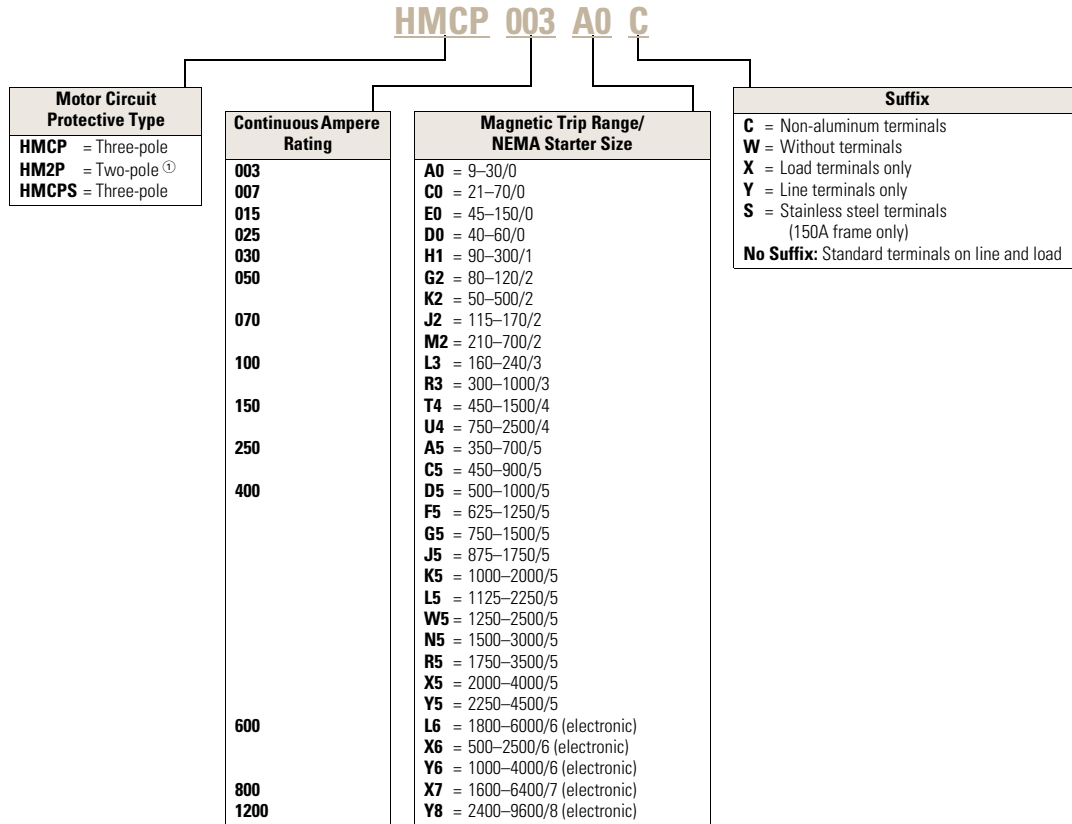


**Note:** Interrupting ratings are dependent on starter it is used with.

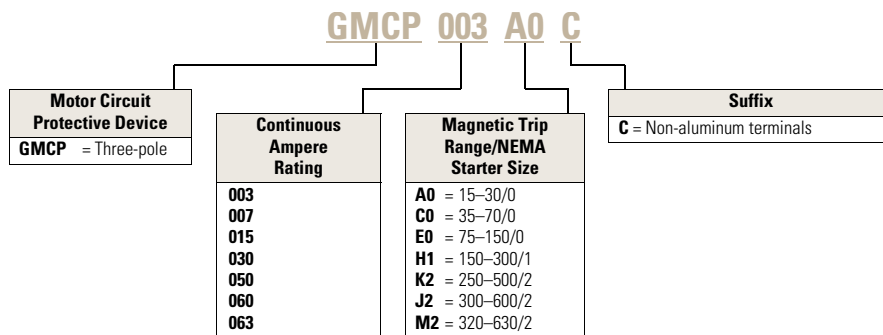
### Catalog Number Selection

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



### Motor Circuit Protector



**Note**

① On J- and K-Frame HMCPs only.

## Product Selection

## G-Frame

2

## 480 Vac Maximum, 600Y/347 Vac

NEMA Starter Size	Continuous Amperes	Cam Setting	Motor Full Load Current Amperes (FLA) <sup>①</sup>	MCP Trip Setting	MCP Catalog Number
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	
		D	38.8–46.4	500	
		E	43.6–48.9	570	
		F	48.5–53.7	630	

## Notes

<sup>①</sup> 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.

All GMCP 3–63A come with line and load steel body terminals for Cu only wire. Refer to **Page V4-T2-122** under Optional Terminal Types.

UL recognized and CSA approved.

## Accessories

### Modifications for GMCP

Internal accessories must be factory installed.

### Internal Accessories <sup>①</sup>

Type Accessory	Electrical Ratings			Contact Arrangement	Factory Suffix	Style Number
	Volts	Frequency	Amperes			
Shunt trip <sup>②</sup>	120	50/60 Hz	1.1	—	S5	1373D62G18
Shunt trip <sup>②</sup>	240	50/60 Hz	2.1	—	S6	1373D62G19
Auxiliary switch <sup>③</sup>	240	50/60 Hz	6.0	1A/1B	A3	1288C74G03
Auxiliary switch <sup>③</sup>	240	50/60 Hz	6.0	2A/2B	A6	1288C73G03
Alarm switch <sup>③</sup>	240	50/60 Hz	6.0	Make/Break	B3	1288C75G03
Auxiliary switch/alarm switch combination <sup>③</sup>	240	50/60 Hz	6.0	1A/1B Make/Break	B13	1288C76G09

### External Mounted Accessories



Description	Number Units in Package	Style Number
Lock dog (non-padlockable)	1	1294C01H01
Mounting hardware	1	624B375G23
DIN rail adapter <sup>④</sup>	10	1225C79G02

### Modifications for HMCP

See Internal Accessories starting on **Page V4-T2-273**.

### Handle Mechanisms for Series C Frames

#### Kits Only (Kit Includes Shaft, Mechanism and Handle)—GMCP-Frame

Description	Rating Type		GMCP-Frame Catalog Number
	NEMA	IP	
 S01 Blue Handle S01 blue handle, 12-inch shaft	1/3R/12	54	GMHMVD12B / 68C6039G05
	4/4X	65	GMHMVD12BX / 68C6039G07
 S01 Red Handle S01 red handle, 12-inch shaft	1/3R/12	54	GMHMVD12R / 68C6039G06
	4/4X	65	GMHMVD12RX / 68C6039G08

### Direct (Close-Coupled) Handle Mechanisms

#### G Direct <sup>⑤</sup>

Frame	Black Handle		Yellow Handle	
	With Shroud Catalog Number	Without Shroud Catalog Number	With Shroud Catalog Number	Without Shroud Catalog Number
GMCP	HRGMC1S	HRGMC10	HRGMC3S	HRGMC30

#### Notes

- ① Only one accessory may be installed in GMCP.
- ② LH only.
- ③ RH only.
- ④ For use with standard 35 mm DIN rail such as, 35 x 7.5 or 15 mm per DIN EN50022.
- ⑤ Suitable for use on two- or three-pole G-Frame.

No UVR available on GMCP.

## F-Frame

2

## 600 Vac Maximum, 250 Vdc Maximum

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) <sup>①</sup>	MCP Trip Setting <sup>②</sup>	MCP Catalog Number
0	3	A	0.69–0.91	9	HMCP003A0C
		B	0.92–1.0	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	30.7–4.5	400	
		G	34.6–38.3	450	
		H	38.4–42.1	500	

## 600 Vac Maximum, 250 Vdc Maximum, continued

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) <sup>①</sup>	MCP Trip Setting <sup>②</sup>	MCP Catalog Number
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	
		D	69.2–80.6	900	
		E	80.7–92.2	1050	
		F	92.3–103.7	1200	
		G	103.8–115.2	1350	
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	

## Notes

- 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.

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

**Special Low Magnetic Protection Application MCP****600 Vac Maximum, 250 Vdc Maximum**

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

**Notes**

<sup>①</sup> For DC applications, actual trip levels are approximately 40% higher than values shown.

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

# 2.3

## Molded Case Circuit Breakers

### Series C

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

2

#### 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
0	3	A	0.69–0.91	9	<b>HMCP5003A0C</b>
		B	0.92–1.0	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	<b>HMCP5007C0C</b>
		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	<b>HMCP5015E0C</b>
		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	<b>HMCP5030H1C</b>
		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	<b>HMCP5050K2C</b>
		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	

#### 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	100	A	23.0–30.6	300	<b>HMCP5100R3C</b>
		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	<b>HMCP5150T4C</b>
		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	<b>HMCP5150U4C</b>
		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	

#### Notes

- 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 130A 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.

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

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

**J-Frame****600 Vac Maximum, 250 Vdc Maximum**

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

**600 Vac Maximum, 250 Vdc Maximum, continued**

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

**Notes**

- <sup>①</sup> 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.
- <sup>②</sup> For DC applications, actual trip levels are approximately 40% higher than values shown.
- <sup>③</sup> Three-pole catalog numbers shown. Two-pole catalog numbers begin with **HM2P** in place of **HMCP**.

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



## K-Frame

2

## 600 Vac Maximum, 250 Vdc Maximum

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) <sup>①</sup>	MCP Trip Setting <sup>②</sup>	MCP Catalog Number <sup>③</sup>
4	400	A	27.0–30.7	350	<b>HMCP400A5C</b>
		B	30.8–33.8	400	
		C	33.9–36.9	440	
5	400	D	37.0–40.3	480	<b>HMCP400A5C</b>
		E	40.4–43.8	525	
		F	43.9–46.9	570	
		G	47.0–50.7	610	
		H	50.8–53.8	660	
		I	53.9–57.2	700	
5	400	A	38.5–43.4	500	<b>HMCP400D5C</b>
		B	43.5–48.0	565	
		C	48.1–53.0	626	
		D	53.1–57.6	690	
		E	57.7–62.3	750	
		F	62.4–67.3	810	
		G	67.4–71.9	875	
		H	72.0–76.9	935	
		I	77.0–81.6	1000	
5	400	A	48.1–53.8	625	<b>HMCP400F5C</b>
		B	53.9–59.9	700	
		C	60.0–66.1	780	
		D	66.2–72.3	860	
		E	72.4–78.4	940	
		F	78.5–83.8	1020	
		G	83.9–89.9	1090	
		H	90.0–96.1	1170	
		I	96.2–102.0	1250	
5	400	A	57.7–64.6	750	<b>HMCP400G5C</b>
		B	64.7–71.9	840	
		C	72.0–79.2	935	
		D	79.3–86.5	1030	
		E	86.6–93.8	1125	
		F	93.9–101.1	1220	
		G	101.2–108.4	1315	
		H	108.5–115.3	1410	
		I	115.4–122.4	1500	
5	400	A	67.4–75.3	875	<b>HMCP400J5C</b>
		B	75.4–83.8	980	
		C	83.9–92.3	1090	
		D	92.4–100.7	1200	
		E	100.8–109.2	1310	
		F	109.3–117.6	1420	
		G	117.7–126.1	1530	
		H	126.2–134.6	1640	
		I	134.7–142.8	1750	

## 600 Vac Maximum, 250 Vdc Maximum, continued

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) <sup>①</sup>	MCP Trip Setting <sup>②</sup>	MCP Catalog Number <sup>③</sup>	
5	400	A	77.0–86.5	1000	<b>HMCP400K5C</b>	
		B	86.6–96.1	1125		
		C	96.2–105.7	1250		
		D	105.8–115.3	1375		
		E	115.4–124.9	1500		
		F	125.0–134.6	1625		
5	400	G	134.7–144.2	1750	<b>HMCP400L5C</b>	
		H	144.3–153.8	1875		
		I	153.9–163.3	2000		
		A	86.6–97.3	1125		<b>HMCP400W5C</b>
		B	97.4–108.4	1265		
		C	108.5–118.8	1410		
		D	118.9–129.9	1545		
		E	130.0–140.7	1690		
		F	140.8–151.5	1830		
G	151.6–162.3	1970				
H	162.4–173.0	2110				
I	173.1–183.6	2250				
5	400	A	96.2–108.0	1250	<b>HMCP400N5C</b>	
		B	108.1–119.9	1405		
		C	120.0–132.3	1560		
		D	132.4–144.2	1720		
		E	144.3–156.1	1875		
		F	156.2–168.0	2030		
		G	168.1–179.9	2185		
		H	180.0–192.3	2340		
		I	192.4–204.0	2500		
5	400	A	115.4–129.9	1500	<b>HMCP400O5C</b>	
		B	130.0–144.2	1690		
		C	144.3–158.4	1875		
		D	158.5–173.0	2060		
		E	173.1–187.6	2250		
		F	187.7–201.9	2440		
		G	202.0–216.1	2625		
		H	216.2–230.7	2810		
		I	230.8–244.9	3000		

**Notes**

- 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**.

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

## 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
5	400	A	134.7–151.5	1750	<b>HMCP400R5C</b>
		B	151.6–168.4	1970	
		C	168.5–185.3	2190	
		D	185.4–201.9	2410	
		E	202.0–218.8	2625	
		F	218.9–235.7	2845	
		G	235.8–252.6	3065	
		H	252.7–269.2	3285	
		I	269.3–285.7	3500	
5	400	A	153.9–173.0	2000	<b>HMCP400X5C</b>
		B	173.1–192.3	2250	
		C	192.4–211.5	2500	
		D	211.6–230.7	2750	
		E	230.8–249.9	3000	
		F	250.0–269.2	3250	
		G	269.3–288.4	3500	
		H	288.5–307.6	3750	
		I	307.7–326.9	4000	
5	400	A	173.1–194.5	2250	<b>HMCP400Y5C</b>
		B	194.6–216.1	2530	
		C	216.2–237.6	2810	
		D	237.7–259.5	3090	
		E	259.6–281.1	3375	
		F	281.2–302.6	3655	
		G	302.7–324.1	3935	
		H	324.2–346.1	4215	
		I	346.2–368.1	4500	

## L-Frame

## 600 Vac Maximum ④

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) ①	MCP Trip Setting	MCP Catalog Number
6	600	A	138.5–184.5	1800	<b>HMCP600L6W</b>
		B	184.6–230.7	2400	
		C	230.8–276.8	3000	
		D	276.9–323.0	3600	
		E	323.1–369.1	4200	
		F	369.2–415.3	4800	
		G	415.4–461.4	5400	
		H	461.5–507.7	6000	
		6	600	A	
B	46.2–61.4			600	
C	61.5–76.8			800	
D	76.9–96.1			1000	
E	96.2–115.3			1250	
F	115.4–153.7			1500	
G	153.8–192.2			2000	
H	192.3–230.7			2500	
6	600			A	76.9–96.1
		B	96.2–115.3	1250	
		C	115.4–153.7	1500	
		D	153.8–192.2	2000	
		E	192.3–230.7	2500	
		F	230.8–269.1	3000	
		G	269.2–307.6	3500	
		H	307.7–346.1	4000	

**Notes**

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**.

④ Equipped with electronic trip device.

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

All HMCP 600 A come without terminals. For terminals, see **Page V4-T2-217**.

**N-Frame**

2

**600 Vac Maximum** <sup>①</sup>

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

**Notes**

- <sup>①</sup> Equipped with electronic trip device.
- <sup>②</sup> 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.

## Motor Circuit Protectors

2



## 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.

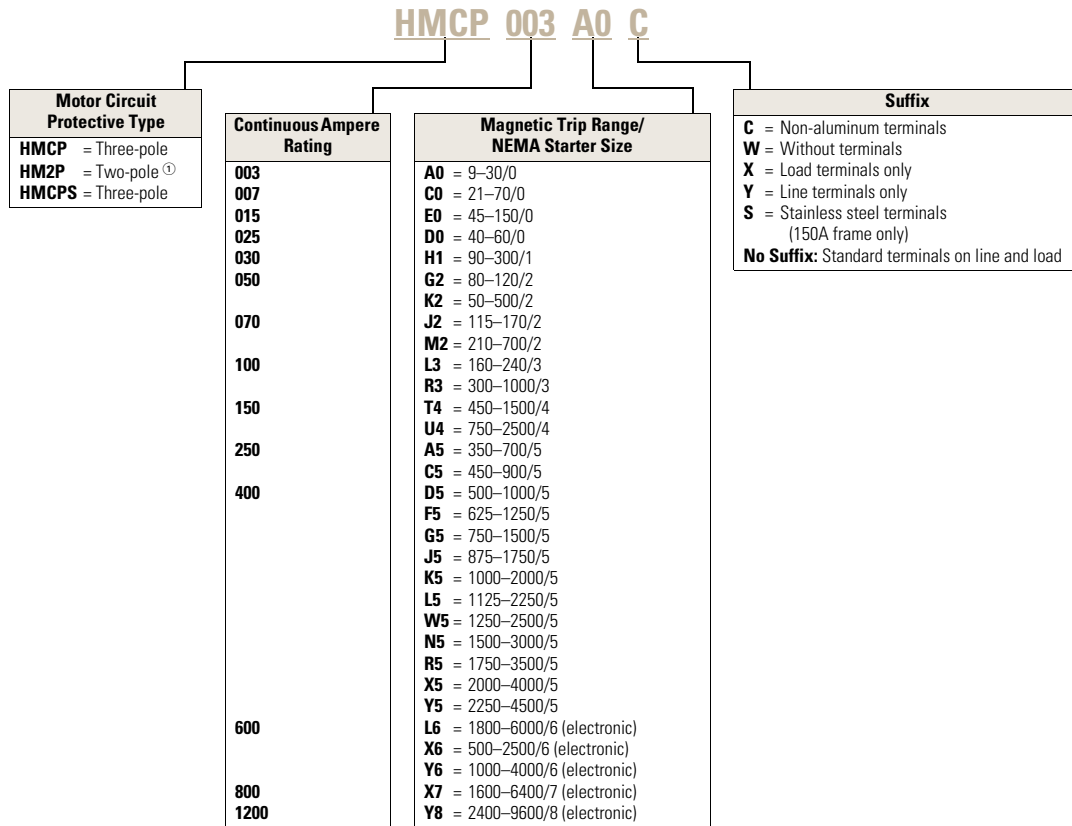


**Note:** Interrupting ratings are dependent on starter it is used with.

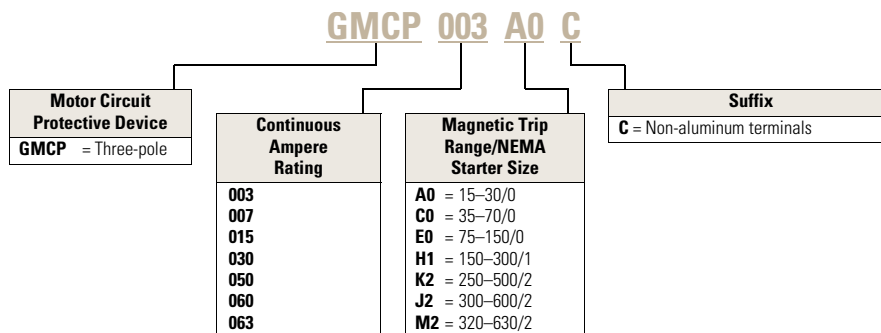
## Catalog Number Selection

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



### Motor Circuit Protector



**Note**

① On J- and K-Frame HMCPs only.

## Product Selection

## G-Frame

2

## 480 Vac Maximum, 600Y/347 Vac

NEMA Starter Size	Continuous Amperes	Cam Setting	Motor Full Load Current Amperes (FLA) <sup>①</sup>	MCP Trip Setting	MCP Catalog Number
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	
		D	38.8–46.4	500	
		E	43.6–48.9	570	
		F	48.5–53.7	630	

## Notes

<sup>①</sup> 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.

All GMCP 3–63A come with line and load steel body terminals for Cu only wire. Refer to **Page V4-T2-122** under Optional Terminal Types.

UL recognized and CSA approved.

## Accessories

### Modifications for GMCP

Internal accessories must be factory installed.

### Internal Accessories <sup>①</sup>

Type Accessory	Electrical Ratings			Contact Arrangement	Factory Suffix	Style Number
	Volts	Frequency	Amperes			
Shunt trip <sup>②</sup>	120	50/60 Hz	1.1	—	S5	1373D62G18
Shunt trip <sup>②</sup>	240	50/60 Hz	2.1	—	S6	1373D62G19
Auxiliary switch <sup>③</sup>	240	50/60 Hz	6.0	1A/1B	A3	1288C74G03
Auxiliary switch <sup>③</sup>	240	50/60 Hz	6.0	2A/2B	A6	1288C73G03
Alarm switch <sup>③</sup>	240	50/60 Hz	6.0	Make/Break	B3	1288C75G03
Auxiliary switch/alarm switch combination <sup>③</sup>	240	50/60 Hz	6.0	1A/1B Make/Break	B13	1288C76G09

### External Mounted Accessories



Description	Number Units in Package	Style Number
Lock dog (non-padlockable)	1	1294C01H01
Mounting hardware	1	624B375G23
DIN rail adapter <sup>④</sup>	10	1225C79G02

### Modifications for HMCP

See Internal Accessories starting on **Page V4-T2-273**.

### Handle Mechanisms for Series C Frames

#### Kits Only (Kit Includes Shaft, Mechanism and Handle)—GMCP-Frame

Description	Rating Type		GMCP-Frame Catalog Number
	NEMA	IP	
 S01 Blue Handle S01 blue handle, 12-inch shaft	1/3R/12	54	GMHMVD12B / 68C6039G05
	4/4X	65	GMHMVD12BX / 68C6039G07
 S01 Red Handle S01 red handle, 12-inch shaft	1/3R/12	54	GMHMVD12R / 68C6039G06
	4/4X	65	GMHMVD12RX / 68C6039G08

### Direct (Close-Coupled) Handle Mechanisms

#### G Direct <sup>⑤</sup>

Frame	Black Handle		Yellow Handle	
	With Shroud Catalog Number	Without Shroud Catalog Number	With Shroud Catalog Number	Without Shroud Catalog Number
GMCP	HRGMC1S	HRGMC10	HRGMC3S	HRGMC30

#### Notes

- ① Only one accessory may be installed in GMCP.
- ② LH only.
- ③ RH only.
- ④ For use with standard 35 mm DIN rail such as, 35 x 7.5 or 15 mm per DIN EN50022.
- ⑤ Suitable for use on two- or three-pole G-Frame.

No UVR available on GMCP.

## F-Frame

2

## 600 Vac Maximum, 250 Vdc Maximum

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) <sup>①</sup>	MCP Trip Setting <sup>②</sup>	MCP Catalog Number
0	3	A	0.69–0.91	9	HMCP003A0C
		B	0.92–1.0	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	30.7–4.5	400	
		G	34.6–38.3	450	
		H	38.4–42.1	500	

## 600 Vac Maximum, 250 Vdc Maximum, continued

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) <sup>①</sup>	MCP Trip Setting <sup>②</sup>	MCP Catalog Number
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	
		D	69.2–80.6	900	
		E	80.7–92.2	1050	
		F	92.3–103.7	1200	
		G	103.8–115.2	1350	
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	

## Notes

- 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.

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



**Special Low Magnetic Protection Application MCP****600 Vac Maximum, 250 Vdc Maximum**

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

**Notes**

<sup>①</sup> For DC applications, actual trip levels are approximately 40% higher than values shown.

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

# 2.3

## Molded Case Circuit Breakers

### Series C

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

2

#### 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
0	3	A	0.69–0.91	9	<b>HMCP5003A0C</b>
		B	0.92–1.0	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	<b>HMCP5007C0C</b>
		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	<b>HMCP5015E0C</b>
		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	<b>HMCP5030H1C</b>
		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	<b>HMCP5050K2C</b>
		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	

#### 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	100	A	23.0–30.6	300	<b>HMCP5100R3C</b>
		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	<b>HMCP5150T4C</b>
		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	<b>HMCP5150U4C</b>
		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	

#### Notes

- 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 130A 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.

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

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

**J-Frame****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
4	250	A	27.0–30.7	350	<b>HMCP250A5C</b>
		B	30.8–33.8	400	
		C	33.9–36.9	440	
5	250	D	37.0–40.3	480	<b>HMCP250D5C</b>
		E	40.4–43.8	525	
		F	43.9–46.9	570	
		G	47.0–50.7	610	
		H	47.0–50.7	660	
		I	47.0–50.7	700	
		5	250	A	
B	38.9–43.4			505	
C	43.5–47.6			565	
D	47.7–52.2			620	
E	52.3–56.5			680	
F	56.6–60.7			735	
G	60.8–64.9			790	
H	65.0–69.2			845	
I	69.3–73.5			900	
5	250	A	38.5–43.4	500	<b>HMCP250D5C</b>
		B	43.5–48.0	565	
		C	48.1–53.0	625	
		D	53.1–57.6	690	
		E	57.7–62.3	750	
		F	62.4–67.3	810	
		G	67.4–71.9	875	
		H	72.0–76.9	935	
		I	77.0–81.6	1000	
5	250	A	48.1–53.8	625	<b>HMCP250F5C</b>
		B	53.9–59.9	700	
		C	60.0–66.1	780	
		D	66.2–72.3	860	
		E	72.4–78.4	940	
		F	78.5–83.8	1020	
		G	83.9–89.9	1090	
		H	90.0–96.1	1170	
		I	96.2–102.0	1250	
5	250	A	57.7–64.6	750	<b>HMCP250G5C</b>
		B	64.7–71.9	840	
		C	72.0–79.2	935	
		D	79.3–86.5	1030	
		E	86.6–93.8	1125	
		F	93.9–101.1	1220	
		G	101.2–108.4	1315	
		H	108.5–115.3	1410	
		I	115.4–122.4	1500	

**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
5	250	A	67.4–75.3	875	<b>HMCP250J5C</b>
		B	75.4–83.8	980	
		C	83.9–92.3	1090	
		D	92.4–100.7	1200	
		E	100.8–109.2	1310	
		F	109.3–117.6	1420	
		G	117.7–126.1	1530	
		H	126.2–134.6	1640	
		I	134.7–142.8	1750	
5	250	A	77.0–86.6	1000	<b>HMCP250K5C</b>
		B	86.6–96.1	1125	
		C	96.2–105.7	1250	
		D	105.8–115.3	1375	
		E	115.4–124.9	1500	
		F	125.0–134.6	1625	
		G	134.7–144.2	1750	
		H	144.3–153.8	1875	
		I	153.9–163.3	2000	
5	250	A	86.6–97.3	1125	<b>HMCP250L5C</b>
		B	97.4–108.4	1265	
		C	108.5–118.8	1410	
		D	118.9–129.9	1545	
		E	130.0–140.7	1690	
		F	140.8–151.5	1830	
		G	151.6–162.3	1970	
		H	162.4–173.0	2110	
		I	173.1–183.6	2250	
5	250	A	96.2–108.0	1250	<b>HMCP250W5C</b>
		B	108.1–119.9	1405	
		C	120.0–132.3	1560	
		D	132.4–144.2	1720	
		E	144.3–156.1	1875	
		F	156.2–168.0	2030	
		G	168.1–179.9	2185	
		H	180.0–192.3	2340	
		I	192.4–204.0	2500	

**Notes**

- 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**.

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

## K-Frame

2

## 600 Vac Maximum, 250 Vdc Maximum

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) <sup>①</sup>	MCP Trip Setting <sup>②</sup>	MCP Catalog Number <sup>③</sup>
4	400	A	27.0–30.7	350	<b>HMCP400A5C</b>
		B	30.8–33.8	400	
		C	33.9–36.9	440	
5	400	D	37.0–40.3	480	<b>HMCP400A5C</b>
		E	40.4–43.8	525	
		F	43.9–46.9	570	
		G	47.0–50.7	610	
		H	50.8–53.8	660	
		I	53.9–57.2	700	
5	400	A	38.5–43.4	500	<b>HMCP400D5C</b>
		B	43.5–48.0	565	
		C	48.1–53.0	626	
		D	53.1–57.6	690	
		E	57.7–62.3	750	
		F	62.4–67.3	810	
		G	67.4–71.9	875	
		H	72.0–76.9	935	
		I	77.0–81.6	1000	
5	400	A	48.1–53.8	625	<b>HMCP400F5C</b>
		B	53.9–59.9	700	
		C	60.0–66.1	780	
		D	66.2–72.3	860	
		E	72.4–78.4	940	
		F	78.5–83.8	1020	
		G	83.9–89.9	1090	
		H	90.0–96.1	1170	
		I	96.2–102.0	1250	
5	400	A	57.7–64.6	750	<b>HMCP400G5C</b>
		B	64.7–71.9	840	
		C	72.0–79.2	935	
		D	79.3–86.5	1030	
		E	86.6–93.8	1125	
		F	93.9–101.1	1220	
		G	101.2–108.4	1315	
		H	108.5–115.3	1410	
		I	115.4–122.4	1500	
5	400	A	67.4–75.3	875	<b>HMCP400J5C</b>
		B	75.4–83.8	980	
		C	83.9–92.3	1090	
		D	92.4–100.7	1200	
		E	100.8–109.2	1310	
		F	109.3–117.6	1420	
		G	117.7–126.1	1530	
		H	126.2–134.6	1640	
		I	134.7–142.8	1750	

## 600 Vac Maximum, 250 Vdc Maximum, continued

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) <sup>①</sup>	MCP Trip Setting <sup>②</sup>	MCP Catalog Number <sup>③</sup>	
5	400	A	77.0–86.5	1000	<b>HMCP400K5C</b>	
		B	86.6–96.1	1125		
		C	96.2–105.7	1250		
		D	105.8–115.3	1375		
		E	115.4–124.9	1500		
		F	125.0–134.6	1625		
5	400	G	134.7–144.2	1750	<b>HMCP400L5C</b>	
		H	144.3–153.8	1875		
		I	153.9–163.3	2000		
		A	86.6–97.3	1125		<b>HMCP400W5C</b>
		B	97.4–108.4	1265		
		C	108.5–118.8	1410		
		D	118.9–129.9	1545		
		E	130.0–140.7	1690		
		F	140.8–151.5	1830		
G	151.6–162.3	1970				
H	162.4–173.0	2110				
I	173.1–183.6	2250				
5	400	A	96.2–108.0	1250	<b>HMCP400N5C</b>	
		B	108.1–119.9	1405		
		C	120.0–132.3	1560		
		D	132.4–144.2	1720		
		E	144.3–156.1	1875		
		F	156.2–168.0	2030		
		G	168.1–179.9	2185		
		H	180.0–192.3	2340		
		I	192.4–204.0	2500		
5	400	A	115.4–129.9	1500	<b>HMCP400O5C</b>	
		B	130.0–144.2	1690		
		C	144.3–158.4	1875		
		D	158.5–173.0	2060		
		E	173.1–187.6	2250		
		F	187.7–201.9	2440		
		G	202.0–216.1	2625		
		H	216.2–230.7	2810		
		I	230.8–244.9	3000		

**Notes**

- 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**.

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

## 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
5	400	A	134.7–151.5	1750	<b>HMCP400R5C</b>
		B	151.6–168.4	1970	
		C	168.5–185.3	2190	
		D	185.4–201.9	2410	
		E	202.0–218.8	2625	
		F	218.9–235.7	2845	
		G	235.8–252.6	3065	
		H	252.7–269.2	3285	
		I	269.3–285.7	3500	
5	400	A	153.9–173.0	2000	<b>HMCP400X5C</b>
		B	173.1–192.3	2250	
		C	192.4–211.5	2500	
		D	211.6–230.7	2750	
		E	230.8–249.9	3000	
		F	250.0–269.2	3250	
		G	269.3–288.4	3500	
		H	288.5–307.6	3750	
		I	307.7–326.9	4000	
5	400	A	173.1–194.5	2250	<b>HMCP400Y5C</b>
		B	194.6–216.1	2530	
		C	216.2–237.6	2810	
		D	237.7–259.5	3090	
		E	259.6–281.1	3375	
		F	281.2–302.6	3655	
		G	302.7–324.1	3935	
		H	324.2–346.1	4215	
		I	346.2–368.1	4500	

## L-Frame

## 600 Vac Maximum ④

NEMA Starter Size	Cont. Amps	Cam Setting	Motor Full Load Current Amperes (FLA) ①	MCP Trip Setting	MCP Catalog Number
6	600	A	138.5–184.5	1800	<b>HMCP600L6W</b>
		B	184.6–230.7	2400	
		C	230.8–276.8	3000	
		D	276.9–323.0	3600	
		E	323.1–369.1	4200	
		F	369.2–415.3	4800	
		G	415.4–461.4	5400	
		H	461.5–507.7	6000	
		6	600	A	
B	46.2–61.4			600	
C	61.5–76.8			800	
D	76.9–96.1			1000	
E	96.2–115.3			1250	
F	115.4–153.7			1500	
G	153.8–192.2			2000	
H	192.3–230.7			2500	
6	600			A	76.9–96.1
		B	96.2–115.3	1250	
		C	115.4–153.7	1500	
		D	153.8–192.2	2000	
		E	192.3–230.7	2500	
		F	230.8–269.1	3000	
		G	269.2–307.6	3500	
		H	307.7–346.1	4000	

**Notes**

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**.

④ Equipped with electronic trip device.

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

All HMCP 600 A come without terminals. For terminals, see **Page V4-T2-217**.

**N-Frame**

2

**600 Vac Maximum** <sup>①</sup>

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

**Notes**

- <sup>①</sup> Equipped with electronic trip device.
- <sup>②</sup> 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.