



Series C Motor Circuit Protectors

General Information

Designated as the Cutler-Hammer Types GMCP, HMCP, the Series C instantaneous-only motor circuit protector (MCP) is available in ratings from 3A to 600A for motor starter sizes 0 through 6. The MCP is designed to comply with the applicable requirements of Underwriters Laboratories, Inc. Standard UL489, Canadian Standards Association Standard C22.2 No. 5, and International Electrotechnical Commission Recommendations IEC 157-1.

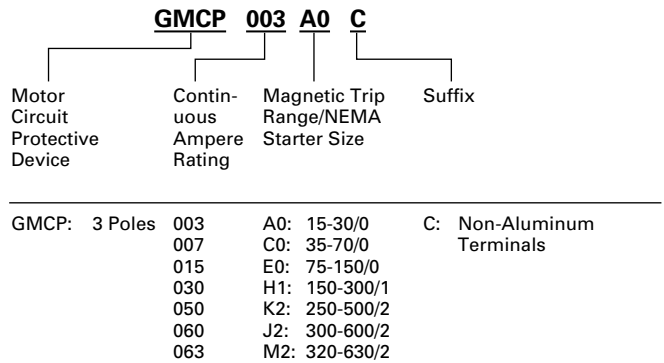
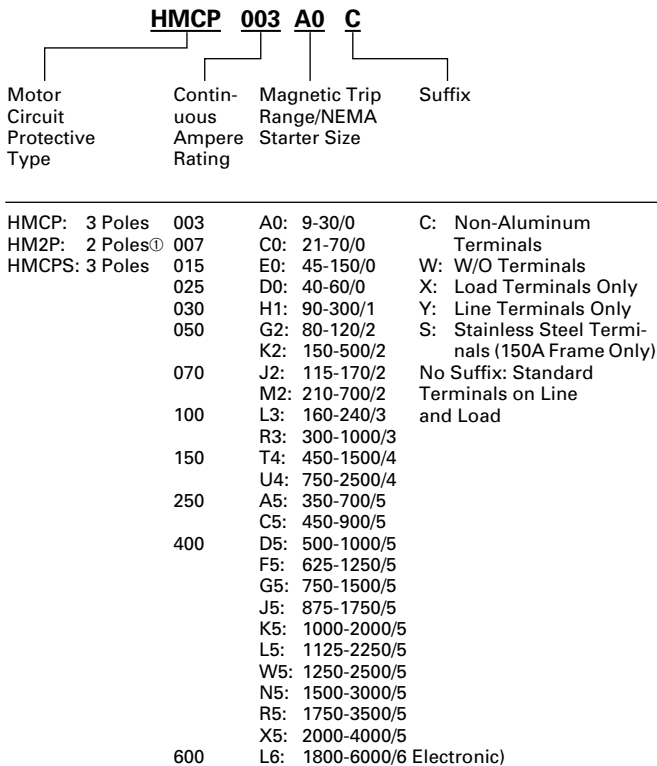
An innovative design of internal components allows higher MCP-starter combination interrupting ratings. The MCP is marked to permit proper electrical application within the assigned equipment ratings.

The MCP is a recognized component (UL File E7819) and complies with the applicable requirements of Underwriters Laboratories, Inc. Standard UL489. It is also designed to comply with the applicable requirements of Canadian Standards Association Standard C22.2 No. 5, International Electrotechnical Commission Recommendations IEC 157-1, and nameplates bear the CE marking.

Catalog Numbering System

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 Catalog Number



① On J- and K-Frame HMCPs only.

K-Frame

600 Vac Maximum, 250 Vdc Maximum

MCP Catalog Number ^①	NEMA Starter Size	Continuous Amperes	Cam Setting	Motor Full Load Center Amperes ^②	MCP Trip Setting ^③
HMCP400D5C	5	400	A	38.5 - 43.4	500
	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
HMCP400F5C	5	400	A	48.1 - 53.8	625
	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
HMCP400G5C	5	400	A	57.7 - 64.6	750
	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
HMCP400J5C	5	400	A	67.4 - 75.3	875
	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
HMCP400K5C	5	400	A	77.0 - 86.5	1000
	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

MCP Catalog Number ^①	NEMA Starter Size	Continuous Amperes	Cam Setting	Motor Full Load Center Amperes ^②	MCP Trip Setting ^③
HMCP400L5C	5	400	A	86.6 - 97.3	1125
	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
HMCP400W5C	5	400	A	96.2 - 108.0	1250
	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
HMCP400N5C	5	400	A	115.4 - 129.9	1500
	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
HMCP400R5C	5	400	A	134.7 - 151.5	1750
	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
HMCP400X5C	5	400	A	153.9 - 173.0	2000
	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

Instruction Leaflet/FRED Number 29C403

L-Frame^④

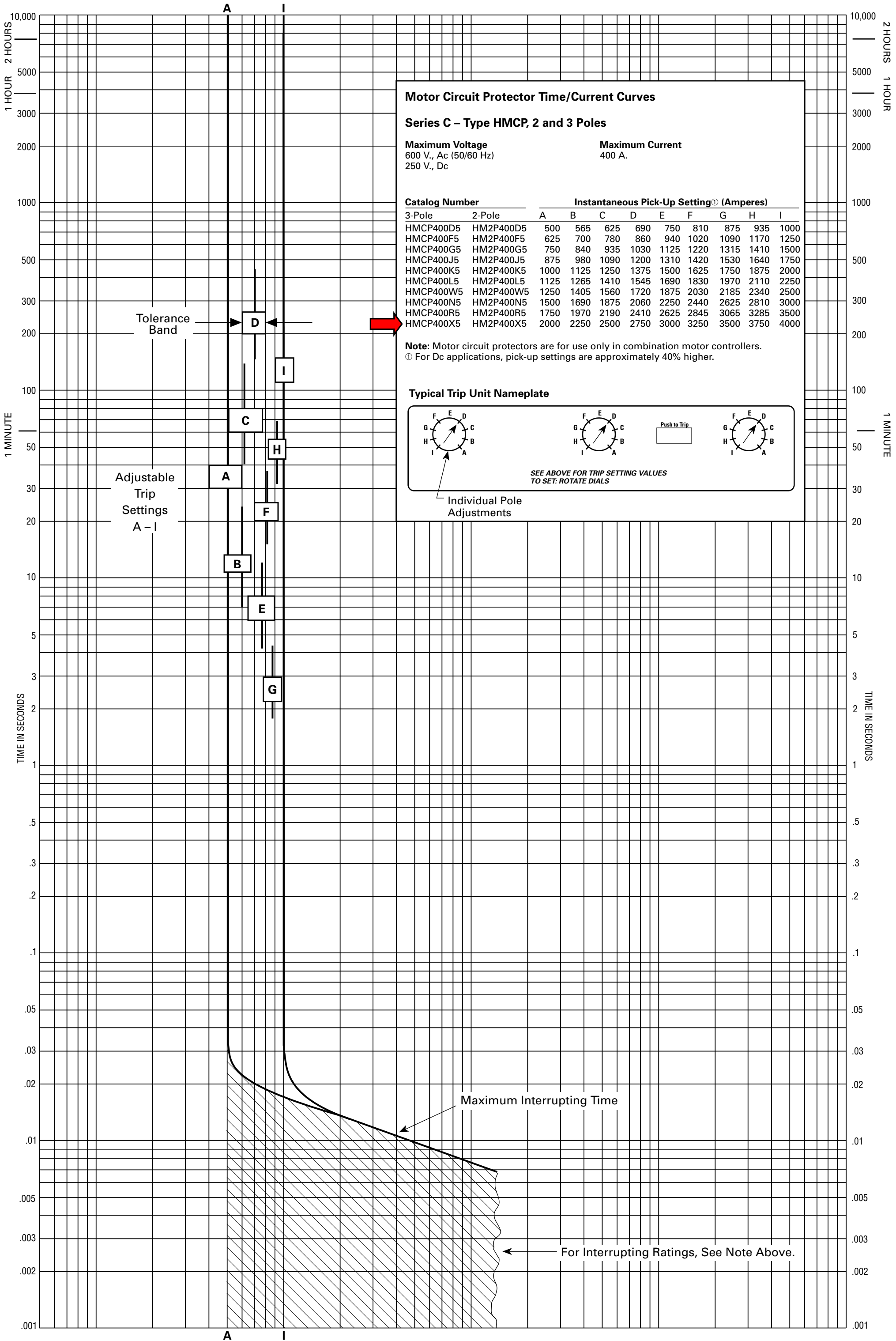
600 Vac Maximum

MCP Catalog Number	NEMA Starter Size	Continuous Amperes	Cam Setting	Motor Full Load Center Amperes ^②	MCP Trip Setting
HMCP600L6W	6	600	A	138.5 - 184.5	1800
	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

Instruction Leaflet/FRED Number 29C404

- ① Three-pole catalog numbers shown. Two-pole catalog numbers begin with "HM2P" in place of "HMCP."
- ② 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.
- ③ For Dc applications, actual trip levels are approximately 40% higher than values shown.
- ④ Equipped with electronic trip device.

TRIP CURRENT IN AMPERES PER CHART



Motor Circuit Protector Time/Current Curves

Series C - Type HMCP, 2 and 3 Poles

Maximum Voltage
600 V., Ac (50/60 Hz)
250 V., Dc

Maximum Current
400 A.

Catalog Number		Instantaneous Pick-Up Setting ^① (Amperes)									
3-Pole	2-Pole	A	B	C	D	E	F	G	H	I	
HMCP400D5	HM2P400D5	500	565	625	690	750	810	875	935	1000	
HMCP400F5	HM2P400F5	625	700	780	860	940	1020	1090	1170	1250	
HMCP400G5	HM2P400G5	750	840	935	1030	1125	1220	1315	1410	1500	
HMCP400J5	HM2P400J5	875	980	1090	1200	1310	1420	1530	1640	1750	
HMCP400K5	HM2P400K5	1000	1125	1250	1375	1500	1625	1750	1875	2000	
HMCP400L5	HM2P400L5	1125	1265	1410	1545	1690	1830	1970	2110	2250	
HMCP400W5	HM2P400W5	1250	1405	1560	1720	1875	2030	2185	2340	2500	
HMCP400N5	HM2P400N5	1500	1690	1875	2060	2250	2440	2625	2810	3000	
HMCP400R5	HM2P400R5	1750	1970	2190	2410	2625	2845	3065	3285	3500	
HMCP400X5	HM2P400X5	2000	2250	2500	2750	3000	3250	3500	3750	4000	

Note: Motor circuit protectors are for use only in combination motor controllers.
^① For Dc applications, pick-up settings are approximately 40% higher.

Typical Trip Unit Nameplate

SEE ABOVE FOR TRIP SETTING VALUES TO SET: ROTATE DIALS

TRIP CURRENT IN AMPERES PER CHART