

Bulletin 140M Motor Protection Circuit Breakers

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- Short Circuit Protection – Standard Magnetic Trip ($13...14 \times I_e$)
- Motor Overload Protection – Trip Class 10



Cat. No. 140M-C Cat. No. 140M-D Cat. No. 140M-F Cat. No. 140-CMN

Rated Operational Current (I_e) [A]	Motor Current Adjustment Range [A]	Nominal Magnetic Trip Current [A]	Max. Short Circuit Current [kA]		Max. 3-phase Hp Ratings*				Max. kW, 3-Phase – AC-3*				Cat. No.
			400V (I_{cu})	480V (group motor)	200V	230V	460V	575V	230V	400/415V	500V	690V	
C-Frame													
0.16	0.10...0.16	2.1	100	65	–	–	–	–	–	0.02	0.06	0.06	140M-C2E-A16
0.25	0.16...0.25	3.3	100	65	–	–	–	–	–	0.04	0.09	0.09	140M-C2E-A25
0.4	0.25...0.40	5.2	100	65	–	–	–	0.25	0.06	0.09	0.12	0.18	140M-C2E-A40
0.63	0.40...0.63	8.2	100	65	–	–	0.25	0.33	0.09	0.18	0.18	0.25	140M-C2E-A63
1	0.63...1.0	13	100	65	–	–	0.5	0.75	0.18	0.25	0.37	0.55	140M-C2E-B10
1.6	1.0...1.6	21	100	65	0.25	0.33	1	1	0.25	0.55	0.75	1.1	140M-C2E-B16
2.5	1.6...2.5	33	100	65	0.5	0.75	1.5	2	0.37	0.75	1.1	1.8	140M-C2E-B25
4	2.5...4.0	52	100	65	1	1	3	3	0.75	1.5	2.2	3	140M-C2E-B40
6.3	4.0...6.3	82	100	65	1.5	2	5	5	1.5	2.2	3	4	140M-C2E-B63
10	6.3...10	130	100	65	3	3	7.5	10	2.2	4	6.3	7.5	140M-C2E-C10
16	10...16	208	65	30	5	5	10	15	4	7.5	10	13	140M-C2E-C16
20	14.5...20	260	50	30	5	7.5	15	20	5.5	10	11	17	140M-C2E-C20
25	18...25	325	15	25	7.5	7.5	20	20	5.5	11	15	22	140M-C2E-C25
29	24...29	406	15	25	7.5	10	20	25	7.5	13	18.5	25	140M-C2E-C29
32	27...32	448	15	25	7.5	10	25	30	7.5	15	20	25	140M-C2E-C32
D-Frame													
2.5	1.6...2.5	33	100	65	0.5	0.75	1.5	2	0.37	0.75	1.1	1.8	140M-D8E-B25
4	2.5...4.0	52	100	65	1	1	3	3	0.75	1.5	2.2	3	140M-D8E-B40
6.3	4.0...6.3	82	100	65	1.5	2	5	5	1.5	2.2	3	4	140M-D8E-B63
10	6.3...10	130	100	65	3	3	7.5	10	2.2	4	6.3	7.5	140M-D8E-C10
16	10...16	208	100	65	5	5	10	15	4	7.5	10	13	140M-D8E-C16
20	14.5...20	260	100	65	5	7.5	15	20	5.5	10	11	17	140M-D8E-C20

25	18...25	325	65	30	7.5	7.5	20	20	5.5	11	15	22	140M-D8E-C25
29	24...29	406	50	30	7.5	10	20	25	7.5	13	18.5	25	140M-D8E-C29
32	27...32	448	50	30	7.5	10	25	30	7.5	15	20	25	140M-D8E-C32
F-Frame													
10	6.3...10	130	100	65	3	3	7.5	10	2.2	4	6.3	7.5	140M-F8E-C10
16	10...16	208	100	65	5	5	10	15	4	7.5	10	13	140M-F8E-C16
20	14.5...20	260	100	65	5	7.5	15	20	5.5	10	11	17	140M-F8E-C20
25	18...25	325	100	65	7.5	10	20	25	6.3	11	15	22	140M-F8E-C25
32	23...32	416	65	65	7.5	10	25	30	7.5	15	20	30	140M-F8E-C32
45	32...45	585	65	65	10	15	30	40	13	22	30	40	140M-F8E-C45
CMN-Frame													
25	16...25	350	50	30	5	7.5	15	20	7.5	13	15	22	140-CMN-2500
40	25...40	560	30	20	10	10	30	30	11	22	25	30	140-CMN-4000
63	40...63	882	20	10	20	20	40	60	20	32	40	55	140-CMN-6300
90	63...90	1260	20	10	25	30	60	75	25	45	55	75	140-CMN-9000

* Horsepower/kW ratings shown in the table above are for reference. The final selection of the MPCB depends on the actual motor full load current.

Motor Protection Circuit Breakers

- Short Circuit Protection – Standard Magnetic Trip (Fixed at 12...15 x I_e)
- Overload Protection – Trip Class 10...30 (Adjustable)



Cat. No. 140M-I Cat. No. 140M-J Cat. No. 140M-L

Rated Operational Current (I _e) [A]	Motor Current Adjustment Range [A]	Nominal Magnetic Trip Current [A]	Ultimate Interrupting Current [kA] (I _{cm})		3-phase Hp Ratings*				Max. kW, 3-Phase – AC-3*				Cat. No.
			400V	480V	200V	230V	460V	575V	230V	400/415V	500V	690V	
I-Frame													
80	40...80	1200	70‡	65	25	30	60	75	22	37	55	75	140M-I8E-C80‡ §
100	80...100	1500	70‡	65	30	40	75	100	30	55	55	90	140M-I8E-D10‡ §
160	100...160	2400	70‡	65	50	60	125	150	45	75	110	132	140M-I8E-D16‡ §
205	160...205	2665	70‡	65	60	75	150	200	55	110	132	200	140M-I8E-D20‡ ¶
J-Frame													
50	20...50	700	25	25	25	30	60	75	15	22	30	45	140M-J2E-C50
100	40...100	1400	25	25	30	40	75	100	30	55	55	90	140M-J2E-D10
160	64...160	2240	25	25	50	60	125	150	45	90	110	160	140M-J2E-D16
250	100...250	3500	25	25	75	100	200	250	55	132	160	250	140M-J2E-D25
50	20...50	700	70	65	25	30	60	75	15	22	30	45	140M-J8E-C50

100	40...100	1400	70	65	30	40	75	100	30	55	55	90	140M-J8E-D10
160	64...160	2240	70	65	50	60	125	150	45	90	110	160	140M-J8E-D16
250	100...250	3500	70	65	75	100	200	250	55	132	160	250	140M-J8E-D25
L-Frame													
250	100...250	3000	40	35	75	100	200	250	55	132	160	250	140M-L2E-D25
400	160...400	4800	40	35	125	150	300	400	132	200	250	400	140M-L2E-D40
630	250...630	7580	40	35	200	250	500	600	200	355	450	630	140M-L2E-D63
L-Frame													
250	100...250	3000	70	65	75	100	200	250	55	132	160	250	140M-L8E-D25
400	160...400	4800	70	65	150	150	350	450	132	200	250	400	140M-L8E-D40
630	250...630	7560	70	65	200	250	500	600	200	355	450	630	140M-L8E-D63

* Horsepower/kW ratings shown in the table above are for reference. The final selection of the MPCB depends on the actual motor full load current.

‡ For IEC approvals and CE marking, add an "E" to the end of the Cat. No. Example: 140M-18E-C80E.

§ Overload Protection – adjustable Trip Class 5, 10, 15, or 20.

♣ Overload Protection – fixed Trip Class 10.

High Inrush Motor Protection Circuit Breakers

- Short Circuit Protection – High Magnetic Trip (Fixed at 16...21 x I_e)
- Motor Overload Protection – Trip Class 10



Cat. No. 140M-C Cat. No. 140M-D Cat. No. 140M-F

Rated Operational Current (I _e) [A]	Motor Current Adjustment Range [A]	Magnetic Trip Current [A]	Max. Short Circuit Current [kA]		Max. 3-phase Hp Ratings*				Max kW, 3-Phase – AC-3*				Cat. No.
			400V (I _{cu})	480V (group motor)	200V	230V	460V	575V	230V	400/415V	500V	690V	
C-Frame													
0.16	0.10...0.16	3.3	100	65	–	–	–	–	–	0.02	0.06	0.06	140M-C2T-A16
0.25	0.16...0.25	5.2	100	65	–	–	–	–	–	0.04	0.09	0.09	140M-C2T-A25
0.4	0.25...0.40	8.2	100	65	–	–	–	0.25	0.06	0.09	0.12	0.18	140M-C2T-A40
0.63	0.40...0.63	13	100	65	–	–	0.25	0.33	0.09	0.18	0.18	0.25	140M-C2T-A63
1	0.63...1.0	21	100	65	–	–	0.5	0.75	0.18	0.25	0.37	0.55	140M-C2T-B10
1.6	1.0...1.6	33	100	65	0.25	0.33	1	1	0.25	0.55	0.75	1.1	140M-C2T-B16
2.5	1.6...2.5	52	100	65	0.5	0.75	1.5	2	0.37	0.75	1.1	1.8	140M-C2T-B25
4	2.5...4	82	100	65	1	1	3	3	0.75	1.5	2.2	3	140M-C2T-B40
6.3	4...6.3	130	100	65	1.5	2	5	5	1.5	2.2	3	4	140M-C2T-B63
10	6.3...10	208	100	30	3	3	7.5	10	2.2	4	6.3	7.5	140M-C2T-C10
16	10...16	260	50	30	5	5	10	15	4	7.5	10	13	140M-C2T-C16
D-Frame													

16	10...16	260	100	65	5	5	10	15	4	7.5	10	13	140M-D8T-C16
20	14.5...20	325	65	30	5	7.5	15	20	5.5	10	11	17	140M-D8T-C20
F-Frame													
25	18...25	416	65	65	7.5	10	20	25	6.3	11	15	22	140M-F8T-C25
32	23...32	585	65	65	7.5	10	25	30	7.5	15	20	30	140M-F8T-C32

* Horsepower/kW ratings shown in the table above are for reference. The final selection of the MPCB depends on the actual motor full load current.

Motor Protection Circuit Breakers — Screwless

- Short Circuit Protection – Standard Magnetic Trip ($13...14 \times I_e$)
- Motor Overload Protection – Trip Class 10



Rated Operational Current (I_e) [A]	Motor Current Adjustment Range [A]	Magnetic Trip Current [A]	Max. Short Circuit Current [kA]		Max. 3-phase Hp Ratings*				Max. kW, 3-Phase – AC-3*				Cat. No.
			400V (I_{cu})	480V (group motor)	200V	230V	460V	575V	230V	400/415V	500V	690V	
C-Frame													
0.16	0.10...0.16	2.1	100	65	–	–	–	–	–	0.02	0.06	0.06	140M-RC2E-A16
0.25	0.16...0.25	3.3	100	65	–	–	–	–	–	0.04	0.09	0.09	140M-RC2E-A25
0.4	0.25...0.40	5.2	100	65	–	–	–	0.25	0.06	0.09	0.12	0.18	140M-RC2E-A40
0.63	0.40...0.63	8.2	100	65	–	–	0.25	0.33	0.09	0.18	0.18	0.25	140M-RC2E-A63
1	0.63...1.0	13	100	65	–	–	0.5	0.75	0.18	0.25	0.37	0.55	140M-RC2E-B10
1.6	1.0...1.6	21	100	65	0.25	0.33	1	1	0.25	0.55	0.75	1.1	140M-RC2E-B16
2.5	1.6...2.5	33	100	65	0.5	0.75	1.5	2	0.37	0.75	1.1	1.8	140M-RC2E-B25
4	2.5...4.0	52	100	65	1	1	3	3	0.75	1.5	2.2	3.0	140M-RC2E-B40
6.3	4.0...6.3	82	100	65	1.5	2	5	5	1.5	2.2	3.0	4.0	140M-RC2E-B63
10	6.3...10	130	100	65	3	3	7.5	10	2.2	4.0	6.3	7.5	140M-RC2E-C10
16	10...16	208	65	30	5	5	10	15	4.0	7.5	10	13	140M-RC2E-C16

* Horsepower/kW ratings shown in the table above are for reference. The final selection of the MPCB depends on the actual motor full load current.