

2C EMN Series Pushbutton Style Compact Manual NEMA Starters

Cl. I, Div. 1 & 2, Groups C, D
 Cl. II, Div. 1 & 2, Groups E, F, G
 Cl. III
 NEMA 3, 4, 7(CD), 9(EFG)

UL/cUL Listed
 Wet Locations

Applications:

- Explosionproof, compact, across-the-line manual NEMA starters for single and polyphase VAC or VDC motors
- Used on drilling rigs for mud agitators and shakers where flammable or explosive gases are present
- Also used for fans and blowers, pumps, compressors and conveyors

Electrical Ratings:

- NEMA starter sizes 0, 1 and 1P
- 1 to 10 HP
- 2-pole, single phase AC up to 230 VAC
- 3-pole, three phase AC up to 600 VAC
- 2- pole, VDC up to 230 VAC
- #14 - #10 wire size range



Features:

- Optional gasket protects from mud and hose-directed water
- Option for no top entries provides additional ingress protection
- Lockout/tagout option allows for starter to be locked in "OFF" position
- Redesigned buttons allow for ease of use with gloves
- Enclosure designed to protect buttons from damage
- Detachable mounting hardware
- Mounting footprint with multiple options for field flexibility

Certifications and Complies:

- Class I, Divisions 1 & 2, Groups C, D
- Class II, Divisions 1 & 2, Groups E, F, G
- Class III
- UL1203; cUL C22.2 No. 30

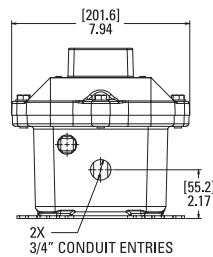
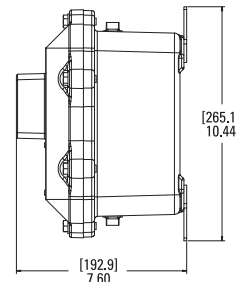
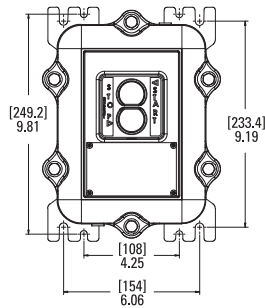
Environmental Ratings:

- NEMA 3, 4, 7(CD), 9(EFG)
- Protected from hose-directed water
- NEMA 4X rated when ordered with epoxy powder coat and gasket options

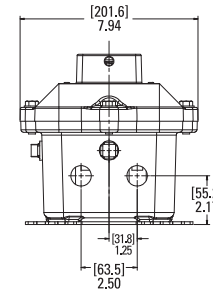
Standard Materials:

- Enclosure – copper-free aluminum
- Shaft, bearing and bolts – stainless steel
- O-ring gasket – Buna-N (optional)

Dimensions:



Top/Bottom View



Bottom View
 (No Top Entry Option)

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Ordering Information:

EMN25

D31

S198V

M15

Enclosure Type	
25	Pre-drilled for Square D Starter
27	Pre-drilled for GE Starter

Starter Type	
D	Square D Starter
G	GE Starter

Suffix	No. of Poles	NEMA Size	Motor Voltage	Single Phase	Poly-phase	DC
20		0	115	1	–	–
			230	2	–	–
21	2	1	115	2	–	–
			230	3	–	–
21P		1P	115	3	–	–
			230	5	–	–
30		0	200-230	–	3	–
			380-575	–	5	–
31	3	1	200-230	–	7.5	–
			380-575	–	10	–
20DC		0	115	–	–	1
			230	–	–	1.5
21DC	2 DC	1	115	–	–	1.5
			230	–	–	2

Options	
S752	Gray Epoxy Powder Coat, Outside Only
S753	Gray Epoxy Powder Coat, Inside & Outside
S198V	Breather and Drain
NTE	No Top Entry
GSK	Gasket (for NEMA 4 Rating)
See Next Page	Heater Element (see tables on next page for Square D or GE options)

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Heater Elements:

Select heater elements based on motor nameplate listed Full Load Amps (FLA). Trip rating of elements is 125% of motor minimum FLA listed for the elements. One heater is furnished with 2-pole AC or DC starters and three heaters with 3-pole starters.

Square D

Size M-0, M-1 and M-1P Only			Size M-0, M-1 and M-1P Only		
Suffix	1 PH	3 PH	Suffix	1 PH	3 PH
B44	0.33 - 0.36	0.29 - 0.32	B370	2.62 - 2.99	2.51 - 2.81
B51	0.37 - 0.40	0.33 - 0.36	B415	3.00 - 3.37	2.82 - 3.16
B57	0.41 - 0.45	0.37 - 0.39	B485	3.38 - 3.94	3.17 - 3.40
B63	0.46 - 0.52	0.40 - 0.47	B550	3.95 - 4.24	3.41 - 3.76
B71	0.53 - 0.59	0.48 - 0.56	B625	4.25 - 4.54	3.77 - 4.00
B81	0.60 - 0.66	0.57 - 0.63	B690	4.55 - 5.29	4.01 - 4.68
B92	0.67 - 0.73	0.64 - 0.69	B770	5.30 - 5.73	4.69 - 5.18
B103	0.74 - 0.81	0.70 - 0.77	B820	5.74 - 6.35	5.19 - 5.51
B116	0.82 - 0.91	0.78 - 0.86	B910	6.36 - 7.08	5.52 - 6.19
B130	0.92 - 1.02	0.87 - 0.96	B102	7.09 - 7.83	6.20 - 7.12
B145	1.03 - 1.14	0.97 - 1.11	B115	7.84 - 8.47	7.13 - 8.15
B167	1.15 - 1.29	1.12 - 1.23	B128	8.48 - 9.83	8.16 - 8.60
B188	1.20 - 1.42	1.24 - 1.37	B140	9.84 - 10.5	8.61 - 9.21
B210	1.43 - 1.64	1.38 - 1.55	B155	10.6 - 11.4	9.22 - 10.1
B240	1.65 - 1.80	1.56 - 1.75	B175	11.5 - 12.8	10.2 - 11.2
B265	1.81 - 2.10	1.76 - 1.92	B195	12.9 - 13.9	11.3 - 12.0
B300	2.11 - 3.20	1.93 - 2.16	B220	14.0 - 16.1	-
B330	2.31 - 2.61	2.17 - 2.50	B250	16.2 - 18.0	-

Size M-1 and M-1P Only			Size M-1P Only		
Suffix	1 PH	3 PH	Suffix	1 PH	3 PH
B195	-	11.3 - 12.1	B360	23.2 - 27.1	-
B220	-	12.2 - 13.6	B400	27.2 - 29.2	-
B250	16.2 - 17.6	13.7 - 15.3	B450	29.3 - 33.0	-
B280	17.7 - 20.6	15.4 - 17.3	B500	33.1 - 36.0	-
B320	20.7 - 23.1	17.4 - 19.1			
B360	23.2 - 26.0	19.2 - 21.7			
B400	-	21.8 - 24.2			
B450	-	24.3 - 26.0			

General Electric

Size M-0 and M-1 Only			Size M-0 and M-1 Only		
Suffix	1 PH	3 PH	Suffix	1 PH	3 PH
36A	0.34	0.29	955A	9.66	7.98
39A	0.37	0.31	104B	10.5	8.59
43A	0.42	0.34	113B	11.6	9.46
48A	0.47	0.40	125B	12.7	10.3
54A	0.52	0.44	137B	13.2	11.7
60A	0.57	0.48	151B	15.1	12.6
66A	0.63	0.52	163B	16.6	13.8
71A	0.69	0.58	180B	17.6	15.4
78A	0.77	0.64	198B	-	16.6
87A	0.87	0.71	214B	-	17.4
97A	0.97	0.81	198B	19.8	-
109A	1.06	0.89	214B	21.1	-
118A	1.18	0.98	228B	23.1	19.4
131A	1.33	1.12	250B	25.2	20.6
148A	1.47	1.22	273B	-	22.0
163A	1.66	1.38	303B	-	25.3
184A	1.78	1.48			
196A	2.00	1.66			
220A	2.18	1.80			
239A	2.45	2.03			
268A	2.76	2.28			
301A	3.00	2.47			
326A	3.27	2.71			
356A	3.49	2.87			
379A	3.86	3.18			
419A	4.30	3.54			
466A	4.88	3.89			
526A	5.49	4.51			
592A	5.85	4.90			
630A	6.45	5.30			
695A	7.22	5.94			
778A	8.05	6.70			
867A	8.88	7.36			

Size M-1P Only		Size M-1P Only	
Suffix	1 PH	Suffix	1 PH
778A	8.56	180B	19.7
867A	9.43	198B	21.2
955A	10.3	214B	22.2
104B	11.0	228B	24.9
113B	12.1	250B	26.4
125B	13.2	273B	30.0
137B	15.0	303B	32.7
151B	16.2	330B	34.0
163B	17.7		

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