



STARTERS

B7MSN SERIES

COMPACT SERIES NEMA STARTERS



B7MSN2P



Internal View

B7MSN

Motor Starter

NEC / CEC Certifications

Class I, Groups B, C & D

Class I, Zone 1 IIB+H2 Gb

Class II, Groups E, F & G

Class III

Type 3, 4, 4X

Ta=-25°C to +40°C (CSAus)

Ta=-50°C to +40°C (cCSA)



Certificate LR11714

FEATURES-SPECIFICATIONS

Features

- Allen-Bradley 609 Series
- Cutler-Hammer B100M Series
- GE CR106 Series
- Square D 2510M Series
- Compact size enclosures provide application flexibility with cost savings over industry standard sizes
- TYPE 4, 4X rated – providing protection from hose directed water and corrosion
- Pre-drilled to facilitate easy field installation of starters
- Large double green/red start-stop push buttons
- Can be pad locked in “OFF” position
- Provisions for drain and breather
- Bolt on ductile mounting lugs
- Two 1-½” NPT conduit openings provided as standard, with custom openings on request

Materials

- Enclosures: Copper-free aluminum (less than ¼% of 1% copper content)
- Cover Bolts: 316 Stainless Steel
- O-ring Gasket: Silicone
- Finish: Grey Powder Polyester painted

Electrical Rating

NEMA starter sizes 0, 1, 1-½ FVNR;
2 pole single phase = 230 VAC
3 pole three phase = 600 VAC
2 pole VDC = 230 VDC

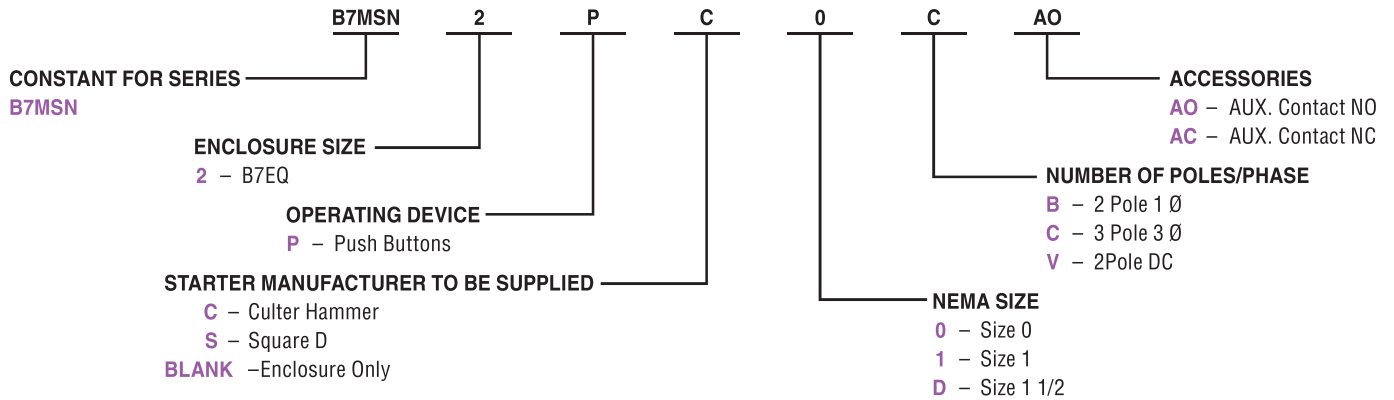
Overload Heaters

Heaters are not included, see next page.



COMPACT SERIES NEMA STARTERS

CATALOG LOGIC



CATALOG NUMBER			SIZE/ PHASE	SINGLE PHASE HP		THREE PHASE				DC HP	
ENCLOSURE	W/CUTLER-HAMMER	W/ SQUARE D		120 VAC	230 VAC	208 VAC	230 VAC	480 VAC	600 VAC	115 DC	230 VDC
B7MSN2P	B7MSN2PC0B	B7MSN2PS0B	M-0 2P	1	2					1 CH	1.5 CH
	B7MSN2PC1B	B7MSN2PS1B	M-1 2P	2	3					1.5 CH	2 CH
		B7MSN2PSDB	M-1P 2P	3	5						
	B7MSN2PC0C	B7MSN2PS0C	M-0 3P			3	3	5	5		
	B7MSN2PC1C	B7MSN2PS1C	M-1 3P			7.5	7.5	10	10		
		B7MSN2PS0V	M-0 2P VDC							1	1.5
		B7MSN2PS1V	M-1 2P VDC							1.5	2



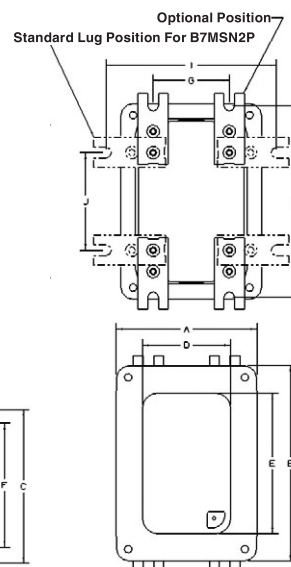
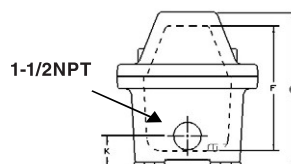
STARTERS

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HEATERS, CATALOG LOGIC, DIMENSIONS

B7MSN HEATER SELECTION SQUARE D 2510M ONLY		
MOTOR FULL LOAD AMPS @ 40° C		
SIZE 0		
CATALOG NUMBER	SINGLE PHASE	THREE PHASE
KB044	0.33 - 0.36	0.29 - 0.32
KB051	0.37 - 0.40	0.33 - 0.36
KB057	0.41 - 0.45	0.37 - 0.39
KB063	0.46 - 0.52	0.40 - 0.47
KB071	0.53 - 0.59	0.48 - 0.56
KB081	0.60 - 0.66	0.57 - 0.63
KB092	0.67 - 0.73	0.64 - 0.69
KB103	0.74 - 0.81	0.70 - 0.77
KB116	0.82 - 0.91	0.78 - 0.86
KB130	0.92 - 1.02	0.87 - 0.96
KB145	1.03 - 1.14	0.97 - 1.11
KB167	1.15 - 1.29	1.12 - 1.23
KB188	1.20 - 1.42	1.24 - 1.37
KB210	1.43 - 1.64	1.38 - 1.55
KB240	1.65 - 1.80	1.56 - 1.75
KB265	1.81 - 2.10	1.76 - 1.92
KB300	2.11 - 2.30	1.93 - 2.16
KB330	2.31 - 2.61	2.17 - 2.50
KB370	2.62 - 2.99	2.51 - 2.81
KB415	3.00 - 3.37	2.82 - 3.16
KB485	3.38 - 3.94	3.17 - 3.40
KB550	3.95 - 4.24	3.41 - 3.76
KB625	4.25 - 4.54	3.77 - 4.00
KB690	4.55 - 5.29	4.01 - 4.68
KB770	5.30 - 5.73	4.69 - 5.18
KB820	5.74 - 6.35	5.19 - 5.51
KB910	6.36 - 7.08	5.52 - 6.19
KB102	7.09 - 7.83	6.20 - 7.12
KB115	7.84 - 8.47	7.13 - 8.15
KB128	8.48 - 9.83	8.16 - 8.60
KB014	9.84 - 10.5	8.61 - 9.21
KB155	10.6 - 11.4	9.22 - 10.1
KB175	11.5 - 12.8	10.2 - 11.2
KB195	12.9 - 13.9	11.3 - 12.0
KB022	14.0 - 16.1	—
KB025	16.2 - 18.0	—
SIZE 1 & 1P	SIZE 1 & 1P	SIZE 1 & 1P
KB195	—	11.3 - 12.1
KB022	—	12.2 - 13.6
KB025	16.2 - 17.6	13.7 - 15.3
KB280	17.7 - 20.6	15.4 - 17.3
KB032	20.7 - 23.1	17.4 - 19.1
KB036	23.2 - 26.0	19.2 - 21.7
KB040	—	21.8 - 24.2
KB045	—	24.3 - 26.0
SIZE 1P	SIZE 1P	SIZE 1P
KB036	23.2 - 27.1	—
KB040	27.2 - 29.2	—
KB045	29.3 - 33.0	—
KB050	33.1 - 36.0	—

MODIFICATIONS	
SUFFIX NUMBER	DESCRIPTION
KIT-251	100 amp ground lug
AO	Aux. contact NO only
AC	Aux. contact NC only
SU-2	Hinge-9 Installed
SU3B-4X	Drain & Breather installed TYPE 4X
SU3B-4XSS	Drain & Breather installed TYPE 4X SS
B7SPNPT	Change Std. conduit size and location
SU9	Special paint finish
SU14	Fungus proofing of enclosures



B7MSN HEATER SELECTIONS CUTLER-HAMMER							
CATALOG NUMBER	MOTOR FULL-LOAD AMPS @ 40°C		CUTLER-HAMMER CODEMARK	CATALOG NUMBER	MOTOR FULL-LOAD AMPS @ 40°C		CUTLER-HAMMER CODEMARK
	SINGLE PHASE	THREE PHASE			SINGLE PHASE	THREE PHASE	
YOWEA200-FH03	.28-.29	.25-.26	FH03	YOWEA200-FH31	4.41-4.81	3.87-4.22	FH31
YOWEA200-FH04	.30-.33	.27-.29	FH04	YOWEA200-FH32	4.82-5.26	4.23-4.61	FH32
YOWEA200-FH05	.34-.36	.30-.32	FH05	YOWEA200-FH33	5.27-5.74	4.62-5.03	FH33
YOWEA200-FH06	.37-.40	.33-.35	FH07	YOWEA200-FH34	5.75-6.25	5.04-5.49	FH34
YOWEA200-FH07	.41-.45	.36-.39	FH07	YOWEA200-FH35	6.27-6.83	5.50-5.99	FH35
YOWEA200-FH08	.46-.50	.40-.44	FH08	YOWEA200-FH36	6.84-7.45	6.00-6.53	FH36
YOWEA200-FH09	.51-.56	.45-.49	FH09	YOWEA200-FH37	7.46-8.11	6.54-7.11	FH37
YOWEA200-FH10	.57-.63	.50-.55	FH10	YOWEA200-FH38	8.12-8.81	7.12-7.73	FH38
YOWEA200-FH11	.64-.70	.56-.61	FH11	YOWEA200-FH39	8.82-9.58	7.74-8.40	FH39
YOWEA200-FH12	.71-.78	.62-.68	FH12	YOWEA200-FH40	9.59-10.40	8.41-9.12	FH40
YOWEA200-FH13	.79-.86	.69-.75	FH13	YOWEA200-FH41	10.41-11.3	9.13-9.89	FH41
YOWEA200-FH14	.87-.95	.76-.83	FH14	YOWEA200-FH42	11.4-12.2	9.9-10.7	FH42
YOWEA200-FH15	.96-1.04	.84-.91	FH15	YOWEA200-FH43	12.3-13.5	10.8-11.8	FH43
YOWEA200-FH16	1.05-1.14	.92-1.00	FH16	YOWEA200-FH44	13.6-14.9	11.9-13.0	FH44
YOWEA200-FH17	1.15-1.25	1.01-1.10	FH17	YOWEA200-FH45	15.0-16.0	13.1-14.0	FH45
YOWEA200-FH18	1.26-1.39	1.11-1.22	FH18	YOWEA200-FH46	16.1-17.1	14.1-15.0	FH46
YOWEA200-FH19	1.40-1.54	1.23-1.35	FH19	YOWEA200-FH47	17.2-18.3	15.1-16.1	FH47
YOWEA200-FH20	1.55-1.71	1.36-1.50	FH20	YOWEA200-FH48	18.4-19.7	16.2-17.3	FH48
YOWEA200-FH21	1.72-1.89	1.51-1.66	FH21	YOWEA200-FH49	19.8-21.2	17.4-18.6	FH49
YOWEA200-FH22	1.90-2.10	1.67-1.84	FH22	YOWEA200-FH50	21.3-22.8	18.7-20.0	FH50
YOWEA200-FH23	2.11-2.32	1.85-2.03	FH23	YOWEA200-FH51	22.9-24.5	20.1-21.5	FH51
YOWEA200-FH24	2.33-2.54	2.04-2.23	FH24	YOWEA200-FH52	24.6-26.4	21.6-23.2	FH52
YOWEA200-FH25	2.55-2.79	2.24-2.45	FH25	YOWEA200-FH53	26.5-28.5	23.2-25.0	FH53
YOWEA200-FH26	2.80-3.07	2.46-2.69	FH26	YOWEA200-FH54	28.6-30.8	25.1-26.8	FH54
YOWEA200-FH27	3.08-3.36	2.70-2.95	FH27	YOWEA200-FH55	30.9-33.3	—	FH55
YOWEA200-FH28	3.37-3.68	2.96-3.23	FH28	YOWEA200-FH56	33.4-36.0	—	FH56
YOWEA200-FH29	3.69-4.03	3.24-3.53	FH29	YOWEA200-FH57	36.1-38.9	—	FH57
YOWEA200-FH30	4.04-4.40	3.54-3.86	FH30				

Select heater element based on motor nameplate listed full load amps. Trip rating of element is 125% of motor minimum F.L.A. listed for the element