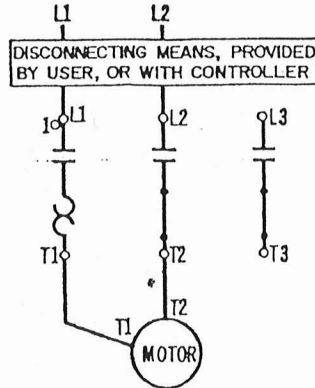


MELTING ALLOY OVERLOAD RELAY JUMPER STRAP KIT CLASS 9998, TYPE SO-30, 31, or 32

FOR NEMA SIZE 00 TYPE A AND SIZE 0 AND 1, 2, AND 3 TYPE S STARTERS AND NEMA SIZE M-0 AND M-1 MANUAL STARTERS.

POWER WIRING



JUMPER STRAP INSTALLATION

Install Jumper Straps in Poles L2 and L3 using existing screws.
Note: Latch of Overload Relay must be fully depressed under Jumper Strap.

SINGLE-PHASE MAX. HP. RATING

SIZE	TYPE	VOLTS AC	
		115	230
00	A	1/3	1
0 & MOSBMBTB		1	2
1 & MSCMCTC		2	3
2	SD	3	7-1/2
3	SE	7-1/2	15

OVERLOAD-RELAY THERMAL UNITS

Use applicable thermal unit selection table below in place of selection table furnished with starter. For continuous-rated motors having service factors of 1.15 to 1.25, select thermal units directly from the applicable table, using 100% of full-load current shown on motor nameplate. For continuous-rated motors having a service factor of 1.0, select thermal units from the applicable table using 90% full-load current shown on motor nameplate.
Trip current rating in a 40°C (104°F) ambient temperature is 1.25 times the minimum full-load current shown in the applicable column for the thermal unit selected.
Refer to instruction sheet furnished with starter for limitations regarding branch-circuit protection.

Use Column 1 for Starter in small enclosure (Class 8536).
Use Column 2 for Starter in all large enclosures.

Use Column 1 for Starter in small enclosure (Class 2510).
Use Column 2 for Starter in all large enclosures.
Selections for full-load currents above 18.0 amperes do not apply for NEMA Size M-0.

Use Column 1 for Starter in small enclosure (Class 8536), and for Motor Starter Center (QMB, I-LINE).
Use Column 2 for Model 4 Motor Control Center (Class 8998, 8999).
Use Column 3 for Combination Starter (Class 8538, 8539), and other large enclosures.

Use Column 1 for Starter in small enclosure (Class 8536).
Use Column 2 for Starter in all large enclosures (Class 8538, 8539, 8998, 8999, QMB, I-LINE, etc.).

FOR NEMA SIZE 00

MOTOR FULL-LOAD CURRENT AMPS		THERMAL UNIT NO.
Col. 1	Col. 2	
0.167-0.184	0.177-0.195	A 22
0.185-0.204	0.196-0.215	A 23
0.205-0.226	0.216-0.238	A 26
0.227-0.251	0.239-0.263	A 27
0.252-0.279	0.264-0.291	A 31
0.280-0.309	0.292-0.322	A 34
0.310-0.344	0.323-0.356	A 37
0.345-0.381	0.357-0.394	A 39
0.382-0.419	0.395-0.429	A 47
0.42-0.46	0.43-0.47	A 49
0.47-0.50	0.48-0.51	A 54
0.51-0.55	0.52-0.56	A 59
0.56-0.62	0.57-0.64	A 65
0.63-0.67	0.65-0.69	A 71
0.68-0.73	0.70-0.76	A 78
0.74-0.81	0.77-0.84	A 86
0.82-0.89	0.85-0.91	A 95
0.90-0.98	0.92-1.01	A 102
0.99-1.12	1.02-1.15	A 116
1.13-1.20	1.16-1.23	A 125
1.21-1.34	1.24-1.37	A 139
1.35-1.41	1.38-1.45	A 154
1.42-1.51	1.46-1.56	A 163
1.52-1.62	1.57-1.67	A 175
1.63-1.73	1.68-1.77	A 186
1.74-1.86	1.78-1.92	A 199
1.87-2.02	1.93-2.09	A 215
2.03-2.25	2.10-2.31	A 231
2.26-2.46	2.32-2.56	A 257
2.47-2.77	2.57-2.92	A 281
2.78-2.99	2.93-3.16	A 361
3.00-3.26	3.17-3.48	A 395
3.27-3.59	3.49-3.83	A 432
3.60-3.99	3.84-4.24	A 479
4.00-4.42	4.25-4.62	A 530
4.43-4.61	4.63-4.92	A 578
4.62-5.23	4.93-5.61	A 620
5.24-5.39	5.62-5.85	A 699
5.40-5.88	5.86-6.36	A 765
5.89-6.56	6.37-6.99	A 838
6.57-7.18	7.00-7.67	A 925
7.19-7.90	7.68-8.15	A 985
7.81-9.00	8.16-9.00	A 11.0

FOR NEMA M-0 and M-1

MOTOR FULL-LOAD CURRENT AMPS		THERMAL UNIT NO.
Col. 1	Col. 2	
0.33-0.36	0.35-0.38	B 0.44
0.37-0.40	0.39-0.43	B 0.51
0.41-0.45	0.44-0.48	B 0.57
0.46-0.52	0.49-0.56	B 0.63
0.53-0.59	0.57-0.63	B 0.71
0.60-0.66	0.64-0.71	B 0.81
0.67-0.73	0.72-0.78	B 0.92
0.74-0.81	0.79-0.88	B 1.03
0.82-0.91	0.83-0.99	B 1.16
0.92-1.02	1.00-1.15	B 1.30
1.03-1.14	1.16-1.23	B 1.45
1.15-1.29	1.24-1.43	B 1.67
1.30-1.42	1.44-1.51	B 1.88
1.43-1.64	1.52-1.75	B 2.10
1.65-1.80	1.76-1.93	B 2.40
1.81-2.10	1.94-2.25	B 2.65
2.11-2.30	2.26-2.47	B 3.00
2.31-2.61	2.48-2.81	B 3.30
2.62-2.99	2.82-3.20	B 3.70
3.00-3.37	3.21-3.63	B 4.15
3.38-3.94	3.64-4.19	B 4.85
3.95-4.24	4.20-4.53	B 5.50
4.25-4.54	4.54-4.89	B 6.25
4.55-5.29	4.90-5.68	B 6.90
5.30-5.73	5.69-6.27	B 7.70
5.74-6.35	6.28-6.85	B 8.20
6.36-7.08	6.86-7.73	B 9.10
7.09-7.83	7.74-8.50	B 10.2
7.84-8.47	8.51-9.29	B 11.5
8.48-9.83	9.30-10.4	B 12.8
9.84-10.5	10.5-11.3	B 14
10.6-11.4	11.4-12.3	B 15.5
11.5-12.8	12.4-13.9	B 17.5
12.9-13.9	14.0-15.0	B 19.5
14.0-16.1	15.1-17.4	B 22
16.2-17.6	17.5-19.2	B 25
17.7-20.6	19.3-22.0	B 28.0
20.7-23.1	22.1-24.6	B 32
23.2-26.0	24.7-26.0	B 36

FOR NEMA SIZE 0 and 1

MOTOR FULL-LOAD CURRENT AMPS			THERMAL UNIT NO.
Col. 1	Col. 2	Col. 3	
0.29-0.31	0.31-0.32	0.31-0.33	B 0.44
0.32-0.34	0.33-0.36	0.34-0.36	B 0.51
0.35-0.38	0.37-0.41	0.37-0.40	B 0.57
0.39-0.45	0.42-0.49	0.41-0.48	B 0.63
0.46-0.54	0.50-0.54	0.49-0.57	B 0.71
0.55-0.61	0.55-0.61	0.58-0.64	B 0.81
0.62-0.66	0.62-0.67	0.65-0.70	B 0.92
0.67-0.73	0.68-0.76	0.71-0.77	B 1.03
0.74-0.81	0.77-0.87	0.78-0.85	B 1.16
0.82-0.94	0.88-0.98	0.86-0.99	B 1.30
0.95-1.05	0.99-1.05	1.00-1.10	B 1.45
1.06-1.22	1.06-1.25	1.11-1.28	B 1.67
1.23-1.34	1.26-1.33	1.29-1.41	B 1.88
1.35-1.51	1.34-1.56	1.42-1.58	B 2.10
1.52-1.71	1.57-1.71	1.59-1.80	B 2.40
1.72-1.93	1.72-1.97	1.81-2.03	B 2.65
1.94-2.14	1.98-2.15	2.04-2.25	B 3.00
2.15-2.40	2.16-2.42	2.26-2.51	B 3.30
2.41-2.72	2.43-2.78	2.52-2.83	B 3.70
2.73-3.15	2.79-3.28	2.84-3.29	B 4.15
3.16-3.55	3.29-3.88	3.30-3.75	B 4.85
3.56-4.00	3.89-4.13	3.76-4.22	B 5.50
4.01-4.40	4.14-4.43	4.23-4.65	B 6.25
4.41-4.88	4.44-4.96	4.66-5.16	B 6.90
4.89-5.19	4.97-5.35	5.17-5.53	B 7.70
5.20-5.73	5.36-5.91	5.54-6.09	B 8.20
5.74-6.39	5.92-6.79	6.10-6.80	B 9.10
6.40-7.13	6.80-7.56	6.81-7.60	B 10.2
7.14-7.90	7.57-7.83	7.61-8.35	B 11.5
7.91-8.55	7.84-8.09	8.36-9.04	B 12.8
8.56-9.53	8.10-9.51	9.05-9.99	B 14
9.54-10.6	9.52-10.1	10.0-11.1	B 15.5
10.7-11.8	10.2-11.3	11.2-12.3	B 17.5
11.9-13.2	11.4-13.1	12.4-13.7	B 19.5
13.3-14.9	13.2-14.9	13.8-15.4	B 22
15.0-16.6	15.0-16.1	15.5-17.2	B 25
16.7-18.9	16.2-17.8	17.3-19.4	B 28.0
19.0-21.2	17.9-19.1	19.5-21.7	B 32
21.3-23.0	19.2-22.4	21.8-23.9	B 36
23.1-25.5	22.5-23.5	24.0-26.0	B 40
25.6-26.0	23.6-26.0	-	B 45

FOR NEMA SIZE 2

MOTOR FULL-LOAD CURRENT AMPS			THERMAL UNIT NO.
Col. 1	Col. 2	Col. 3	
3.29-3.74	-	3.37-3.82	B 4.85
3.75-4.23	3.79-4.14	3.83-4.33	B 5.50
4.24-4.68	4.15-4.44	4.34-4.79	B 6.25
4.69-5.22	4.45-5.22	4.80-5.33	B 6.90
5.23-5.67	5.23-5.29	5.34-5.79	B 7.70
5.68-6.13	5.30-5.99	5.80-6.27	B 8.20
6.14-6.91	6.00-6.82	6.28-7.03	B 9.10
6.92-7.70	6.83-7.68	7.04-7.88	B 10.2
7.71-8.56	7.69-7.92	7.89-8.73	B 11.5
8.57-9.39	7.93-8.47	8.74-9.55	B 12.8
9.40-10.4	8.48-9.99	9.56-10.6	B 14
10.5-11.6	10.0-10.8	10.7-11.8	B 15.5
11.7-12.9	10.9-12.3	11.9-13.1	B 17.5
13.0-14.6	12.4-12.9	13.2-14.9	B 19.5
14.7-16.5	13.0-15.1	15.0-16.9	B 22
16.6-18.5	15.2-16.7	17.0-18.8	B 25
18.6-21.0	16.8-17.9	18.9-21.5	B 28.0
21.1-23.6	18.0-20.1	21.6-24.1	B 32
23.7-26.3	20.2-23.8	24.2-26.8	B 36
26.4-29.3	23.9-25.8	26.9-29.9	B 40
29.4-35.1	25.9-28.3	30.0-35.5	B 45
35.2-36.1	28.4-29.6	35.6-36.5	B 50
36.2-39.1	29.7-32.1	36.6-39.6	B 56
39.2-41.5	32.2-34.4	39.7-41.5	B 62
41.6-45.0	34.5-38.3	41.6-45.0	B 70
-	38.4-39.9	-	B 79
-	40.0-45.0	-	B 88

FOR NEMA SIZE 3

MOTOR FULL-LOAD CURRENT AMPS		THERMAL UNIT NO.
Col. 1	Col. 2	
15.5-16.4	16.2-17.5	CC 20.9
16.5-17.6	17.6-18.8	CC 22.8
17.7-19.1	18.9-20.5	CC 24.6
19.2-20.4	20.6-22.2	CC 26.3
20.5-22.1	22.3-23.7	CC 28.8
22.2-23.4	23.8-25.4	CC 31.0
23.5-25.6	25.5-27.3	CC 33.3
25.7-27.3	27.4-29.3	CC 36.4
27.4-29.4	29.4-31.5	CC 39.6
29.5-31.5	31.6-33.9	CC 42.7
31.6-33.7	34.0-36.2	CC 46.6
33.8-36.5	36.3-39.3	CC 50.1
36.6-39.1	39.4-42.3	CC 54.5
39.2-41.7	42.4-45.3	CC 59.4
41.8-44.8	45.4-48.3	CC 64.3
44.9-48.0	48.4-52.0	CC 68.5
48.1-50.7	52.1-54.9	CC 74.6
50.8-54.9	55.0-59.7	CC 81.5
55.0-59.9	59.8-65.4	CC 87.7
60.0-63.3	65.5-69.6	CC 94.0
63.4-67.2	69.7-74.8	CC 103
67.3-72.4	74.9-79.7	CC 112
72.5-74.9	79.8-83.1	CC 121
75.0-77.4	83.2-86.0	CC 132
77.5-80.7	-	CC 143
80.8-83.1	-	CC 156
83.2-86.0	-	CC 167