

Quick Installation Guide for Size 3 or 4 Motor Controller

FOR FULL-VOLTAGE, SINGLE-SPEED, NONREVERSING APPLICATIONS

1. Attach the contactor or starter to the mounting surface with $\frac{1}{4}$ inch screws. See Figure 2.
2. Connect the line terminals to the branch circuit Short-Circuit-Protective Device (SCPD) or disconnecting means, with 75°C copper wire or 90°C copper wire derated to 75°C ampacity, selected in accordance with the National Electrical Code (NEC).
3. Connect the load terminals to the motor using 75°C or 90°C copper conductors derated to 75°C ampacity.
4. Make control wire connections as shown in Figure 1. Strip control wires for terminals 3-P-E-C not more than $\frac{1}{4}$ inch.

For Motor Starters

5. See the motor nameplate for motor full-load current (FLA) and service factor (S.F.).
6. Set the 8-position DIP switch beneath the nameplate (Figure 3) for motor FLA and Class 10 protection. See separate instruction sheet: OVERLOAD PROTECTION SETTINGS.
7. If the starter trips before the motor and its connected load come up to rated speed, reset the starter and change the DIP switch setting to Class 20 protection. If starter trips again, select Class 30 protection.
8. Insert the clear plastic snap-in cover into the opening over the DIP switch. Mount the protection label in some convenient location.

See instruction leaflet I.L. 17403 for additional information, alternate connection diagrams, ground-fault and phase-loss protection, trouble-shooting hints, etc.

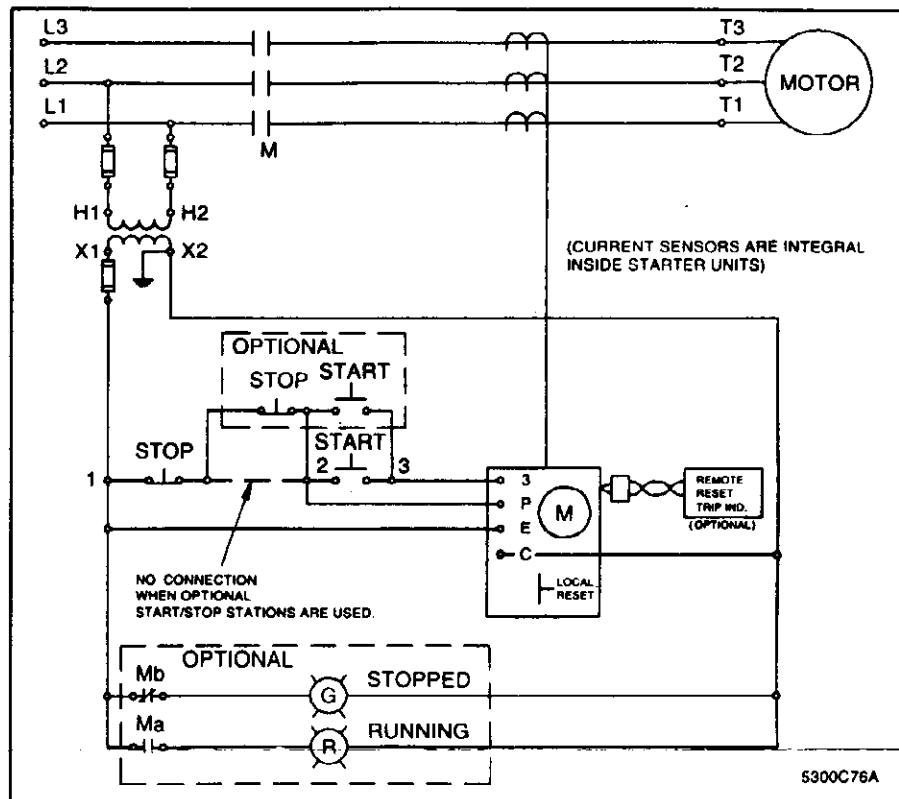


Fig. 1 Internal Holding Circuit - 3 Wire

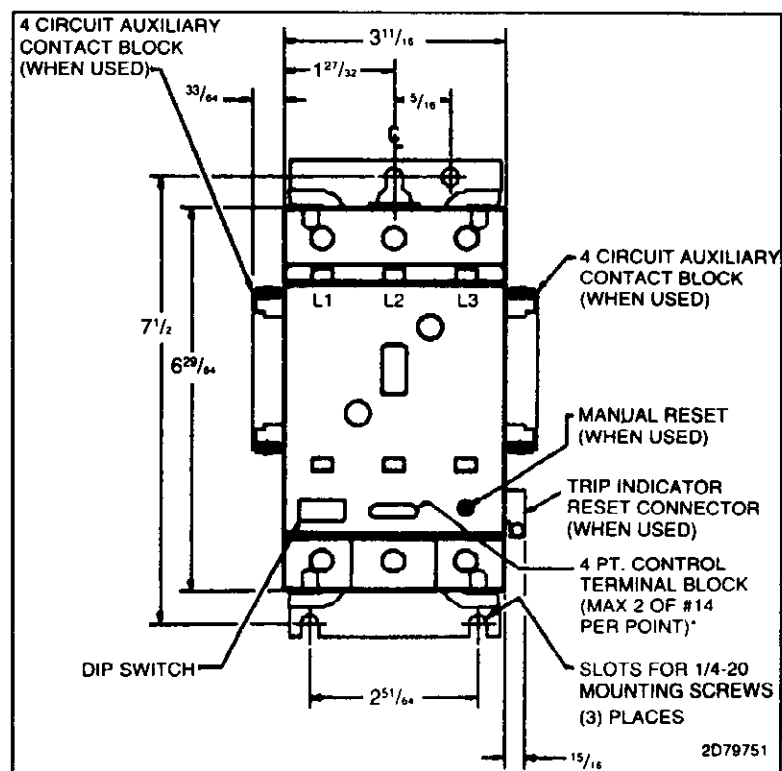


Fig. 2 Size 3 and Size 4 Mounting Dimensions (in inches)

Controller Size	Circuit Conductor	Wire Range (AWG)	Tightening Torque (lb.-in.)
3 & 4	Power	#14-250 kcmil	90-100
3 & 4	Auxiliary Contact	#18-12	7
3 & 4	Control	#18-14	6

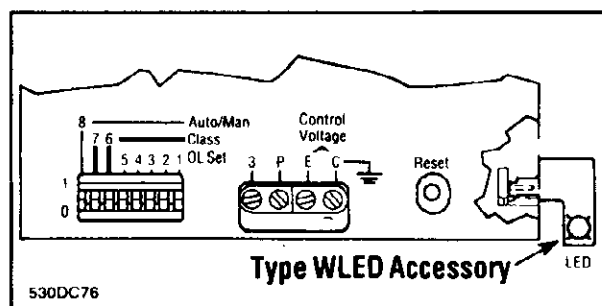


Fig. 3 DIP Switch, Terminals and Reset

RESET METHOD	POSITION 8
MANUAL (Nonautomatic. Wait 5 minutes and push reset button.)	0
AUTOMATIC (Reset time is based on protection Class.)	1

OVERLOAD CLASS	POSITION 7	POSITION 6
10	0	0
20	0	1
30	1	0
NONE	1	1

SIZE 3 CURRENT RANGE			
Column A SERVICE FACTOR 1.15 to 1.25 MIN. MAX.	Column B SERVICE FACTOR 1.0 MIN. MAX.	TRIP RATING (AMPERES)	DIP SWITCH SETTING* (54321)
9.9 — 10.8	10.8 — 11.7	12.4	00000
10.9 — 11.9	11.8 — 12.9	13.6	00001
12.0 — 13.1	13.0 — 14.2	15.0	00010
13.2 — 14.4	14.3 — 15.6	16.5	00011
14.5 — 15.8	15.7 — 17.2	18.1	00100
15.9 — 17.4	17.3 — 18.9	19.9	00101
17.5 — 19.2	19.0 — 20.9	21.9	00110
19.3 — 21.1	21.0 — 22.9	24.1	00111
21.2 — 23.2	23.0 — 25.2	26.5	01000
23.3 — 25.6	25.3 — 27.8	29.1	01001
25.7 — 28.1	27.9 — 30.6	32.1	01010
28.2 — 30.9	30.7 — 33.6	35.3	01011
31.0 — 34.1	33.7 — 37.0	38.8	01100
34.2 — 37.5	37.1 — 40.8	42.7	01101
37.6 — 41.3	40.9 — 44.9	47.0	01110
41.4 — 45.4	45.0 — 49.4	51.7	01111
45.5 — 50.0	49.5 — 54.3	56.9	10000
50.1 — 54.9	54.4 — 59.7	62.6	10001
55.0 — 60.5	59.8 — 65.7	68.8	10010
60.6 — 66.5	65.8 — 72.3	75.7	10011
66.6 — 73.2	72.4 — 79.6	83.3	10100
73.3 — 80.7	79.7 — 87.7	91.6	10101
80.8 — 88.7	87.8 — 90.0	101	10110
88.8 — 90.0	—	111	10111

*ALL SETTINGS NOT SHOWN ARE EQUIVALENT TO 00000.

After reading the **OVERLOAD PROTECTION SETTINGS** instruction sheet, mount it in the starter enclosure or on the panel adjacent to the starter. Discard this instruction sheet after use and retain I.L. 17403 for future reference.

Replace the arc box cover securely after making selections.

SIZE 4 CURRENT RANGE			
Column A SERVICE FACTOR 1.15 to 1.25 MIN. MAX.	Column B SERVICE FACTOR 1.0 MIN. MAX.	TRIP RATING (AMPERES)	DIP SWITCH SETTING* (54321)
9.9 — 10.8	10.8 — 11.7	12.4	00000
10.9 — 11.9	11.8 — 12.9	13.6	00001
12.0 — 13.1	13.0 — 14.2	15.0	00010
13.2 — 14.4	14.3 — 15.6	16.5	00011
14.5 — 15.8	15.7 — 17.2	18.1	00100
15.9 — 17.4	17.3 — 18.9	19.9	00101
17.5 — 19.2	19.0 — 20.9	21.9	00110
19.3 — 21.1	21.0 — 22.9	24.1	00111
21.2 — 23.2	23.0 — 25.2	26.5	01000
23.3 — 25.6	25.3 — 27.8	29.1	01001
25.7 — 28.1	27.9 — 30.6	32.1	01010
28.2 — 30.9	30.7 — 33.6	35.3	01011
31.0 — 34.1	33.7 — 37.0	38.8	01100
34.2 — 37.5	37.1 — 40.8	42.7	01101
37.6 — 41.3	40.9 — 44.9	47.0	01110
41.4 — 45.4	45.0 — 49.4	51.7	01111
45.5 — 50.0	49.5 — 54.3	56.9	10000
50.1 — 54.9	54.4 — 59.7	62.6	10001
55.0 — 60.5	59.8 — 65.7	68.8	10010
60.6 — 66.5	65.8 — 72.3	75.7	10011
66.6 — 73.2	72.4 — 79.6	83.3	10100
73.3 — 80.7	79.7 — 87.7	91.6	10101
80.8 — 88.7	87.8 — 90.0	101	10110
88.8 — 90.0	96.5 — 105	111	10111
97.6 — 106	106 — 116	122	11000
107 — 117	117 — 127	134	11001
118 — 129	128 — 133	147	11010
130 — 133	—	162	11011

*ALL SETTINGS NOT SHOWN ARE EQUIVALENT TO 00000.

Replace the arc box cover securely after making selections.

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