



Duplex controller with two non-fusible disconnect switches with alternator

NEMA controller size 0

3-Phase, 3-Pole Maximum voltage rating 600VAC

Max Hp 60Hz: 3@200V; 3@230V; NA@460V; NA@575V

Solid-state overload relay(s) with 5.5–22A range

Control voltage 110VAC 50Hz / 120VAC 60Hz

NEMA Type 4 enclosure

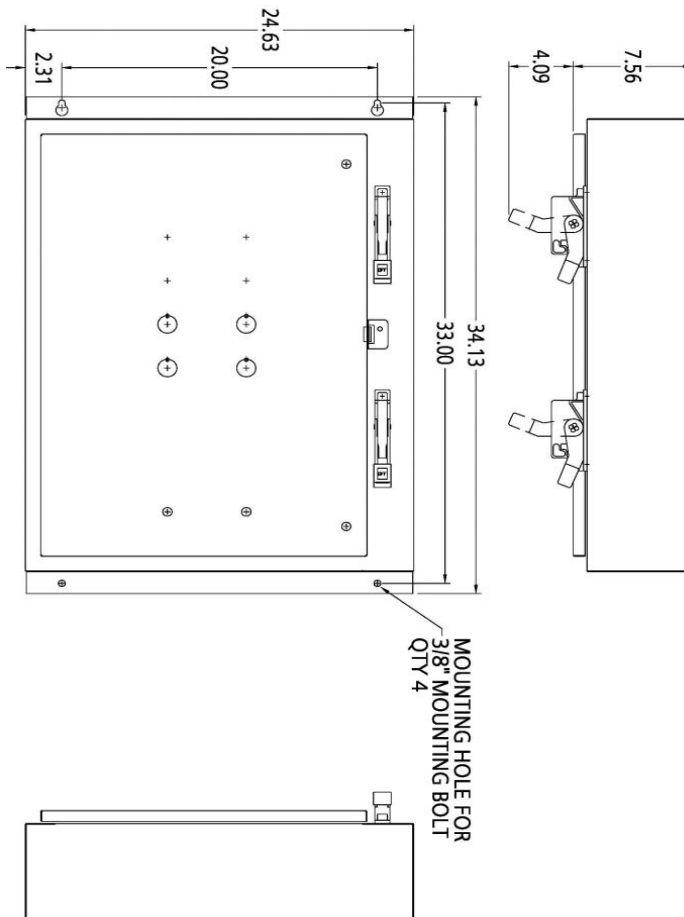


Image is representative and may not depict the actual product.

| <b>General technical data:</b>                              |  |
|---|--|
| Weight  | 70 lb  |
| Height x Width x Depth                                      | 34 x 25 x 8 in.  |
| Finger-safe (main circuit / control circuit)                | NA / NA  |
| Maximum altitude  | 6560 ft  |
| Ambient storage temperature                                 | (-30 to 65)°C / (-22 to 149)°F                         |
| Ambient operating temperature                               | (-20 to 40)°C / (-4 to 104)°F                          |
| Humidity (% non-condensing)                                 | (no data)  |
| Rated impulse voltage resistance                            | (no data)  |
| Rated insulation voltage                                    | (no data)  |
| Country of origin   | USA  |
| <b>Contactors (each):</b>                                   |  |
| Number of NO main contacts                                  | 3  |
| Amp rating  | 18A  |
| Mechanical operating cycles                                 | 10,000,000   |
| <b>Internal/standard auxiliary contact (per contactor):</b> |  |
| Number of NC / NO auxiliary contacts                        | 0NC / 1NO  |
| Rating  | 10A@600VAC (A600), 5A@600VDC (P600)                    |
| <b>Optional auxiliary contact (per contactor):</b>          |  |
| Max number of NC / NO auxiliary contacts                    | 8 total  |
| Rating  | 10A@600VAC (A600), 5A@600VDC (P600)                    |
| <b>Coil (per contactor):</b>                                |  |
| Voltage   | 110VAC 50Hz / 120VAC 60Hz Coil                         |
| Sealed watts  | 8.6W   |
| Inrush / sealed power                                       | 218 / 25 VA  |
| Normal coil operating limits (% of rated voltage)           | 85% - 110%   |
| Typical drop-out volts (% of rated voltage)                 | 50%  |
| Pick-up time / Drop-out time                                | 19-29 / 10-24 msec                                     |
| <b>Overload Relay (each):</b>                               |  |
| Current range   | 5.5–22A  |
| Trip Class  | Class 5 / 10 (factory set) / 20 / 30                   |
| Trip detection  | Overload, phase failure, phase unbalance, ground fault |
| Phase failure sensitivity                                   | Trip time after phase-loss: < 3 sec                    |
| Repeat accuracy   | Within 1%  |
| Reset options   | Manual, automatic and remote                           |
| External reset  | Yes  |
| Test function   | Electronics & manual actuation                         |
| Conformal coating on printed circuit board                  | Yes  |
| Number of NC / NO auxiliary contacts                        | 1NC / 1NO  |
| Rating of auxiliary contacts                                | 5A@600VAC (B600), 1A@250VDC (R300)                     |
| Single contact isolation                                    | 600V   |

|  |   |
|--|---|
| Dual contact isolation                             | 300V differing polarity / 600V common polarity  |
| <b>Disconnect Switch:</b>                          |   |
| Rating   | 30A/600V non-fusible  |
| Fuse type accepted                                 | NA  |
| <b>Enclosure:</b>                                  |   |
| Type   | NEMA Type 4 enclosure   |
| Rating   | Dust-tight, watertight & weather proof  |
| <b>Mounting/wiring:</b>                            |   |
| Mounting orientation                               | Vertical  |
| Mounting type                                      | Surface   |
| Line side connection type / torque                 | Box lug / 35 lb in (14 - 10); 40 lb in (8); 45 lb in (6 - 4) AWG  |
| Line side solid & stranded conductors              | 1x(14 - 2 AWG) 60/75°C AL or CU   |
| Load side connection type / torque                 | Screw / 20 lb-in.   |
| Load side solid & stranded conductors              | 1x(14 - 2 AWG) 75°C AL or CU  |
| Coil connection type / torque                      | Screw / 5 lb in. - 12 lb in.  |
| Coil solid & stranded conductors                   | 2 x (16 - 12 AWG) CU 60/75°C  |
| Main auxiliary contact connection type / torque    | Screw / 10 - 15 lb-in   |
| Main auxiliary contact solid & stranded conductors | 1 x (12 AWG), 2 x (16 - 14 AWG), 2 x (18 - 16 AWG) 75°C CU  |
| OLR auxiliary contact connection type / torque     | Screw / 7 lb in. - 10 lb in.  |
| OLR auxiliary contact solid & stranded conductors  | 2 x (20 - 14 AWG) CU 60/75°C  |
| <b>Short circuit current rating:</b>               |   |
| Fuses  | 10kA@600V (Class H or K); 100kA@600V (Class R or J)   |
| <b>Certificates/approvals:</b>                     |   |
|  | <a href="#">UL (file no. E185287)</a><br><a href="#">cUL (file no. E185287 for Canada)</a><br><a href="#">CSA (file no. 006535 C 000)</a><br><a href="#">ISO 9001 certification</a> |
| <b>Additional information:</b>                     |   |
|  | <a href="#">Brochure</a><br><a href="#">OLR instruction sheet &amp; trip curves</a>   |

OUTLINE 34X25X8 NEMA 3/4/4X/12



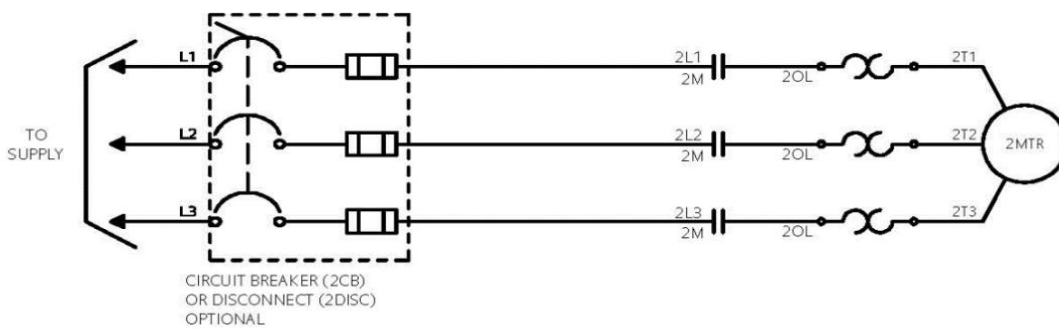
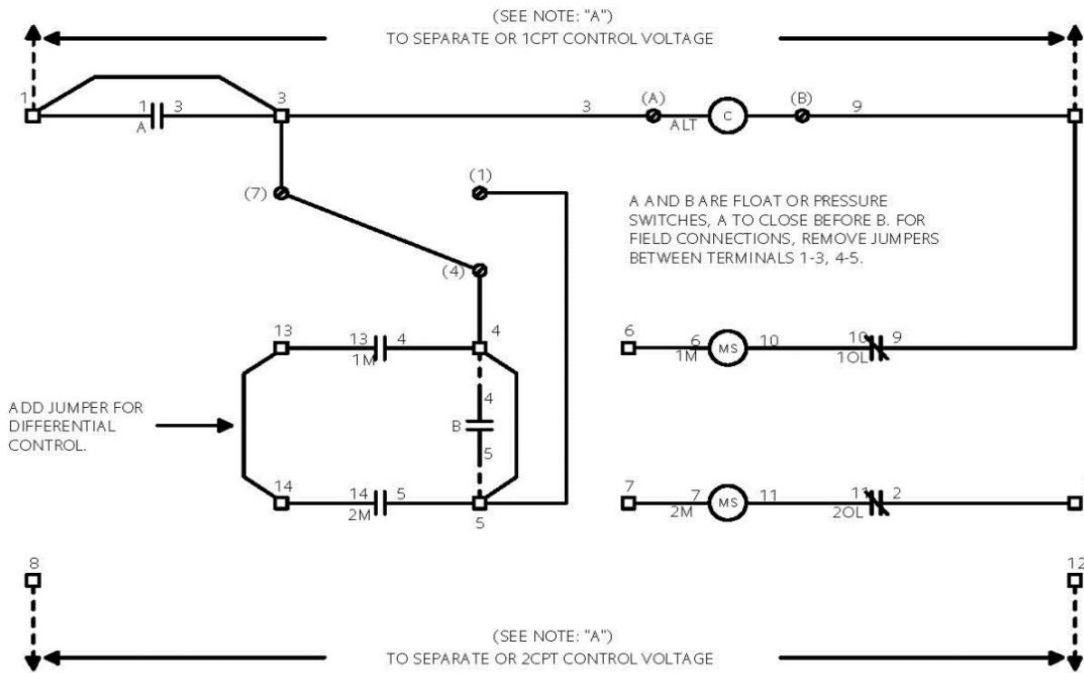
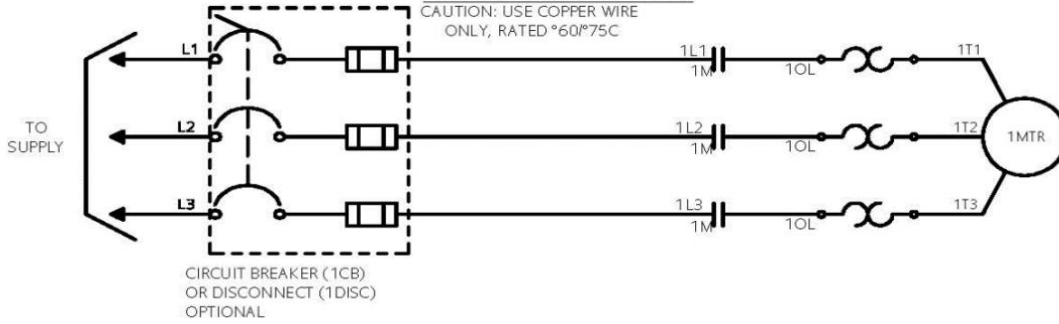
DIMENSIONS ARE IN INCHES.  
FILE NAME: SFIS-D68629002-0211

# SCHEMATIC DIAGRAM

## Class 83 & 84 Duplex W/Auto Alternation Size 0-4

### ELEMENTARY DIAGRAM

CAUTION: USE COPPER WIRE ONLY, RATED #60#75C



#### NOTES:

- A. FOR SEPARATE OR CPT CONTROL VOLTAGE SOURCE: CONNECT PER DOTTED LINES OR TO 1 AND 2 CPT PRIMARIES PER FACTORY OR FIELD MODIFICATIONS.
- B. FOR PROTECTION OF INTERNAL CONTROL CIRCUIT CONDUCTORS IN ACCORDANCE WITH THE N.E.C., USE FUSE KIT 49MAFB4.
- C. TO USE THIS CONTROLLER W/O SELECTOR SWITCHES, JUMPER BETWEEN THE FOLLOWING PAIRS OF TERMINALS 4-6, 5-7, AND 9-2.
- D. FOR TWO POSITION SELECTOR SWITCHES, WIRE AS SHOWN ALSO ADD JUMPER BETWEEN TERMINALS 9-2.
- E. SEPARATE SOURCE CONNECTIONS TO TERMINALS 8 AND 12 ARE REQUIRED ONLY WHEN THREE POSITION SELECTOR SWITCH IS BUILT IN.

REF. D68077001