



Duplex controller with two MCPs  
without alternator  
Controller half size 2 1/2  
3-Phase, 3-Pole Maximum voltage rating 600VAC  
Max Hp 60Hz: 15@200V; 20@230V; 30@460V; 30@575V  
Solid-state overload relay(s) with 25–100A range  
Control voltage 208VAC 60Hz  
NEMA Type 4X 304 stainless steel enclosure

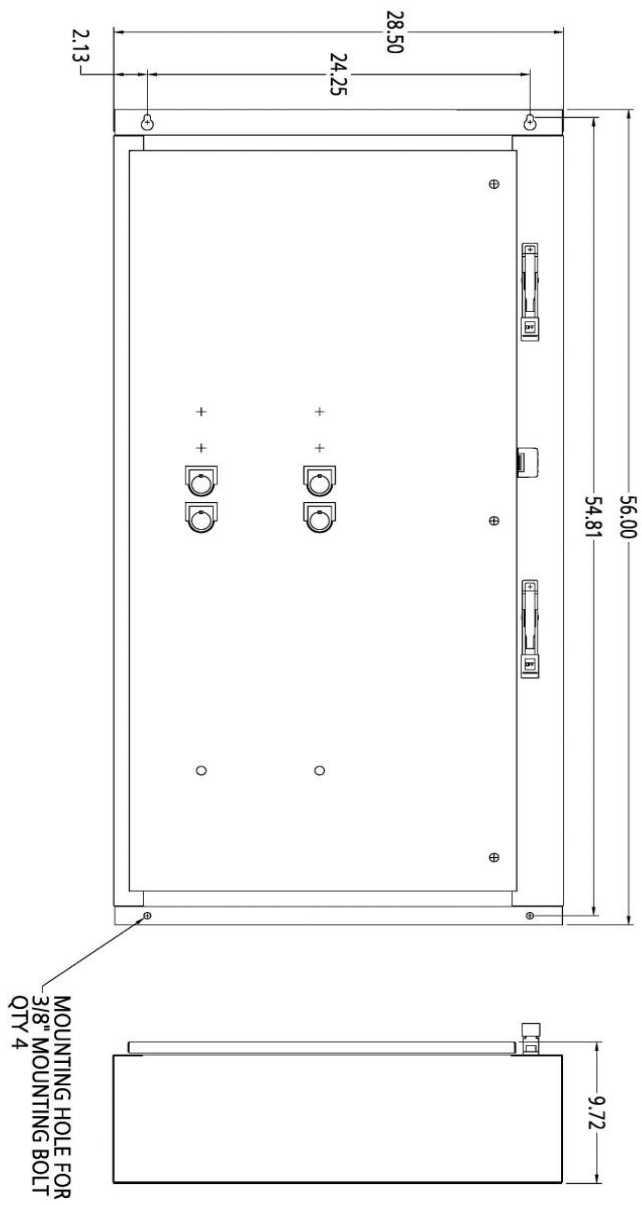


Image is representative and may not depict the actual product.

| <b>General technical data:</b>                              |  |
|---|--|
| Weight  | 70 lb  |
| Height x Width x Depth                                      | 56 x 29 x 10 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  | 60A  |
| 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                    | 7 total  |
| Rating  | 10A@600VAC (A600), 5A@600VDC (P600)                    |
| <b>Coil (per contactor):</b>                                |  |
| Voltage   | 208VAC 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   | 25–100A  |
| 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>Motor Circuit Protector (magnetic trip only):</b> |   |
| Rating   | 100A  |
| Instantaneous trip range                             | 315 - 1000A   |
| <b>Enclosure:</b>                                    |   |
| Type   | NEMA Type 4X 304 stainless steel enclosure  |
| Rating   | Dust-tight, watertight & corrosion resistant  |
| <b>Mounting/wiring:</b>                              |   |
| Mounting orientation                                 | Vertical  |
| Mounting type  | Surface   |
| Line side connection type / torque                   | Box lug / (refer to actual product for torque specs)  |
| Line side solid & stranded conductors                | 1x(10 AWG - 1/0 AWG) 75°C CU/AL   |
| Load side connection type / torque                   | Box lug / 45 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>                 |   |
| Factory installed motor circuit protector            | 100kA@480V; 25kA@600V   |
| <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 56X29X10 NEMA 1/3/4/4X/12



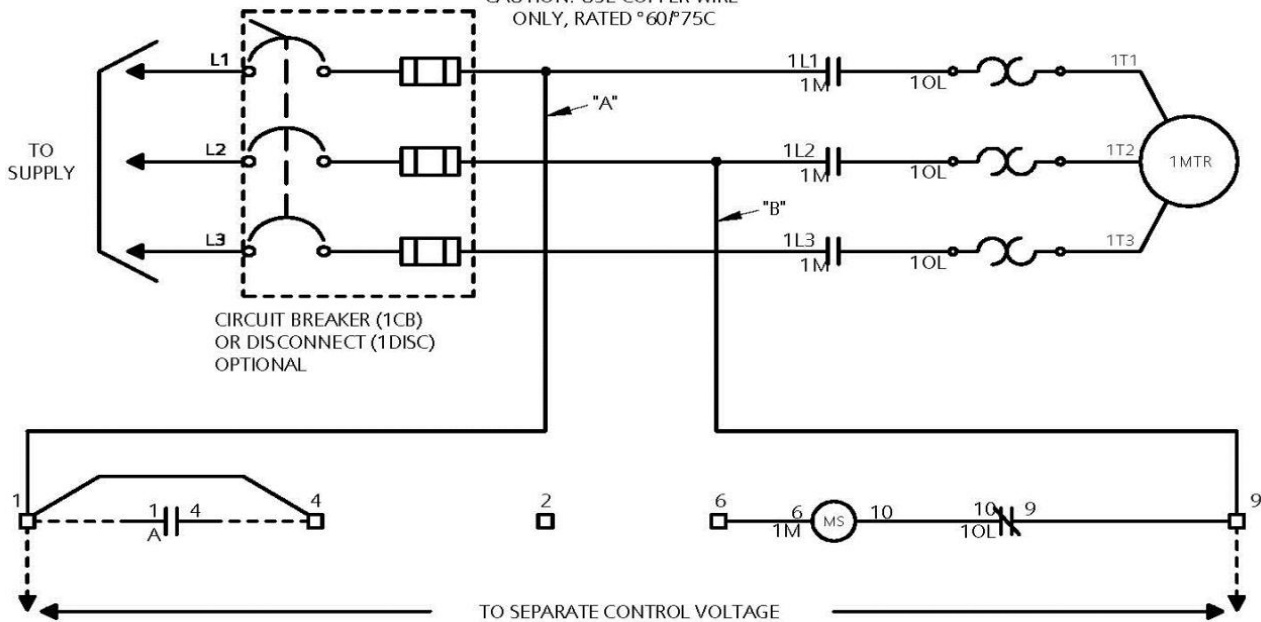
DIMENSIONS ARE IN INCHES.  
FILE NAME: SFIS-D68629004-0211

# SCHEMATIC DIAGRAM

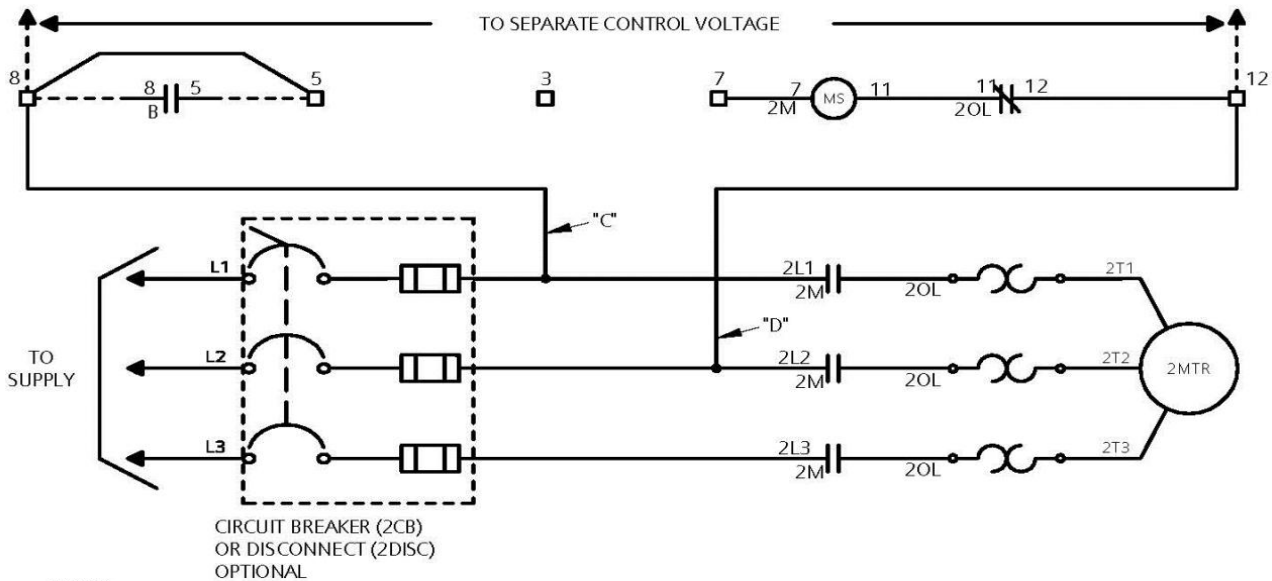
Class 83 & 84 Duplex W/Manual Alternation Size 0-4

## ELEMENTARY DIAGRAM

CAUTION: USE COPPER WIRE ONLY, RATED 60°F/75°C



A AND B ARE FLOAT OR PRESSURE SWITCHES, A TO CLOSE BEFORE B. FOR FIELD CONNECTIONS, REMOVE JUMPERS BETWEEN TERMINALS 1-4, 8-5.



### NOTES:

- FOR SEPARATE OR CPT CONTROL VOLTAGE SOURCE, REMOVE JUMPERS "A", "B", "C", AND "D" AND CONNECT PER DOTTED LINES OR TO 1 AND 2 CPT PRIMARIES PER FACTORY OR FIELD MODIFICATIONS.
- FOR PROTECTION OF INTERNAL CONTROL CIRCUIT CONDUCTORS IN ACCORDANCE WITH THE N.E.C., USE FUSE KIT 49MAFB4.
- TO USE THIS CONTROLLER W/O SELECTOR SWITCHES, JUMPER BETWEEN THE FOLLOWING PAIRS OF TERMINALS 4-6, 5-7.

REF. D68077003