



Duplex controller with two MCPs
without alternator
NEMA controller size 1
3-Phase, 3-Pole Maximum voltage rating 600VAC
Max Hp 60Hz: 7 1/2@200V; 7 1/2@230V; NA@460V; NA@575V
Solid-state overload relay(s) with 10–40A range
Control voltage 240VAC 50Hz / 277VAC 60Hz
NEMA Type 1 enclosure

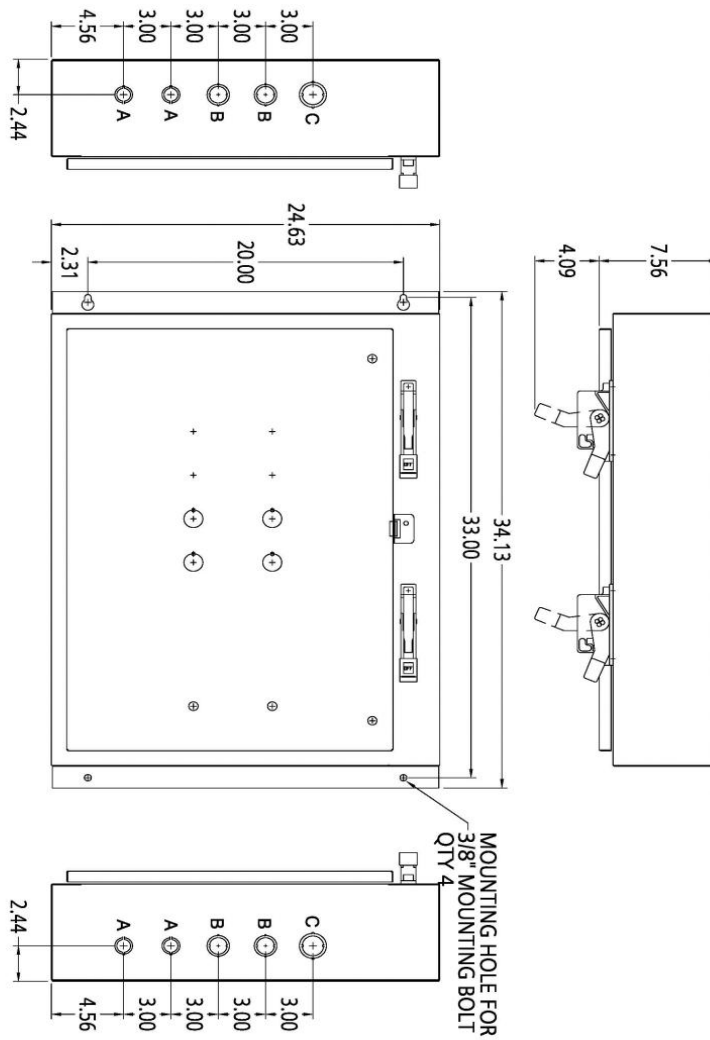


Image is representative and may not depict the actual product.

General technical data:	
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
Contactors (each):	
Number of NO main contacts	3
Amp rating	27A
Mechanical operating cycles	10,000,000
Internal/standard auxiliary contact (per contactor):	
Number of NC / NO auxiliary contacts	0NC / 1NO
Rating	10A@600VAC (A600), 5A@600VDC (P600)
Optional auxiliary contact (per contactor):	
Max number of NC / NO auxiliary contacts	8 total
Rating	10A@600VAC (A600), 5A@600VDC (P600)
Coil (per contactor):	
Voltage	240VAC 50Hz / 277VAC 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
Overload Relay (each):	
Current range	10–40A
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
Motor Circuit Protector (magnetic trip only):	
Rating	30A
Instantaneous trip range	80 - 270A
Enclosure:	
Type	NEMA Type 1 enclosure
Rating	Indoor general purpose use
Mounting/wiring:	
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	Screw / 35 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
Short circuit current rating:	
Factory installed motor circuit protector	100kA@480V; 25kA@600V
Certificates/approvals:	
	UL (file no. E185287) cUL (file no. E185287 for Canada) CSA (file no. 006535 C 000) ISO 9001 certification
Additional information:	
	Brochure OLR instruction sheet & trip curves

OUTLINE 34X25X8 NEMA 1



LETTER	CONDUIT SIZE
A	7/8" & 1-1/8" CONDUIT TYP. TOP & BOTTOM
B	1-1/8" & 1-23/64" CONDUIT TYP. TOP & BOTTOM
C	1-23/64" & 1-23/32" CONDUIT TYP. TOP & BOTTOM

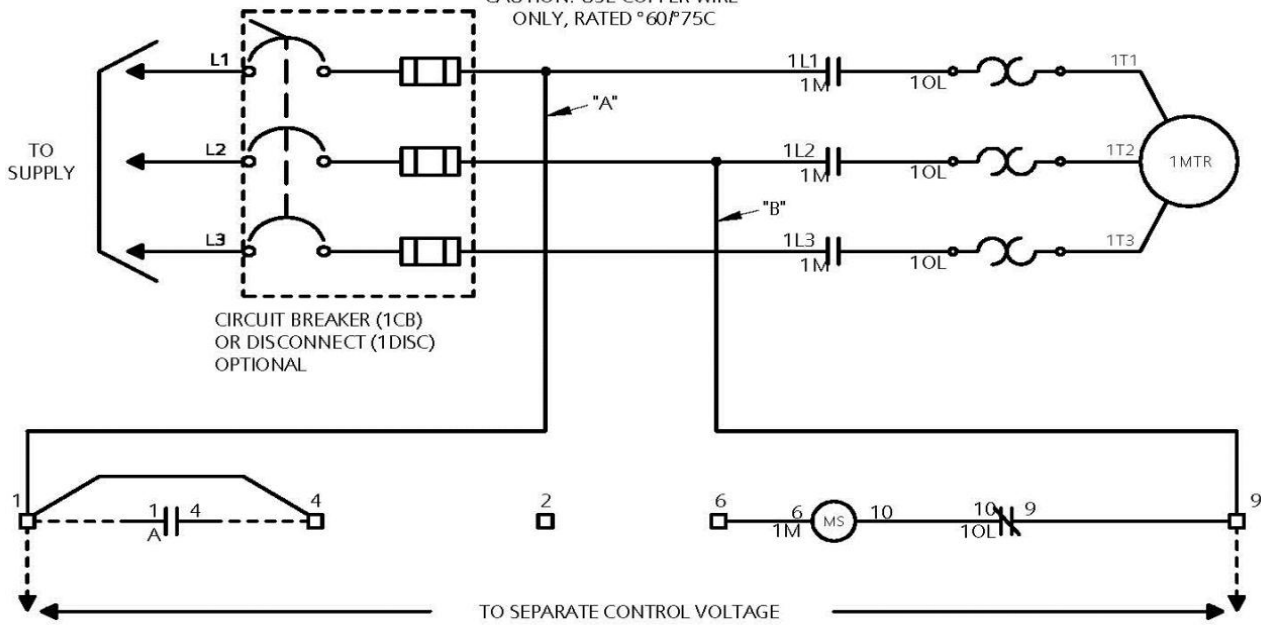
DIMENSIONS ARE IN INCHES.
FILE NAME: SFIS-D68629003-0211

SCHEMATIC DIAGRAM

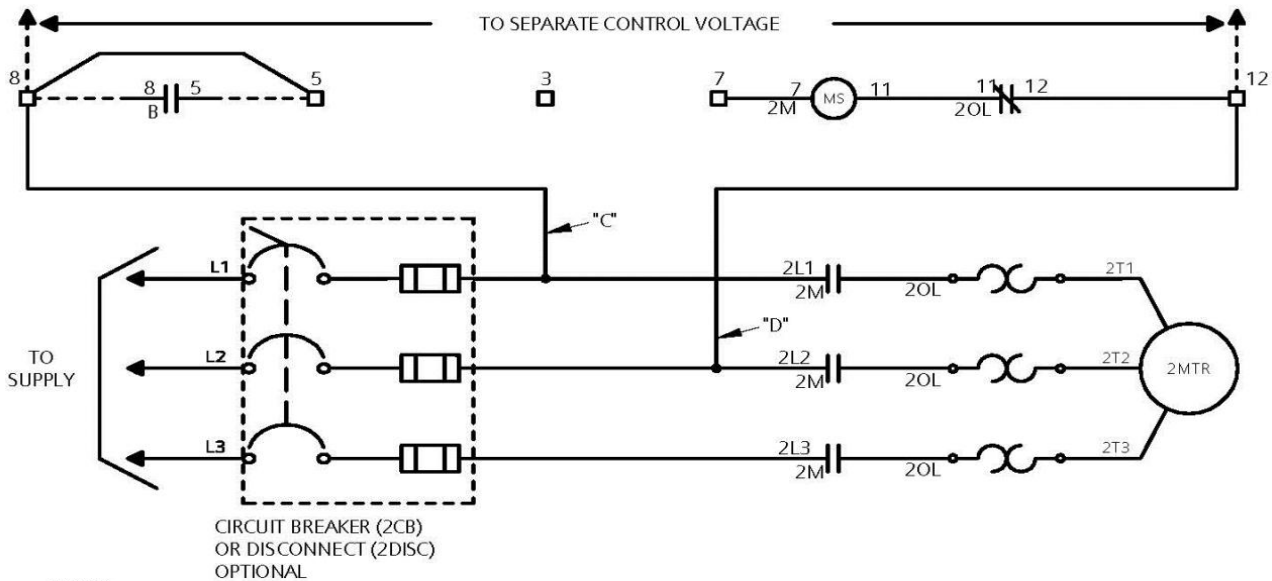
Class 83 & 84 Duplex W/Manual Alternation Size 0-4

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:

- A. 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.
- 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.

REF. D68077003