



Spectra RMS™ Circuit Breakers

*Motor-Operated Mechanisms for Spectra RMS™
Breaker Types SE150, SF250*

Description

A motor-operated mechanism is designed to open, close, and reset a circuit breaker by remote control.

In an operating installation, the customer must supply normally open ON and OFF push-buttons, external wiring, a control power source, and any control circuitry.

Electrical Operation

With the breaker and operating mechanism in their OFF positions, press the ON button to energize the motor, closing the breaker. When the breaker handle reaches the ON position, the control circuitry is disconnected by an internal limit switch.

When the OFF button is pressed, the motor is energized, opening the breaker. After the breaker handle reaches the OFF position, a limit switch de-energizes the control circuit.

When the circuit breaker trips automatically, there is no external trip indication, unless a separate bell alarm accessory is provided to actuate a warning device. It is necessary to press OFF to reset the breaker.

Automatic Reset

For automatic reset, an auxiliary switch, available as an accessory, returns the breaker to the OFF/RESET position after it has tripped. The switch is mounted inside the breaker and wired in parallel with the OFF button. When the breaker trips, the switch closes, moving the breaker handle to the OFF/RESET position. After the motor-operated mechanism has reset the breaker, the limit switch again opens the circuit. To use automatic reset, the ON push-button must be SPDT type and wired as in Figure 5. (The Auto/Reset scheme applies to ac devices only and is not applicable for dc applications.)

Manual Operation

Lift the cover to disengage the handle and operate the breaker handle. To return to electrical operation, align the breaker handle with the operating mechanism and close the cover.

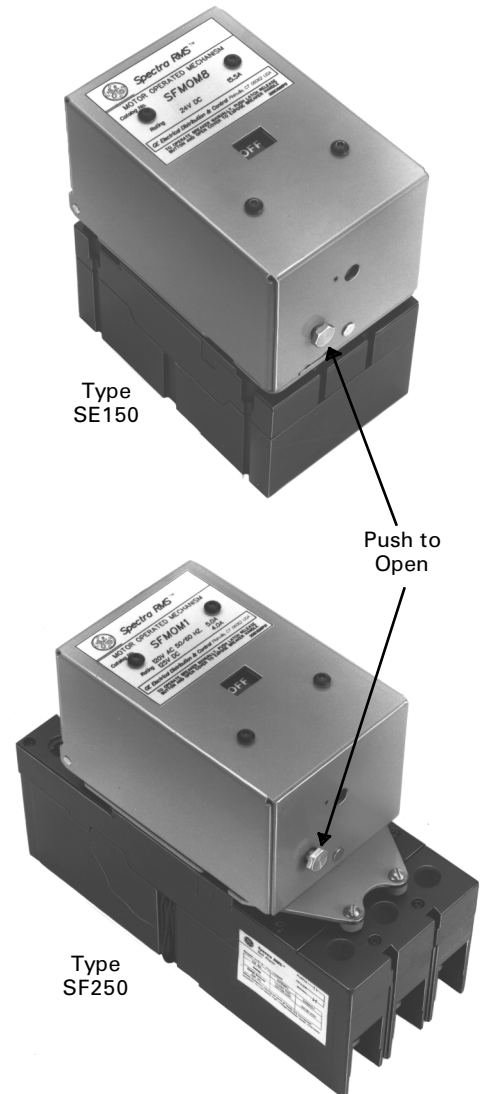


Figure 1. Spectra RMS circuit breakers.

Electrical Data

Table 1 contains the electrical specifications for the motor-operated mechanism.

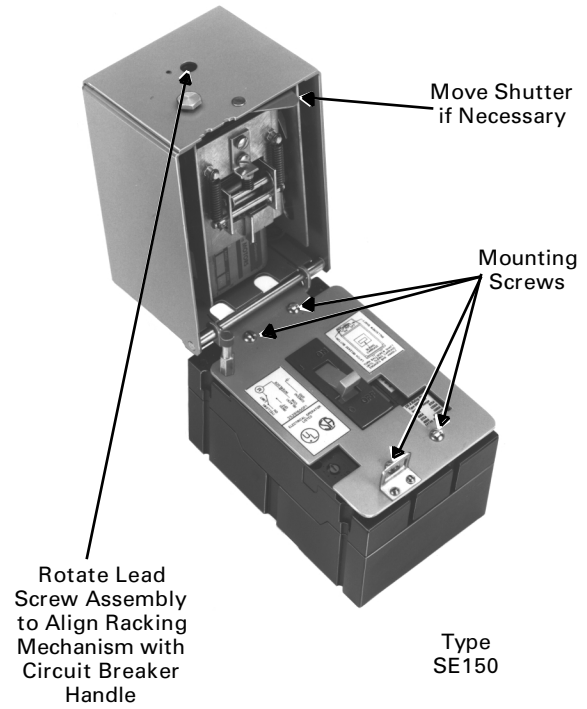
Catalog No.	Control			Timing (Sec)		Recommended Fuse
	Volts	In-Rush Amps	Running Amps	Closing	Opening Reset	
SEMOM1	120 Vac	10.5	5.0	.15	.13	1 Amp Time Delay
SFMOM1	125 Vdc	13.5	4.0			
SEMOM2	240 Vac	6.5	3.0			
SFMOM2	240 Vac	6.5	3.0			
SEMOM8	24 Vdc	31	15.5			2 Amp Time Delay
SFMOM8	24 Vdc	31	15.5			
SEMOM9	48 Vdc	20	7.0			
SFMOM9	48 Vdc	20	7.0			

Table 1. Electrical specifications.

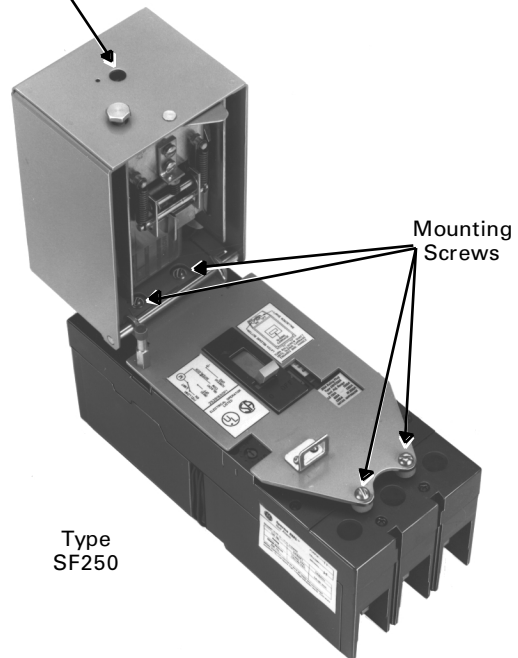
Installation

WARNING: The circuit breaker must be de-energized before the motor operator is installed.

1. Mount the circuit breaker using the diagonal mounting screw locations.
2. Connect the line and load circuit breaker terminals.
3. Install the motor operating mechanism using the remaining diagonal mounting screw locations, shown in Figure 2. See Figure 3 for alternate mounting methods.
4. Align the racking mechanism and the circuit breaker handle by rotating the lead screw or by moving the breaker handle. Close the cover.
5. Electrically test the mechanism according to the specifications in Table 1. Refer to Figure 5 for a schematic and auto reset diagram.



Type SE150



Type SF250

Figure 2. Mounting the motor-operated mechanism on the breaker.

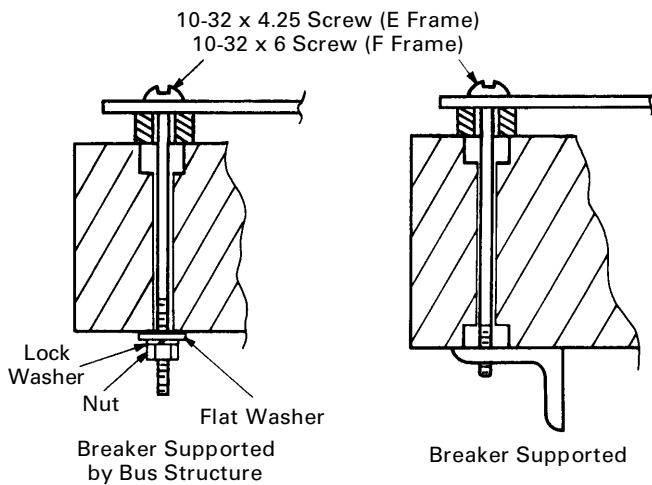


Figure 3. Breaker mounting methods.

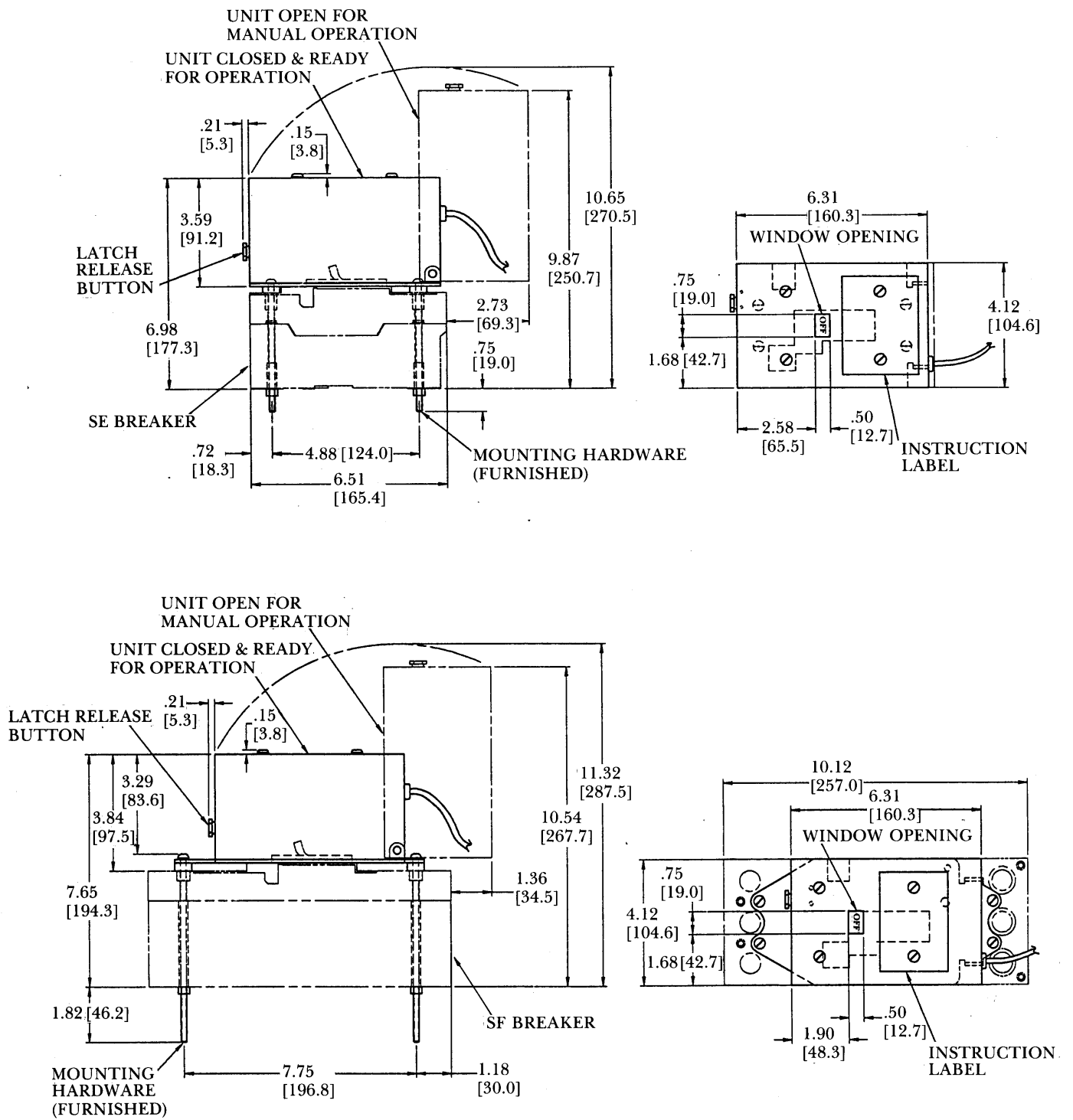


Figure 4. Outline drawings.

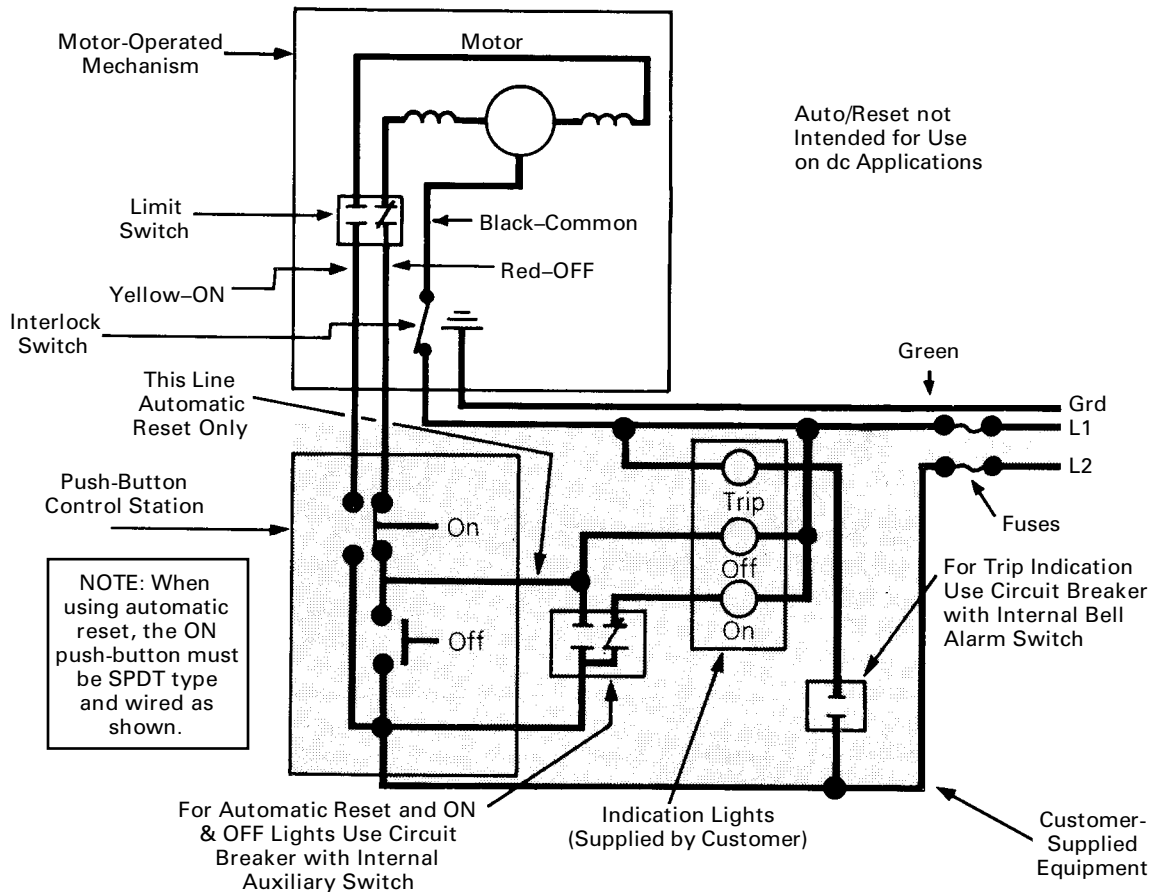


Figure 5. Wiring diagram for SE/SF Motor-Operated Mechanism.
 (All switch contacts are shown with the circuit breaker in the ON position.)

These instructions do not cover all details or variations in equipment nor do they provide for every possible contingency that may be met in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to the GE Company.



GE Industrial Systems

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