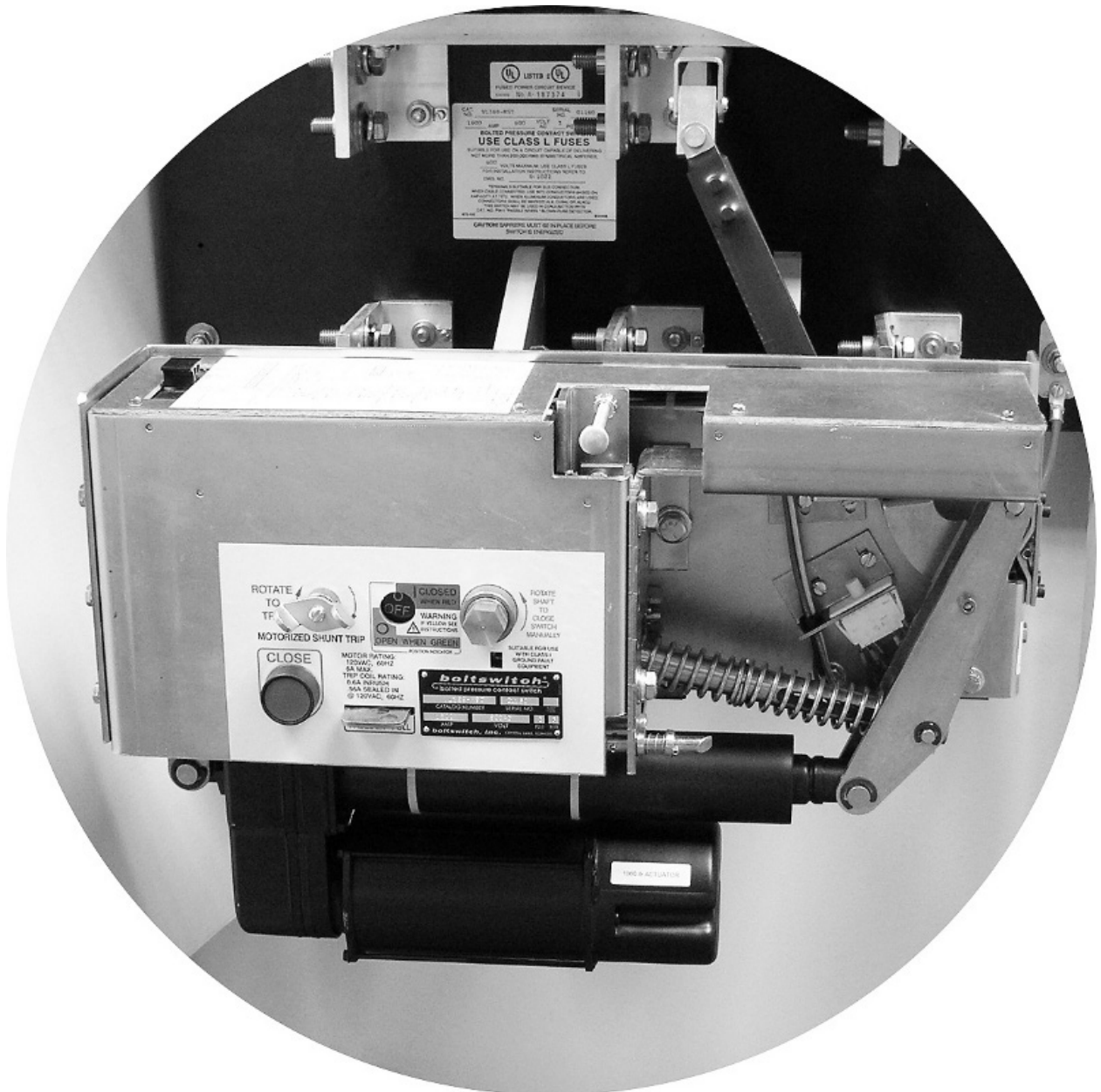


# ***boltswitch***

*Fused Power Circuit Device*

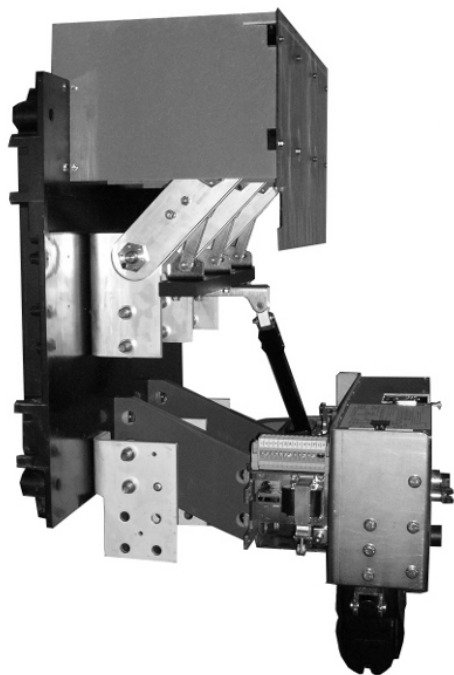
## **MOTORIZED SHUNT TRIP OPERATOR suffix -MST**



***boltswitch, inc.***

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MST operator shown on  
1600 Amp, Top-feed switch,  
Cat. No. VL369-MST



- Side View



Front View -

Motorized Shunt Trip Operators provide a method of electrically closing and opening series VL, SL, VLB and SLB Fused Power Circuit Devices.

Switches with Motorized Shunt Trip Operators are UL Listed as suitable for use with Class 1 ground fault sensing equipment.

The MST Operator is based on the Shunt Trip Operator described in Bulletin 104B with the following features added:

- The manual operating handle is replaced with a motor assembly to electrically close the switch. A hex shaft is provided to allow manual closing.
- The Switch Position Indicator is extended forward, providing true indication of the switch contact position.
- Means are provided to electrically and mechanically padlock the switch in the off position.
- A defeatable door latch is provided to prevent opening the fuse door when the switch is closed.
- A door interlock is provided to electrically and mechanically prevent closing the switch with the fuse door open.
- Switch opening is fast: Approximately 4-6 cycles (1/10 second) from the time the solenoid is energized.
- The switch closes in approximately 5 seconds from the time the close button is pushed.

Compared to our previous MST design, described in Bulletin 106, this design provides:

- Interchangeability; The switch depth, door latch and optional key interlock remain the same while the front cut-out is slightly enlarged.
- Improved fuse access due to underhung motor location.
- Smoother, quieter operation.
- Easy separation of closing and trip control circuits, allowing easier wiring for accessories such as a Capacitor Unit or Ground Fault equipment.

OUTLINE DRAWINGS	
SWITCH TYPE	DRAWING NO.
SERIES VL	O-1117B
SERIES SL	O-1118A
SERIES VLB	O-1155A
SERIES SLB	O-1156A

Wiring diagrams for adding accessories:

Switches without Integral Ground Fault, Dwg. O-1522

Switches with Integral Ground Fault, Dwg. O-1522A

### CONTROL CIRCUIT DATA

Nominal Control Voltage: 120 Volts AC, 60Hz  
 Closing Circuit Voltage Range: 102-125 Volts AC  
 Average Closing Current: 3 Amps  
 Closing Circuit Inrush: 6 Amps maximum  
 Control Fuse: 10 Amp Class CC  
 Recommended Control Transformer: 250VA  
 Shunt Trip Voltage Range: 66-250 Volts AC  
 Shunt Trip Current:  
     Inrush 6.6 Amps @ 120 Volts  
     Sealed in .56 Amps @ 120 Volts

### UL PERFORMANCE REQUIREMENTS

The following is a brief description of the required tests per UL977.

- Operation: Close at 85% of motor rating.  
 Trip at 55% of coil rating.
- Circuit Opening: Break 12 times rated current at rated voltage, 3 operations.

NO LOAD ENDURANCE	
SWITCH RATING IN AMPERES	NUMBER OF OPERATIONS
800	350
1200	250
1600-2500	200
3000-4000	100