

VM-1SE

Stored Energy Motor Operator

- Compatible With Either 120 VAC or 240 VAC Auxiliary Source Supply Voltages
- 24 VDC Output
- 3 Stored Open/Close Operations
- 20,000 in-lbs. Output Torque Units
- 4-6 and 8-10 Second Operating Time Units
- Suitable for Operating Almost Any Type of Switch from Almost Any Manufacturer
- Ideally Suited for use with Southern States type LLS-II Equipped Vertical Break Switches to Perform Automated Remote Transmission Line Switching of Load Currents, Loop Currents, and Line Charging Currents
- Can be Furnished with a Wide Variety of Accessories



The Solution For Automated Line Switching As Well As For Substations Without DC Batteries

The VM-1SE is the stored energy version of Southern States market leading VM-1 motor operator. Both the VM-1 and the VM-1SE share the same time-proven components, but the VM-1SE also includes a 120 VAC to 24 VDC trickle charger or a 240 VAC to 24 VDC trickle charger, either of which supplies the input to the 24 VDC battery system contained in its own integral cabinet attached to the bottom of the main motor operator cabinet. The VM-1SE's batteries provide three stored operations in the event of loss of auxiliary AC source supply. The VM-1SE is ideally suited for use in automating remote transmission line switches or for automating substation switches in substations which do not have a DC battery supply.



VM-1SE

Stored Energy Motor Operator



Ratings:

Type	Rated Output Voltage	Operating Voltage Range	Minimum Output Torque At Minimum Operating Voltage	Maximum Full Load Current	Maximum Locked Rotor Current	Operating Time In Seconds (based upon 180 degree output rotation)	Catalog Number
VM-1SE-204	24 VDC	18 VDC-28 VDC	20,000 in.-lbs.	67 Amps	200 Amps	4 to 6	VM-1SE-20424
VM-1SE-208	24 VDC	18 VDC-28 VDC	20,000 in.-lbs.	27 Amps	82 Amps	8 to 10	VM-1SE-20824

Request For Quote Information:

When requesting a quote, please include the following information:

- Catalog number
- Auxiliary AC source voltage (120 VAC or 240 VAC)
- Any accessories required
- Any special considerations or specifications

And, if the VM-1SE is being furnished to drive an existing switch:

- kV rating of the existing switch
- Continuous current rating of the existing switch
- Break type of the existing switch (vertical break, double end break, double end break Vee, center break, center break Vee, or single side break)
- Existing switch's vertical operating pipe size in inches IPS
- Direction of output rotation of the switch's vertical pipe to open the switch (when viewed from above looking downward)
- Degree of output rotation of existing switch's vertical operating pipe to open or to close the switch

Standard Features:

- 24 VDC electric motor
- Thermal overload protection for the motor
- Open-close-stop pushbuttons
- Reversing contactor
- Mechanical disc brake
- 18 stage fully adjustable auxiliary switch
- 12-point terminal blocks
- Thermostatically controlled heater
- Manual crank handle (insertion automatically disconnects the motor circuit)
- Fused pullouts for protection of motor/control and heater circuit
- Screened, venting cabinet louver
- Power terminal block
- Decoupler for vertical operating pipe
- Galvanized steel manual swing handle for vertical operating pipe
- Hinged, removable front cabinet door
- Formed, sheet aluminum enclosure with cast aluminum gearbox housing
- AC to DC trickle charger
- Integral battery compartment with two 12 VDC batteries

Optional Features:

- Operations counter
- Local-remote selector switch
- Position indicating lights
- Extra auxiliary switch stages (4 additional, for a total of 22)
- View window in front cabinet door
- Side access panels
- Fused knife switches (in lieu of fused pullouts) or molded case circuit breakers (in lieu of fused pullouts)
- Terminal lug or ground bar for cabinet grounding
- Cabinet light with toggle switch or with door actuated switch
- Door actuated remote blocking switch
- Duplex receptacle with GFCI
- Special terminal blocks
- Dead-front panel
- Non-conducting manual swing handle for vertical operating pipe
- Loss of DC relay
- Loss of AC relay
- Separate motor circuit and control circuit
- Others



Note: for dimensional information and/or schematic/wiring drawings of the VM-1SE please contact Southern States for drawing(s) of the rating(s) of interest.

Southern States, LLC
 30 Georgia Avenue
 Hampton, GA 30228
 e-mail: sales@southernstatesllc.com
 Tel: 770-946-4562
 Fax: 770-946-8106
www.southernstatesllc.com