Surge Protector

Protects Critical Substation Equipment

EI-MSB10-400

Features

- Designed to protect critical substation equipment from damaging transients
- Utilizes a multi-stage protection scheme designed to improve equipment reliability by shunting and absorbing dangerous spikes and surges *before* they reach the electronics of the installed equipment
- Use for protection of relays, meters, panel alarms or any other critical equipment
- Fully compliant with IEC 61643-1 and EN61643-11, Class 2 or Class 3 Test
- Internal Thermal Fusing - see figure on back
- Designed to show when unit needs replacement. The EI-MSB10-400 has an LED to provide a replacement alert:
  - When the LED is On, the EI-MSB10-400 is in normal operation and is providing surge protection
  - When the LED is Off, the EI-MSB10-400 needs to be replaced

General Application

The EI-MSB10-400 surge protector is designed to protect sensitive equipment from the damaging effects of lightning strikes and/or industrial switching surges in single phase AC networks up to 320VAC (L-N/L- G), and DC networks up to 400 VDC.

Description

Designed specifically to protect substation equipment from dangerous spikes and transients, the EI-MSB10-400 absorbs the event utilizing a multi-stage transient suppression scheme, before critical equipment is reached. This unit is very low cost and is essential to significantly improve equipment reliability.

The EI-MSB10-400 is connected by wires in parallel with the network to be protected. It can be easily mounted on a wall or plate with self-adhesive tape.

See the back of this page for installation instructions.

Installation

1. Confirm Power Service - Compare voltage measurements of your system to the line voltage (L-N or L-G) listed on the product label.

2. Disconnect Power - Turn off all power supplying the distribution panel or meter before installing the EI-MSB10-400.

3. Mount Protector - Flanges are provided to mount the EI-MSB10-400 to a flat surface. Install the EI-MSB10-400 at the electrical switchboard or electrical meter, downstream of the main circuit breaker, as close as possible to the protected device. A 20 AMP time delay fuse or circuit breaker should be used to provide over-current protection for each phase conductor.

4. Wire to Service Panel - Connect leads of the EI-MSB10-400 to the corresponding electrical terminal lug as follows: Red Conductor (Phase/Neutral), Blue Conductor (Phase/Neutral) and Green/Yellow (Ground).

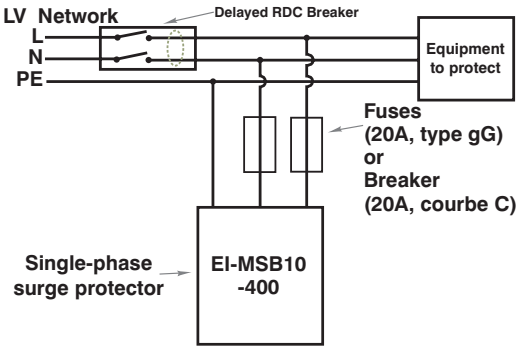
5. Restore Power - Confirm Green LED is lit. The EI-MSB10-400 is properly installed and protection is present.

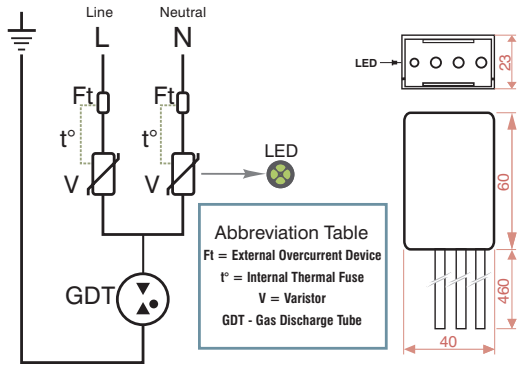
Earth Grounding Connection

The green/yellow earth conductor of the EI-MSB10-400 must be connected to the grounding system of the facility by the most direct path, and in accordance with national and local electrical codes.

Maintenance

- EI-MSB10-400 Surge Protectors are maintenance free. The unit automatically resets after each transient event.
- If the EI-MSB10-400 sustains internal damage due to a catastrophic surge or long duration over voltage:
  - The internal fuse will open and the EI-MSB10-400 will safely disconnect itself from the power line.
  - The green LED will be off, indicating the EI-MSB10-400 must be replaced.





EI-MSB10-400 Circuit Diagram/Dimensions

Specifications and Ordering Information	
AC Operational Voltage Max	320VAC
DC Operational Voltage Max.	400VDC
Clamping Voltage	1.5kV
Discharge Current (15 times - 8/20µs)	3kA
Discharge Current Max	10kA
Model Number	EI-MSB10-400

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