

## Lightning Surge Protectors for Electronics Equipment M-RESTER

Weight: 3.2 kg (7.05 lbs)

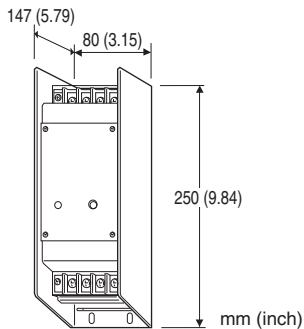
### LIGHTNING SURGE PROTECTOR FOR POWER SUPPLY USE (10 A, 100 / 110 / 120 V AC)

#### Functions & Features

- Designed specifically for power requirements of medium capacities
- Protecting electronic equipment from lightning surges that enter through substations and step-down transformers
- Discharge element failure triggers the fuse blown and alarm contact closed
- Also effective in rejecting switching transients generated by thyristors, circuit breakers, motor starters, etc.

#### Typical Applications

- Control panels
- Telemetry systems



## MODEL: MH-110A

### ORDERING INFORMATION

- Code number: MH-110A

### GENERAL SPECIFICATIONS

**Connection:** M4 screw terminals (torque 1.6 N·m)

**Screw terminal:** Nickel-plated brass

**Housing material:** Steel plate t = 1.6 (black)

**Alarm relay contact:**

- **Rated load:** 100 V AC @ 250 mA ( $\cos \phi = 1$ )  
100 V DC @ 250 mA (resistive load)
- **Maximum switching voltage:** 125 V AC or 125 V DC
- **Maximum switching power:** 25 VA or 25 W
- **Minimum load:** 5 V DC @ 10 mA

### INSTALLATION

**Operating temperature:** -5 to +55°C (23 to 131°F)

**Operating humidity:** 30 to 90 %RH (non-condensing)

**Mounting:** Surface

### PERFORMANCE

**Discharge voltage (peak voltage)**

Line to line: 190 V min.

Line to ground: 410 V min.

**Maximum surge voltage**

Line to line: 350 V max.

Line to ground: 700 V max.

(The maximum voltage that could pass through M-RESTER. Protected equipment must be able to withstand this voltage for very short time period.)

**Response time:**  $\leq 0.1$   $\mu$ sec.

**Leakage current**

Line to line:  $\leq 1$  mA at 150 V DC

Line to ground:  $\leq 1$  mA at 300 V DC

**Discharge current capacity:** 10000 A (8/ 20  $\mu$ sec.)

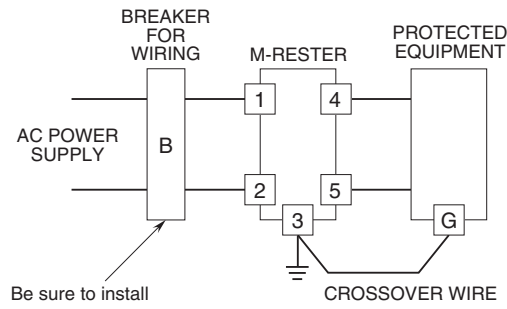
**Maximum load current:** 10 A

**Voltage drop:**  $\leq 2$  V (50/60 Hz)

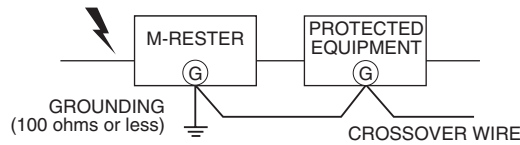
**Rated line voltage:** 100 V / 110 V / 120 V AC



## CONNECTION EXAMPLES

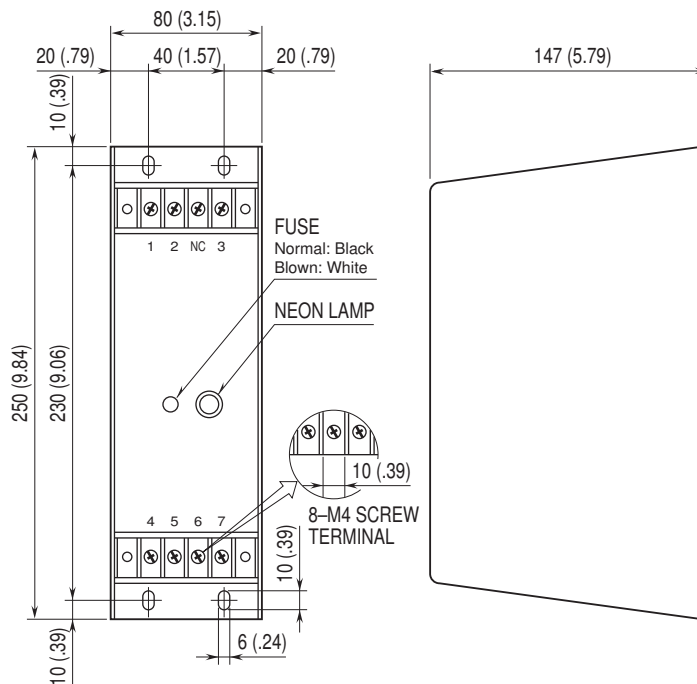


## GROUNDING

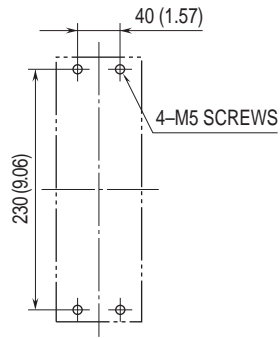


A crossover wire between M-RESTER ground and ground or metallic housing of equipment is required for protection.  
If the protected equipment has no ground terminal, ground the M-RESTER only.

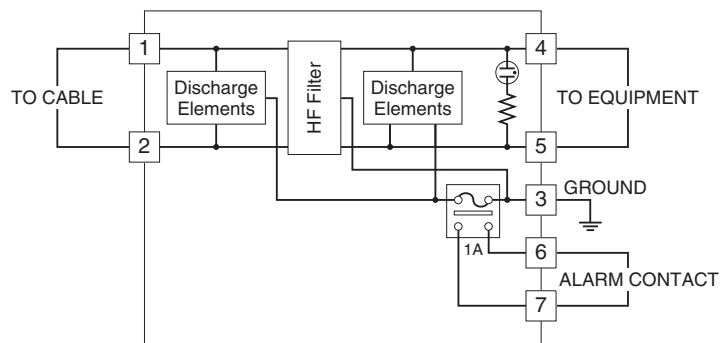
## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENT mm (inch)



**MOUNTING REQUIREMENTS unit: mm (inch)**



**SCHEMATIC CIRCUITRY**



Specifications are subject to change without notice.