

Lightning Surge Protectors for Electronics Equipment M-RESTER

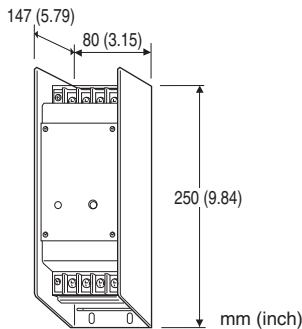
LIGHTNING SURGE PROTECTOR FOR POWER SUPPLY USE
(5 A, 100 / 110 / 120 V AC)

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-105A

ORDERING INFORMATION

- Code number: MH-105A

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 indicator: Discharge element failure indicator turns white when the fuse is blown.
Monitor lamp: Green neon lamp turns on when the power is supplied.
Alarm relay contact: Turns ON with discharge element failure (when the fuse is blown)
- **Rated load:** 100 V AC @ 250 mA (cos ϕ = 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
Weight: 3.0 kg (6.6 lb)

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: $\leq 0.1 \mu\text{sec}$.

Leakage current

- Line to line: $\leq 1 \text{ mA}$ at 150 V DC
- Line to ground: $\leq 1 \text{ mA}$ at 300 V DC

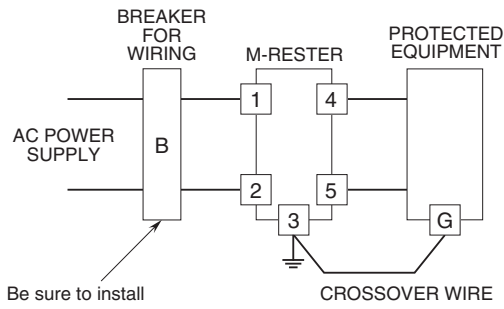
Discharge current capacity: 10000 A (8/ 20 μsec .)

Maximum load current: 5 A

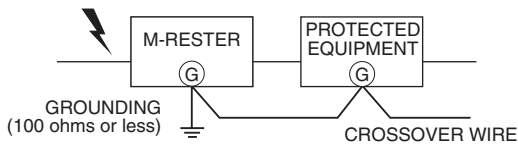
Voltage drop: $\leq 2 \text{ V}$ (50/60 Hz)

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

CONNECTION EXAMPLES

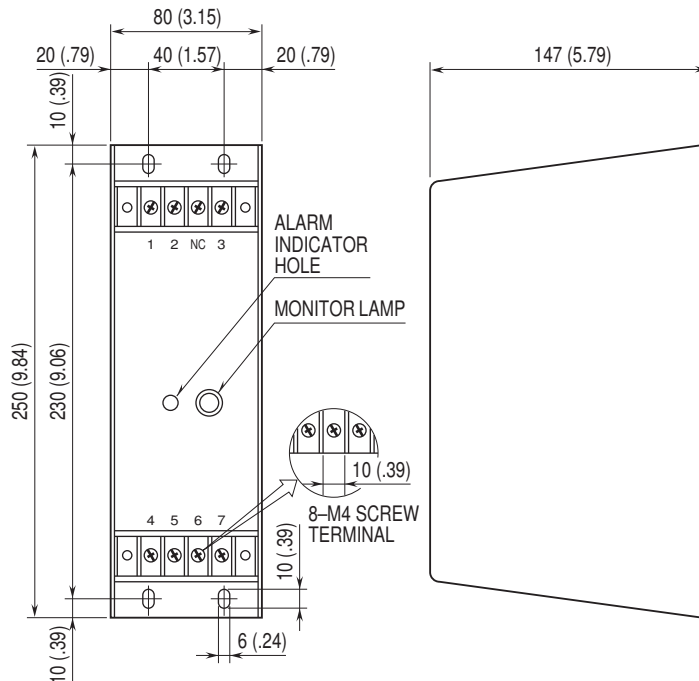


GROUNDING

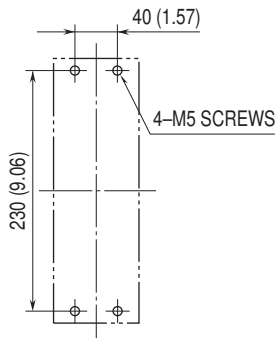


A crossover wire between M-RESTER ground and ground or metallic housing of equipment is required for protection.
If the protected equipment has no ground terminal, ground the M-RESTER only.

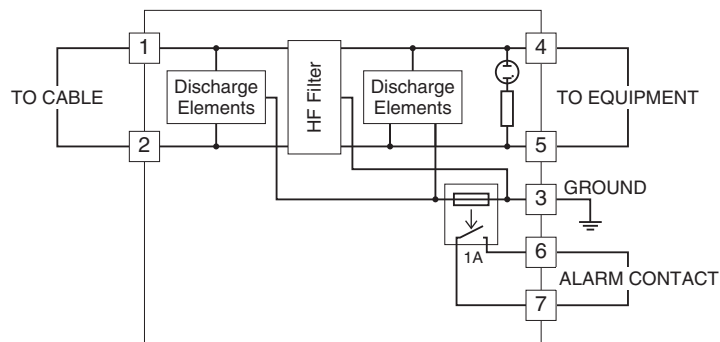
EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENT unit: mm [inch]



MOUNTING REQUIREMENTS unit: mm [inch]



SCHEMATIC CIRCUITRY



Specifications are subject to change without notice.