Lightning Surge Protectors for Electronics Equipment M-RESTER

LIGHTNING SURGE PROTECTOR FOR POWER SUPPLY USE

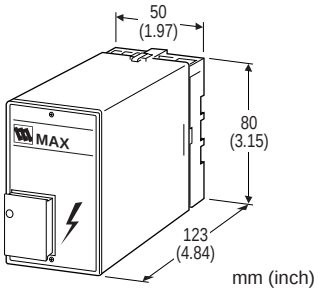
(5 A; high discharge current capacity)

Functions & Features

- Designed specifically for AC power supplies up to 5 A
- Discharge current capacity 10000 A
- Absorbing surges only without affecting instrumentation signal
- No power supply interruption even when the surge absorber is broken
- Relay contact turns ON with surge absorber failure
- Surge absorber element replaceable without power interruption

Typical Applications

- High discharge current capacity is beneficial for use in area with frequent lightnings



MODEL: MAX-[1]

ORDERING INFORMATION

- Code number: MAX-[1]

Specify a code from below for [1].
(e.g. MAX-100)

[1] OPERATIONAL VOLTAGE

100: 100 V / 110 V / 120 V AC
200: 200 V / 220 V / 240 V AC

RELATED PRODUCTS

- Lightning surge protector for standard signal line use (model: MMD-24)
- Surge absorber element (model: MEL)

GENERAL SPECIFICATIONS

Construction: Plug-in
Connection: M3.5 screw terminals (torque 0.8 N·m)
Screw terminal: Chromated steel
Housing material: Flame-resistant resin (black)
Alarm indicator: Surge absorber failure indicator turns white when the fuse is blown.
Alarm contact: Turns ON with surge absorber failure (when the fuse is blown or when the surge absorber element is extracted.)

- **Rating**:

125 V AC @1 A (cos ø = 1)
30 V DC @1 A (resistive load)

- **Maximum switching voltage**: 220 V AC, 250 V DC
- **Maximum switching power**: 125 VA, 100 W
- **Minimum load**: 5 V DC @1 mA

INSTALLATION

Operating temperature: -10 to +55°C (14 to 131°F)
Operating humidity: 30 to 90 %RH (non-condensing)
Mounting: Surface or DIN rail
Weight: 470 g (1.04 lb)

PERFORMANCE

Discharge voltage (peak-to-peak)
Line to line:
≥ 190 V (MAX-100)
≥ 410 V (MAX-200)
Line to ground: ≥ 640 V

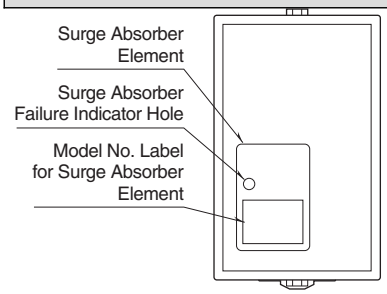
Maximum surge voltage
Line to line:
≤ 350 V (MAX-100)
≤ 700 V (MAX-200)
Line to ground: ≤ 800 V
(Withstand voltage of protected equipment between circuit and metal housing must be 1000 V AC or more.)
Note: This is the maximum voltage that could pass through M-RESTER. Protected equipment must be able to withstand this voltage for very short time period.

Response time: ≤ 0.01 µsec.

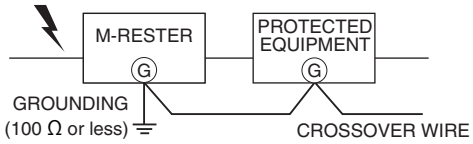
Leakage current
Line to line:
≤ 1 mA at 150 V DC (MAX-100)
≤ 1 mA at 300 V DC (MAX-200)
Line to ground: ≤ 1 mA at 300 V DC

Discharge current capacity: 10000 A (8/ 20 µsec.)
Maximum load current: 5 A
Internal series resistance: ≤ 0.5 Ω including return

EXTERNAL VIEW

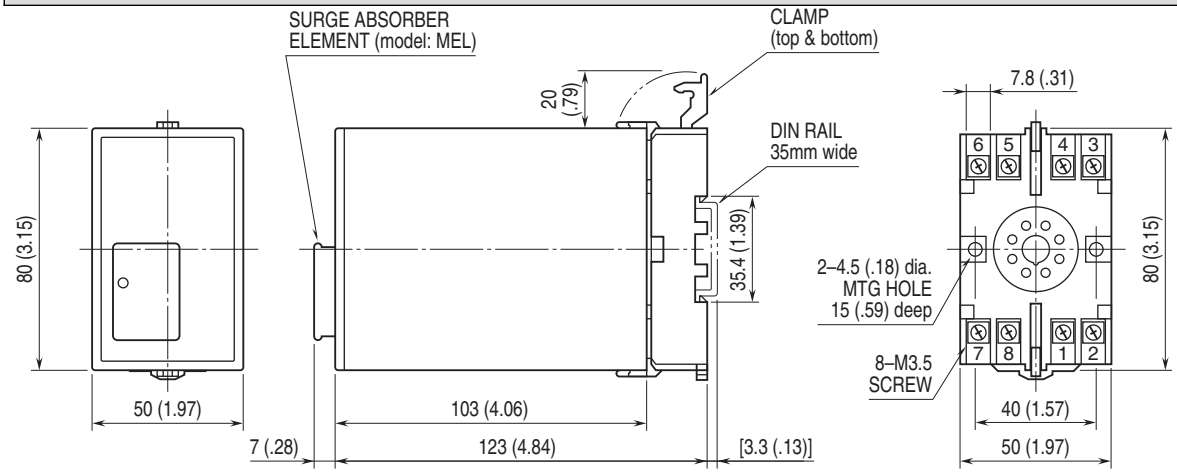


GROUNDING



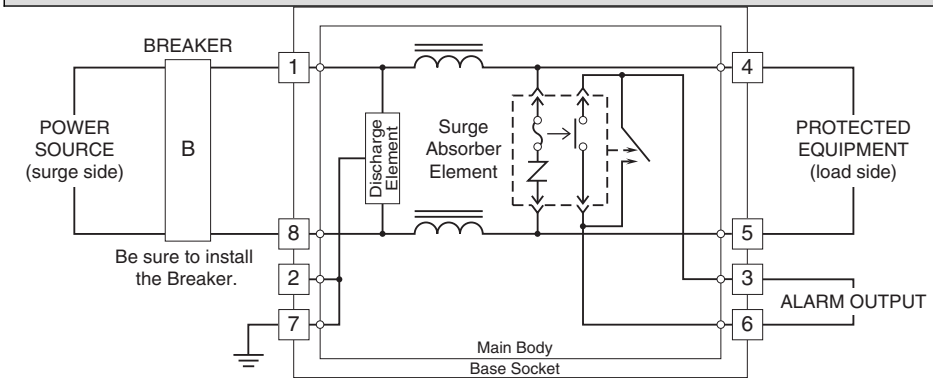
A crossover wire between M-RESTER ground and the ground or metallic housing of the equipment is required for protection.

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



•When mounting, no extra space is needed between units.

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



⚠ Specifications are subject to change without notice.