

Lightning Surge Protectors for Electronics Equipment M-RESTER

LIGHTNING SURGE PROTECTOR FOR RTD USE

MODEL **MDP-RB**

MODEL & SUFFIX CODE SELECTION

MDP-RB

MODEL _____

ORDERING INFORMATION

Specify code number. (e.g. MDP-RB)

GENERAL SPECIFICATIONS

Construction: plug-in

Connection: M4 screw terminals (nickel-plated steel; torque ≤ 0.8 N·m)

Housing material: flame-resistant resin (black)

INSTALLATION

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

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

Mounting: surface or DIN rail (DIN rail adaptor model A-33 is required.)

Dimensions: W31.5×H100×D80 mm (1.24"×3.94"×3.15")

Weight: 140 g (0.31 lbs)

PERFORMANCE

Discharge voltage

Between B – C: ± 6 V min.

Between B or C – A: ± 3 V min.

Between each line – G: ± 500 V max.

Maximum surge voltage*

Between 2 – 3: ± 32 V max.

Between 2 or 3 – 1: ± 16 V max.

Between each line – G: ± 650 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: ≤ 0.1 microseconds

Discharge current capacity: 5000A (8 / 20 μ sec.)

Maximum load current: 100mA

Internal series resistance: $10\Omega \pm 0.1\%$, 30 ppm/°C (17 ppm/°F)

Leakage current

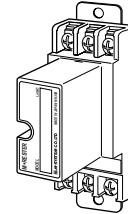
Between B – C: $\leq 2\mu$ A at ± 6 V DC

Between B or C – A: $\leq 2\mu$ A at ± 3 V DC

Between each line – G: $\leq 2\mu$ A at ± 140 V DC

Maximum line voltage: 3V

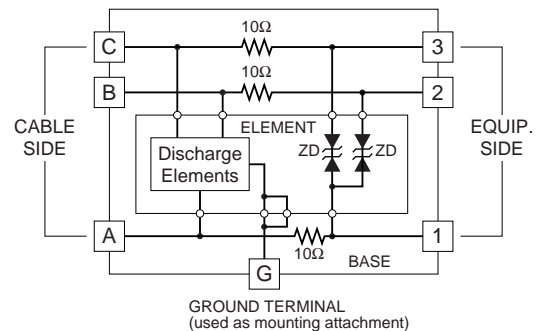
CE conformity (Europe): 89/336/EEC. Electromagnetic Compatibility (EMC) Directive



Functions & Features

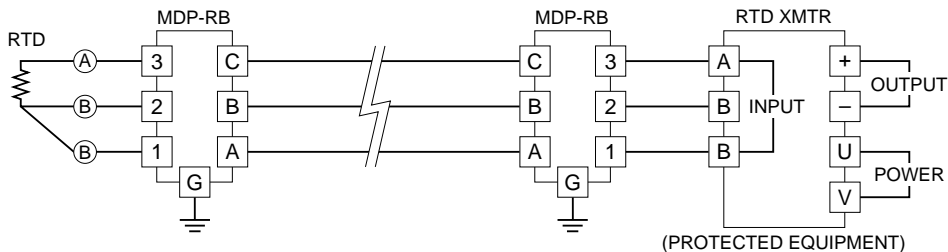
- Designed specifically for resistance temperature detector (RTD) circuits
- Protecting RTD and RTD transmitters from damage caused by surges on the RTD wiring
- Absorbing surges only without affecting instrumentation signal
- No interruption of signal by unplugging arrester element
- CE marking

SCHEMATIC CIRCUITRY



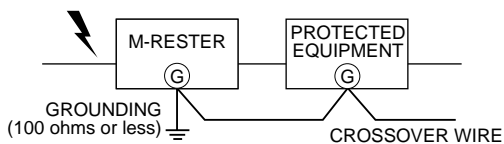
GROUND TERMINAL (used as mounting attachment)

CONNECTION DIAGRAM

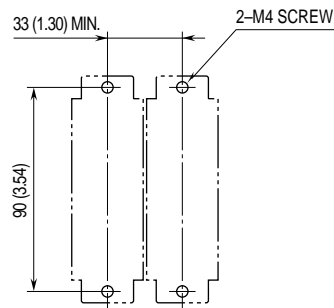


GROUNDING

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



MOUNTING REQUIREMENTS mm (inch)



EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENT mm (inch)

