

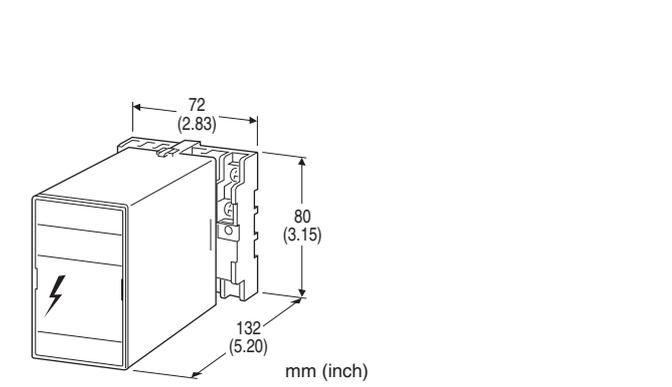
Lightning Surge Protectors for Electronics Equipment M-RESTER

LIGHTNING SURGE PROTECTOR FOR STRAIN GAUGE USE

(6-wire remote sensing)

Functions & Features

- Designed to protect strain gauge transmitters from lightning surge damage that enters on the wiring between the strain gauge and the transmitter
- Six-wire remote sensing
- Absorbing surges only without affecting instrumentation signal



MODEL: MD-LC2

ORDERING INFORMATION

- Code number: MD-LC2

GENERAL SPECIFICATIONS

Construction: Plug-in

Connection: M3.5 screw terminals

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

Weight: 250 g (0.55 lb)

PERFORMANCE

Maximum line voltage

Signal (L1 to L2): ± 0.3 V

Excitation (+ to -): 15 V

Excitation (S+ to S-): 15 V

Signal (L1, L2) to ground: ± 15 V

Excitation (+, S+) to ground: +30/-15 V

Excitation (-, S-) to ground: ± 15 V

Discharge voltage (peak voltage)

Signal (L1 to L2): ± 0.3 V min.

Excitation (+ to -): 15 V min.

Excitation (S+ to S-): 15 V min.

Signal (L1, L2) to ground: ± 15 V min.

Excitation (+, S+) to ground: +30/-15 V min.

Excitation (-, S-) to ground: ± 15 V min.

Maximum surge voltage

Signal (L1 to L2): ± 20 V max.

Excitation (+ to -): 40 V max.

Excitation (S+ to S-): 40 V max.

Signal (L1, L2) to ground: ± 40 V max.

Excitation (+, S+) to ground: +65/-40 V max.

Excitation (-, S-) to ground: ± 40 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: 4 nsec.

Leakage current

Signal (L1 to L2): ≤ 0.2 μ A at ± 0.3 V DC

Excitation (+ to -): ≤ 2 μ A at 15 V DC

Excitation (S+ to S-): ≤ 2 μ A at 15 V DC

Line to ground: ≤ 2 μ A at ± 15 V DC

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

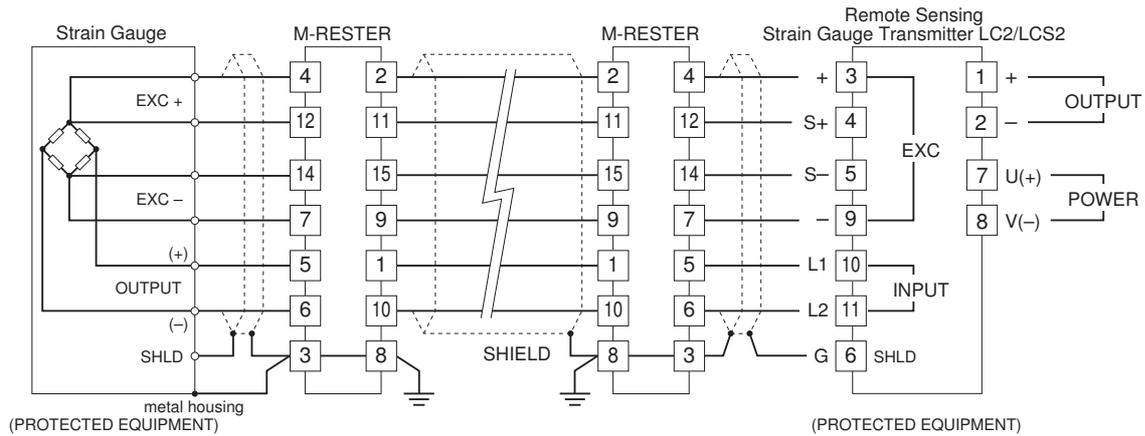
Internal series resistance and max. load current

Signal (L1, L2) each: approx. ≤ 10 Ω ; max. 100 mA

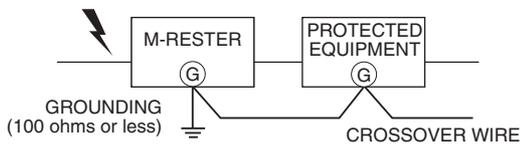
Excitation (+, -) each: approx. ≤ 4 Ω ; max. 200 mA

Excitation (S+, S-) each: approx. ≤ 10 Ω ; max. 100 mA

CONNECTION EXAMPLES

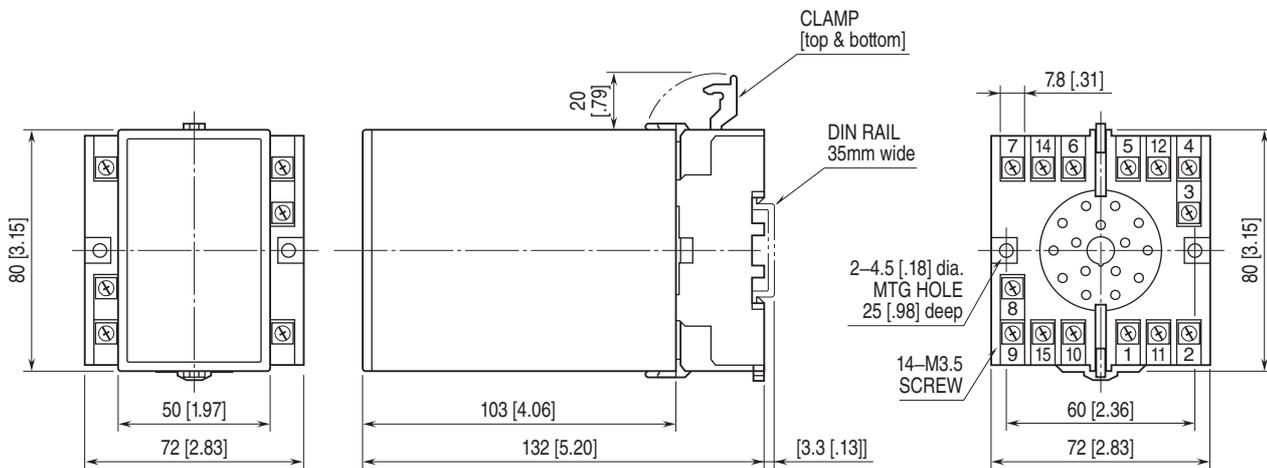


GROUNDING



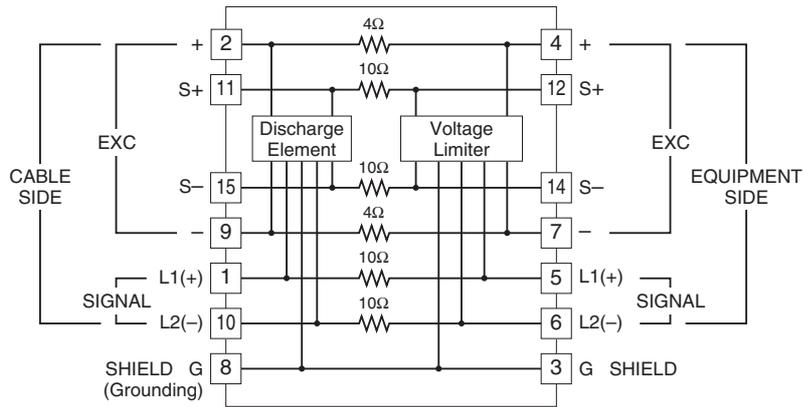
A crossover wire between M-RESTER ground and ground or metallic housing of equipment is required for protection.
If the protected equipment has no ground terminal, ground the M-RESTER only.

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



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

SCHEMATIC CIRCUITRY



Specifications are subject to change without notice.