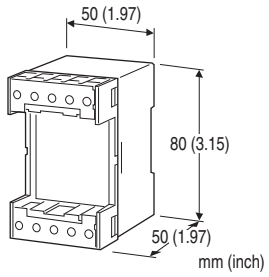
Lightning Surge Protectors for Electronics Equipment M-RESTER

LIGHTNING SURGE PROTECTOR FOR SIGNAL LINE WITH EXITATION USE

Functions & Features

- Designed specifically for level sensors, pressure sensors and their converters/transmitters
- Excitation up to 30 V DC
- Voltage signals up to 10 V DC
- Absorbing surges only without affecting instrumentation signal
- Shallow depth
- DIN rail mounting



MODEL: MDK-LV

ORDERING INFORMATION

- Code number: MDK-LV

GENERAL SPECIFICATIONS

Construction: Discrete box, front terminals; terminal cover provided
Connection: M3.5 screw terminals (torque 0.8 N·m)
Screw terminal: Nickel-plated steel
Housing material: Flame-resistant resin (black)

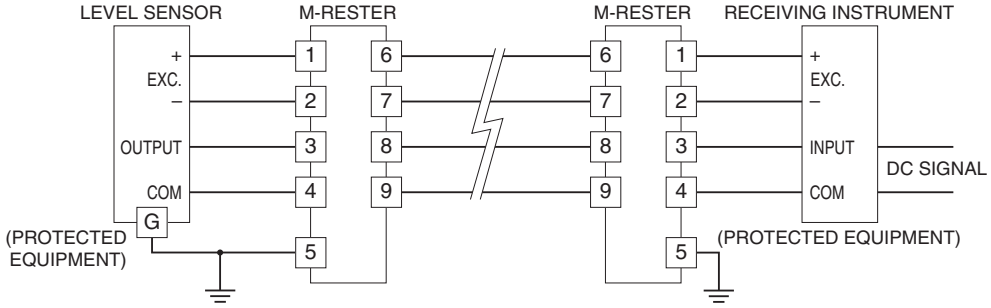
INSTALLATION

Operating temperature: -5 to +55°C (23 to 131°F)
Operating humidity: 30 to 90 %RH (non-condensing)
Mounting: DIN rail
Weight: 150 g (0.33 lbs)

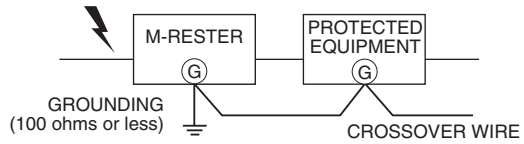
PERFORMANCE

Discharge voltage (peak voltage)
Excitation side: 30 V min.
Signal side: 10 V min.
Line to ground: ±290 V min.
Maximum surge voltage
Excitation side: 40 V max.
Signal side: 20 V max.
Line to ground: ±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 µsec.
Leakage current
Excitation side: ≤ 10 µA at 30 V DC
Signal side: ≤ 10 µA at 10 V DC
Line to ground: ≤ 10 µA at ±290 V DC
Discharge current capacity: 5000 A (8 / 20 µsec.)
Max. load current: 100 mA
Internal series resistance: 10Ω ±5 %
Maximum line voltage
Excitation side: 30 V
Signal side: 10 V

CONNECTION EXAMPLES

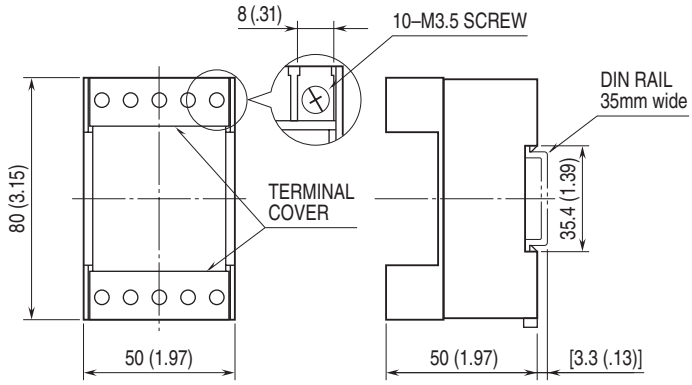


GROUNDING



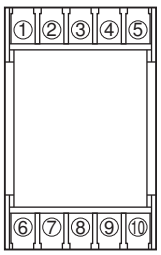
A crossover wire between M-RESTER ground and ground or metallic housing of equipment is required for protection.
If the protected equipment has no ground terminal, ground the M-RESTER only.

DIMENSIONS unit: mm (inch)

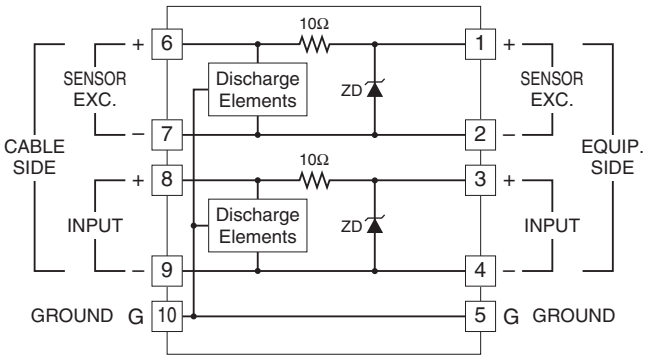


•When mounting, no extra space is needed between units.

TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY



⚠ Specifications are subject to change without notice.