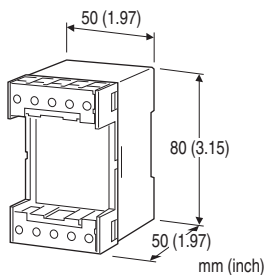


## Lightning Surge Protectors for Electronics Equipment M-RESTER

### LIGHTNING SURGE PROTECTOR FOR STRAIN GAUGE USE

#### Functions & Features

- Designed to protect strain gauge transmitters from lightning surge damage that enters on the wiring between the strain gauge and the transmitter
- Absorbing surges only without affecting instrumentation signal
- Shallow depth
- DIN rail mounting



## MODEL: MDK-LC

### ORDERING INFORMATION

- Code number: MDK-LC

### 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

**Maximum line voltage**

Output side:  $\pm 0.3$  V

Excitation side: 15 V

**Discharge voltage (peak voltage)**

Output side:  $\pm 0.3$  V min.

Excitation side: 15 V min.

Line to ground:  $\pm 15$  V min.

Maximum surge voltage

Output side:  $\pm 15$  V max.

Excitation side: 30 V max.

Line to ground:  $\pm 30$  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:**  $\leq 5$  nsec.

**Leakage current:**

Output side:  $\leq 0.2$   $\mu$ A @  $\pm 0.3$  V DC

Excitation side:  $\leq 2$   $\mu$ A @ 15 V DC

Line to ground:  $\leq 2$   $\mu$ A @  $\pm 15$  V DC

**Discharge current capacity**

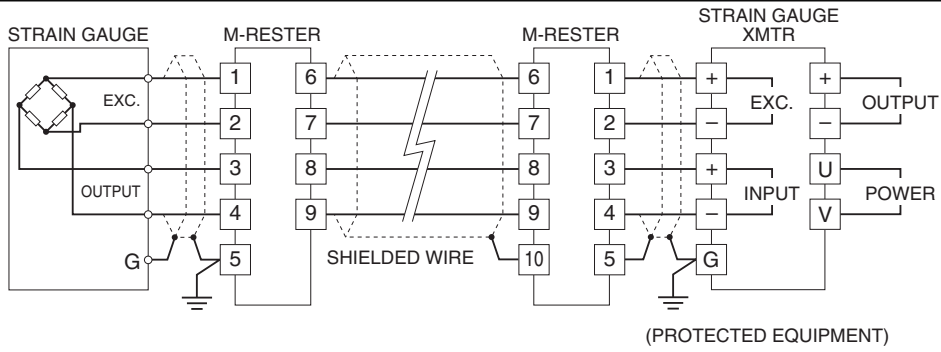
Output side: 100 A (8 / 20  $\mu$ sec.)

Excitation side: 50 A (8 / 20  $\mu$ sec.)

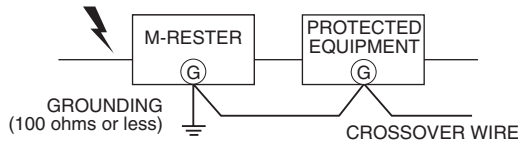
Line to ground: 50 A (8 / 20  $\mu$ sec.)

**Internal series resistance:**  $\leq 0.1$   $\Omega$

## CONNECTION EXAMPLES

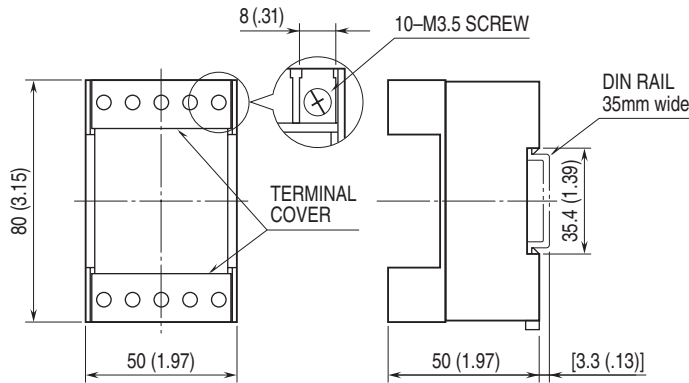


## GROUNDING



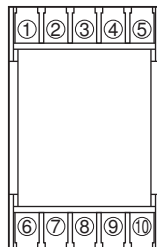
A crossover wire between M-RESTER ground and ground or metallic housing of equipment is required for protection.  
If the protected equipment has no ground terminal, ground the M-RESTER only.

## DIMENSIONS unit: mm (inch)

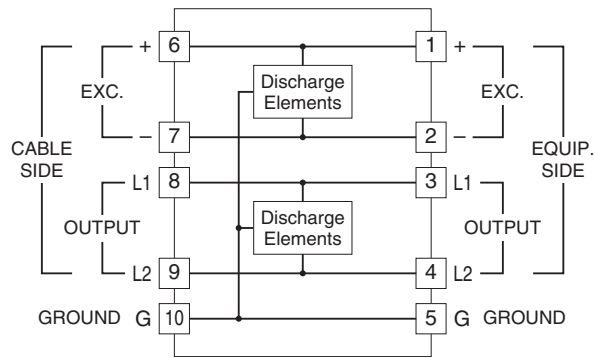


•When mounting, no extra space is needed between units.

## TERMINAL ASSIGNMENTS



**SCHEMATIC CIRCUITRY**



Specifications are subject to change without notice.