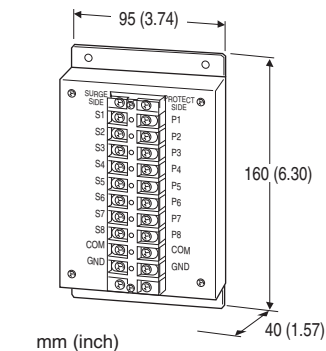


## Lightning Surge Protectors for Electronics Equipment M-RESTER

### MULTI M-RESTER

#### Functions & Features

- Designed specifically for ON-OFF signals, protecting semiconductor switches used for ON-OFF outputs from the computer or PLC from lightning surge damage that enters on the wiring between these instruments
- 8 channels
- Most convenient as junction board
- Minimum mounting space



Each line - COM: 40 V max.

Each line or COM - G:  $\pm 650$  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:**  $\leq 0.1$   $\mu$ sec.

#### Leakage current

Between each of S1-S8 lines:  $\leq 5$   $\mu$ A at  $\pm 30$  V DC

Each line - COM:  $\leq 5$   $\mu$ A at 30 V DC

Each line or COM - G:  $\leq 5$   $\mu$ A at  $\pm 60$  V DC

**Max. discharge current (I<sub>max</sub>):** 1000 A (8/ 20  $\mu$ sec.)

**Max. load current:** 100 mA

**Internal series resistance:** Approx. 100 $\Omega$

## MODEL: MDR-8

### ORDERING INFORMATION

- Code number: MDR-8

### GENERAL SPECIFICATIONS

**Construction:** terminal board; terminal cover provided

**Connection:** M3 screw terminals (torque 0.5 N·m)

**Screw terminal:** Nickel-plated brass

**Housing material:** Steel plate t = 1.2 (black)

### INSTALLATION

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

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

**Mounting:** Surface

**Weight:** 510 g (1.12 lb)

### PERFORMANCE

#### Discharge voltage (peak voltage)

Between each of S1-S8 lines:  $\pm 30$  V min.

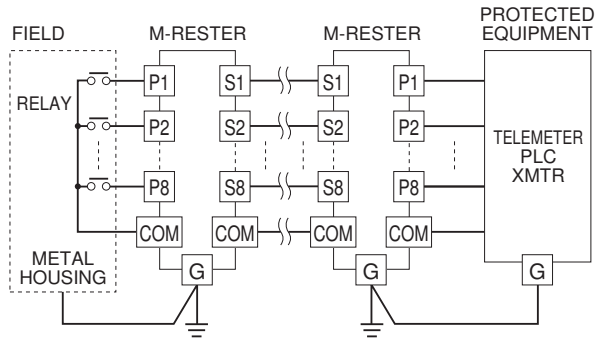
Each line - COM: 30 V min.

Each line or COM - G:  $\pm 60$  V min.

#### Maximum surge voltage

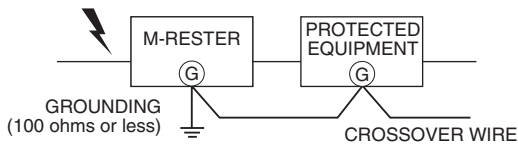
Between each of S1-S8 lines:  $\pm 40$  V max.

## CONNECTION EXAMPLES



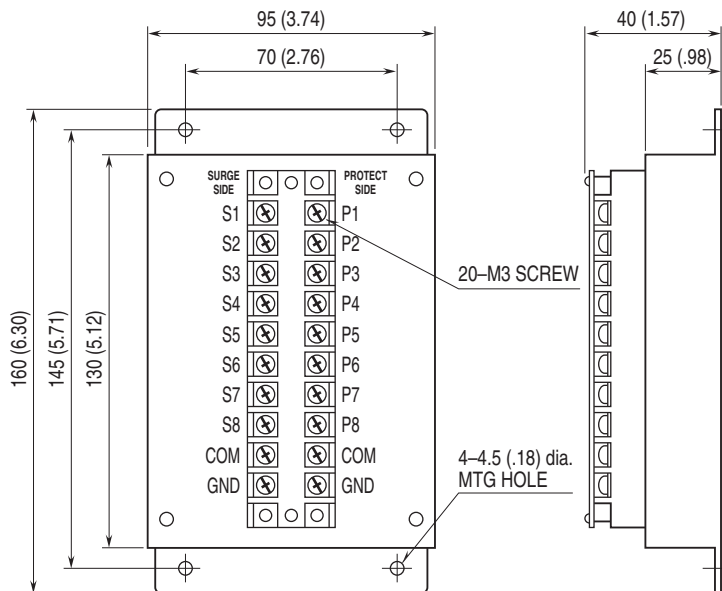
All negative lines are connected to COM.

## GROUNDING



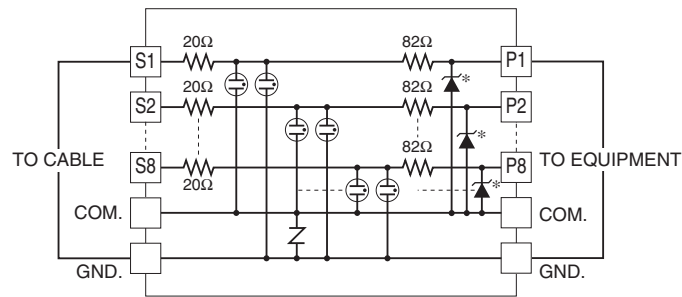
A crossover wire between M-RESTER ground and ground or metallic housing of equipment is required for protection.  
If the protected equipment has no ground terminal, ground the M-RESTER only.

## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



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

**SCHEMATIC CIRCUITRY**



\*Zener diode has polarity.  
Not applicable to zero-cross signals.



Specifications are subject to change without notice.