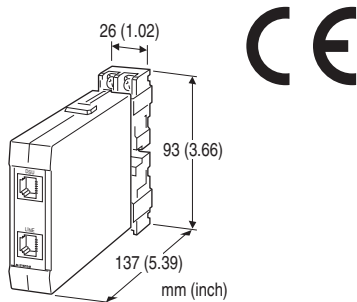


## Lightning Surge Protectors for Electronics Equipment M-RESTER

### LIGHTNING SURGE PROTECTOR FOR ISDN CIRCUIT USE

#### Functions & Features

- Designed specifically to protect devices connected to ISDN circuit from lightning surges



Line to ground:  $\pm 650$  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

Line to line:  $\leq 50$   $\mu$ A at  $\pm 65$  V DC

Line to ground:  $\leq 50$   $\mu$ A at  $\pm 140$  V DC

#### Discharge current capacity

**Modular jack connection:** 500 A (8 / 20  $\mu$ sec.)

**Screw terminal connection:** 10000 A (8 / 20  $\mu$ sec.)

**Max. load current:** 100 mA

**Internal series resistance:** Approx. 4  $\Omega$  including return

**Maximum line voltage:**  $\pm 65$  V

### STANDARDS & APPROVALS

EU conformity:

RoHS Directive

EN 50581

## MODEL: MD-INS

### ORDERING INFORMATION

- Code number: MD-INS

### GENERAL SPECIFICATIONS

**Construction:** Plug-in

#### Connection

**ISDN circuit:** Modular jack or M3.5 screw terminals  
(torque 0.8 N·m)

**Grounding:** M3.5 screw terminals  
(torque 0.8 N·m)

**Modular jack cord:** 6-pole, 2-core

**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:** Surface or DIN rail; Standard Rack Mounting

Frame BX-16H available

**Weight:** 150 g (0.33 lb)

### PERFORMANCE

#### Discharge voltage (peak voltage)

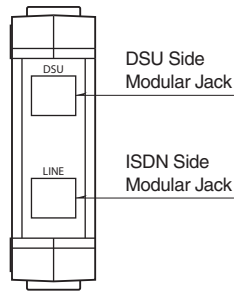
Line to line:  $\pm 65$  V min.

Line to ground:  $\pm 290$  V min.

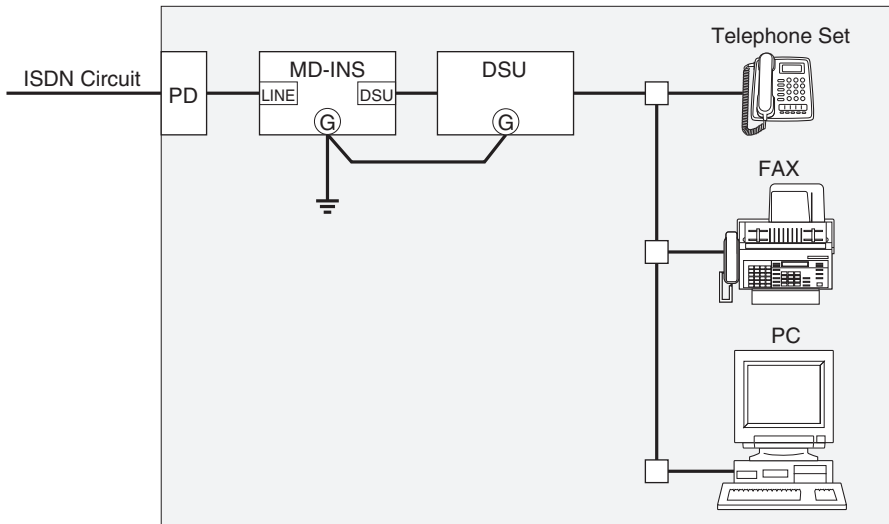
#### Maximum surge voltage

Line to line:  $\pm 100$  V max.

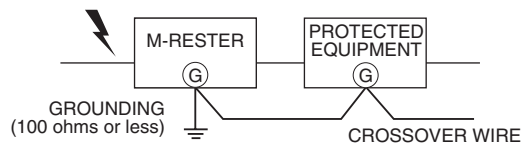
## EXTERNAL VIEW



## CONNECTION EXAMPLES

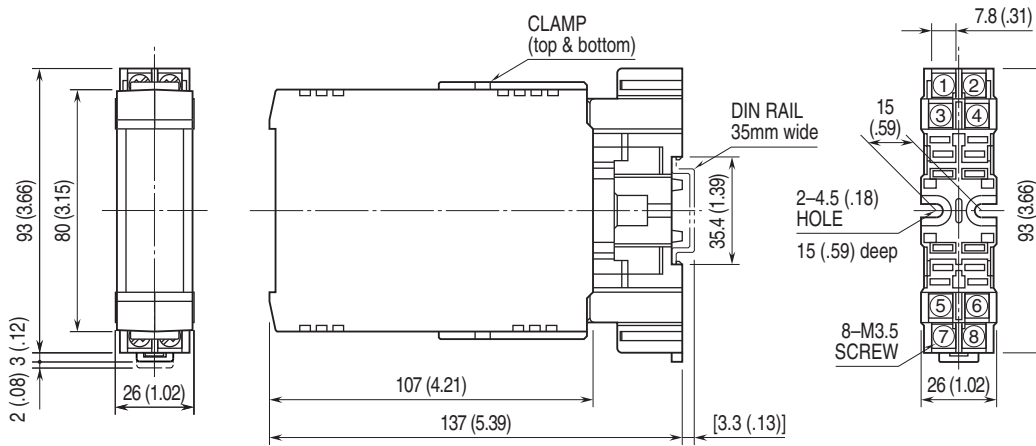


## GROUNDING



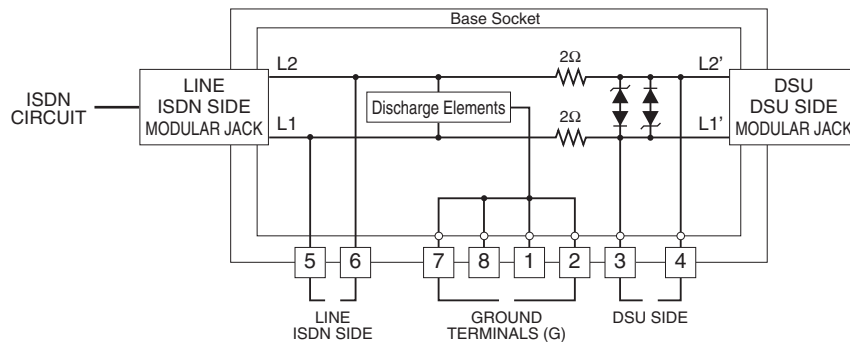
A crossover wire between M-RESTER ground and ground or metallic housing of equipment is required for protection.  
If the protected equipment has no ground terminal, ground the M-RESTER only.

## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



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

## SCHEMATIC CIRCUITRY



Be sure to cross-wire between the G terminal of telephone set and one of the terminals 7, 8, 1, or 2 of the MD-INS.



Specifications are subject to change without notice.