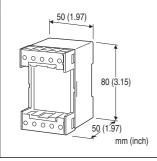
# **Lightning Surge Protectors for Electronics Equipment M-RESTER**

## LIGHTNING SURGE PROTECTOR FOR STANDARD SIGNAL LINE USE

#### **Functions & Features**

- Designed specifically for 4 20 mA DC line including both
- 4-wire and 2-wire transmitters
- Voltage & current signals up to 30 V DC
- Absorbing surges only without affecting instrumentation signal
- · Shallow depth
- DIN rail mounting



(The maximum voltage that could pass through the surge protector. Protected equipment must be able to withstand this voltage for a very short time period.)

**Response time**:  $\leq 0.1 \, \mu sec.$ 

Leakage current

Line to line:  $\leq 5 \mu A$  at 30 V DC Line to ground:  $\leq 5 \mu A$  at  $\pm 290 \text{ V DC}$ 

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

Max. load current: 100 mA

Internal series resistance: 20  $\Omega$  ±5 %

Maximum line voltage: 30 V

**MODEL: MDK-24** 

#### **ORDERING INFORMATION**

Code number: MDK-24

#### **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 lb)

## **PERFORMANCE**

Discharge voltage (peak voltage)

Line to line: 30 V min. Line to ground: ±290 V min.

Max. surge voltage
Line to line: 40 V max.
Line to ground: ±650 V max.

MODEL: MDK-24

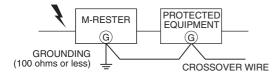
#### **CONNECTION EXAMPLES**

Protected Equipment

2-wire Xmtr M-RESTER M-RESTER Supply

G 5 G G G

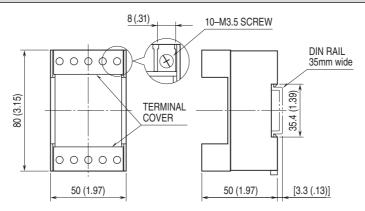
## **GROUNDING**



A crossover wire between M-RESTER ground and ground or metallic housing of equipment is required for protection.

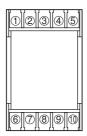
If the protected equipment has no ground terminal, ground the M-RESTER only.

## **DIMENSIONS unit: mm (inch)**



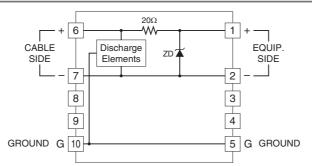
•When mounting, no extra space is needed between units.

## **TERMINAL ASSIGNMENTS**



MODEL: MDK-24

## **SCHEMATIC CIRCUITRY**



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Specifications are subject to change without notice.