MODEL: MMD

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

## LIGHTNING SURGE PROTECTOR FOR STANDARD SIGNAL LINE USE

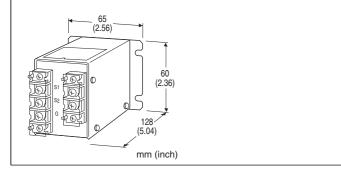
(high discharge current capacity)

#### **Functions & Features**

- Designed specifically for 4 20 mA DC line including both 4-wire and 2-wire transmitters
- Discharge current capacity 10000 A
- Absorbing surges only without affecting instrumentation signal

#### **Typical Applications**

• High discharge current capacity is beneficial for use in area with frequent lightnings



**MODEL: MMD-24** 

## **ORDERING INFORMATION**

• Code number: MMD-24

#### **OPERATIONAL VOLTAGE**

24: 24 V DC

### **RELATED PRODUCTS**

Lightning arrester for power supply use (model: MMA)

## **GENERAL SPECIFICATIONS**

Construction: Wall-mounted, front terminals; terminal cover

provided

Connection: M4 screw terminals (torque 0.8 N·m)

**Screw terminal**: Nickel-plated steel

**Housing material**: Steel plate t = 1.6 (black)

## **INSTALLATION**

Operating temperature: -5 to +55°C (23 to 131°F)
Operating humidity: 30 to 90 %RH (non-condensing)

**Mounting**: Surface **Weight**: 440 g (0.97 lbs)

#### **PERFORMANCE**

#### Discharge voltage (peak voltage)

Line to line: ±40 V min.

Line to ground: ±290 V min.

Maximum surge voltage

Line to line: ±50V max. Line to ground: ±800 V max.

(The maximum voltage that could pass through this surge protector. Protected equipment must be able to withstand

this voltage for very short time period.)

Response time: 0.01 µsec.

Leakage current

Line to line:  $\leq$  5  $\mu$ A at  $\pm$ 30 V DC Line to ground:  $\leq$  5  $\mu$ A at  $\pm$ 140 V DC

Discharge current capacity: 10000 A (8/ 20 µsec.)

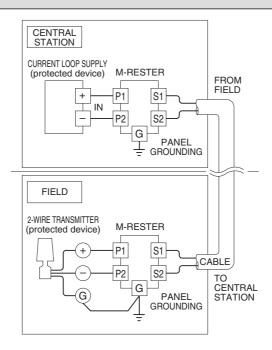
Maximum load current: 0.1 A

Internal series resistance:  $\leq 0.4 \Omega$  (including return)

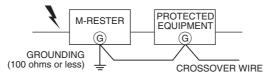
Maximum line voltage: ±30 V

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## **CONNECTION EXAMPLES**



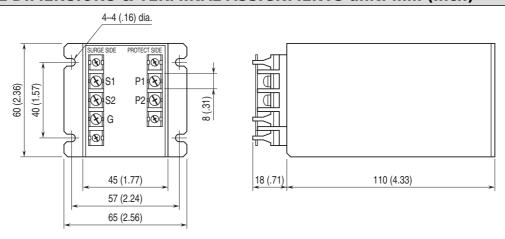
## **GROUNDING**



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

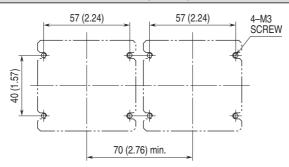
If the protected equipment has no ground terminal, ground the M-RESTER only.

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

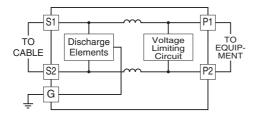


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## **MOUNTING REQUIREMENTS unit: mm (inch)**



## **SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



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Specifications are subject to change without notice.