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

# LIGHTNING SURGE PROTECTOR FOR AC/DC POWER SUPPLY USE (1A)

#### **Functions & Features**

- ullet Designed for AC and specifically for DC power supplies up to 1  $\Delta$
- Beneficial for protecting instruments from counter electromotive force by inductors and of course normal lightning surges entering from power supply lines

• 1 A fuse incorporated in element circuit



MODEL: MDP-100[1]

#### ORDERING INFORMATION

• Code number: MDP-100[1] Specify a code from below for [1]. (e.g. MDP-100/A33)

### [1] OPTIONS

#### DIN rail mounting adapter

blank: Without

/A33: With adapter (model A-33)

#### **GENERAL SPECIFICATIONS**

Construction: Plug-in

**Surge protection type**: Voltage limiting type one-port SPD **Connection**: M4 screw terminals (torque 0.8 N·m)

Screw terminal: Nickel-plated steel

Housing material: Flame-resistant resin (black)

## **INSTALLATION**

Operating temperature: -5 to +60°C (23 to 140°F)
Operating humidity: 30 to 90 %RH (non-condensing)

Mounting: Surface or DIN rail

Weight:

90 g (0.20 lbs), standard

115 g (0.25 lbs), with DIN rail mounting adapter

## **PERFORMANCE**

Max. line voltage (Uc): 120 V AC, 170 V DC

Discharge voltage: Line to line:  $\geq 190 \text{ V}$ Line to earth:  $\geq 410 \text{ V}$ Voltage protection level (Up): Line to line: 400 V max. Line to earth: 800 V max. Response time:  $\leq 0.1 \text{ µsec}$ .

Leakage current:

Line to line:  $\leq$  0.1 mA @ 150 V DC Line to earth:  $\leq$  0.1 mA @ 300 V DC

Max. discharge current (Imax): 1000 A (8/ 20 µsec.)

Nominal current (I<sub>N</sub>): 1.0 A

Dielectric strength of the base module:

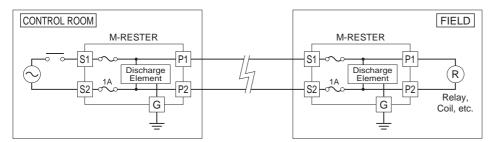
1500 V AC @ 1 minute (G terminal to other terminals) Internal series resistance:  $\leq 0.4 \Omega$  (including return)

## **STANDARDS & APPROVALS**

Surge protection: IEC 61643-1 Class III

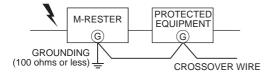
TEL: (02)2598-1199 E-mail: info@xintop.com FAX: (02)2596-2331 Website: www.xintop.com

# **CONNECTION EXAMPLES**



The M-RESTER must be connected with its terminals S1 and S2 faced on power source side in order that the fuses would be blown in case of shortcircuit of the discharge element.

# **GROUNDING**



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

When the M-RÉSTER is mounted with DIN Rail Mounting Adapter, connect the grounding wire to the mounting screw of the M-RESTER.

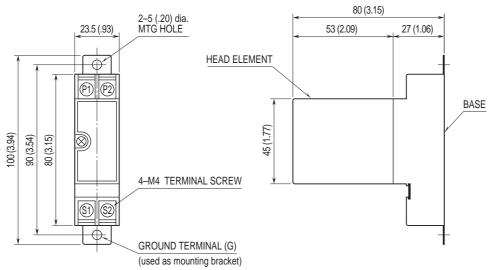
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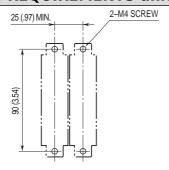
# **EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)**

#### ■ STANDARD



# **■ WITH DIN RAIL MOUNTING ADAPTER** (.33) [3.3 (.13)] 80 (3.15) 23.5 (.93) 53 (2.09) 27 (1.06) (%) DIN RAIL 35mm wide |P1||P2 45 (1.77) 90 (3.54) 80 (3.15) 4-M4 TERMINAL SCREW **S**1 2-M4 MOUNTING SCREW (used as ground terminal (G))

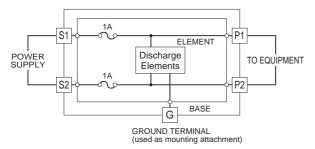
# **MOUNTING REQUIREMENTS unit: mm (inch)**



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# **SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



Note: When the head element is removed, the line will be open.



Specifications are subject to change without notice.

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