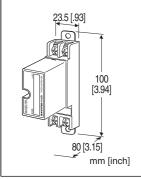
# Lightning Surge Protectors for Electronics Equipment M-RESTER

# LIGHTNING SURGE PROTECTOR FOR STRAIN GAUGE USE

#### **Functions & Features**

- Designed to protect strain gauge transmitters from lightning surge damage that enters on the wiring between the strain gauge and the transmitter
- Absorbs surges only without affecting instrumentation signal
- No interruption of signal by unplugging the protector element



MODEL: MDP-LC[1]

## **ORDERING INFORMATION**

• Code number: MDP-LC[1] Specify a code from below for [1].

(e.g. MDP-LC/A33/Q)

 Specify the specification for option code /Q (e.g. /C01)

# [1] OPTIONS (multiple selections)

**DIN Rail Mounting Adapter** 

blank: Without

/A33: With adapter (model A-33)

Other Options **blank**: none

/Q: Option other than the above (specify the specification)

## **SPECIFICATIONS OF OPTION: Q**

COATING (For the detail, refer to our web site.)

/C01: Silicone coating /C02: Polyurethane coating /C03: Rubber coating

## **GENERAL SPECIFICATIONS**

Construction: Plug-in

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

Mounting: Surface or DIN rail

Weight: 100 g (0.22 lb), standard; 125 g (0.28 lb), with DIN

rail mounting adapter

#### **PERFORMANCE**

Max. continuous operating voltage (Uc):

Output side: ±0.3 V Excitation side: 15 V Line to earth: ±15 V

Voltage protection level (Up):

• @ Imax

Output side: ±15 V Excitation side: 30 V Line to earth: ±30 V Response time: ≤ 5 nsec.

Leakage current:

Output side:  $\leq$  0.2  $\mu$ A @  $\pm$ 0.3 V DC Excitation side:  $\leq$  2  $\mu$ A @ 15 V DC Line to earth:  $\leq$  2  $\mu$ A @  $\pm$ 15 V DC

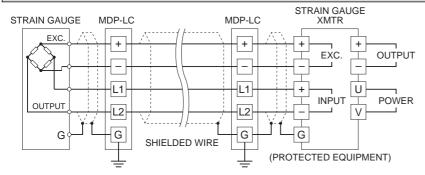
Max. discharge current (Imax)

Output side: 100 A (8/20  $\mu$ s), 25 A (10/1000  $\mu$ s) Excitation side: 50 A (8/20  $\mu$ s), 25 A (10/1000  $\mu$ s) Line to earth: 50 A (8/20  $\mu$ s), 25 A (10/1000  $\mu$ s)

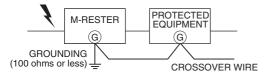
Capacitance @ 1 MHz: Output side:  $\leq$  100 pF Excitation side:  $\leq$  4 nF Line to earth:  $\leq$  2 nF

Surge protection: IEC 61643-21 Categories C3

## **CONNECTION EXAMPLES**



## **GROUNDING**

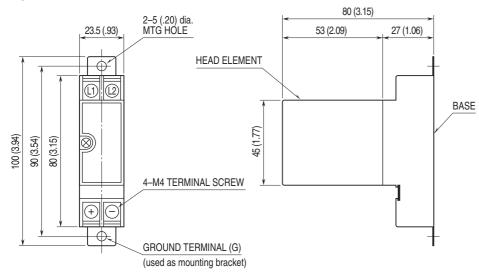


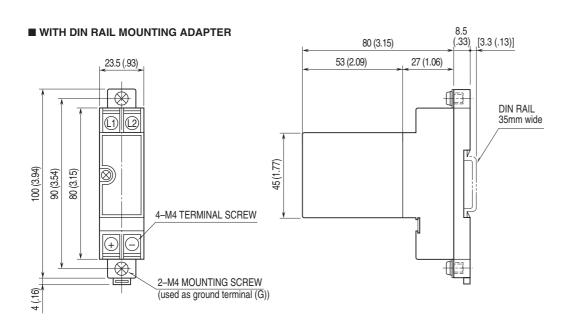
A crossover wire between M-RESTER ground and the ground or metallic housing of the equipment is required for protection. If the protected equipment has no ground terminal, ground the M-RESTER only.

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

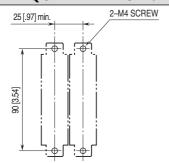
## **EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS** unit: mm [inch]

#### ■ STANDARD

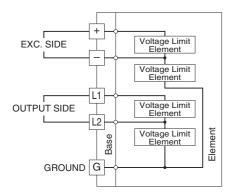




# MOUNTING REQUIREMENTS unit: mm [inch]



## **SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



 $\Lambda$ 

Specifications are subject to change without notice.