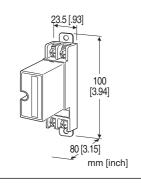
# Lightning Surge Protectors for Electronics Equipment M-RESTER

# LIGHTNING SURGE PROTECTOR FOR DATA-M USE

#### **Functions & Features**

- Protects from lightning surges entering through twistedpair cables connecting DATA-M systems
- Absorbs surges only without affecting instrumentation signal
- No interruption of signal by unplugging the protector element



MODEL: MDP-DM[1]

## **ORDERING INFORMATION**

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

(e.g. MDP-DM/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):

Line to line: ±140 V
Line to earth: ±140 V
Voltage protection level (Up):

@ 1 kV (100 A)
 Line to line: ±650 V
 Line to earth: ±650 V
 @ 2 kV (1 kA)
 Line to line: ±800 V
 Line to earth: ±800 V
 Response time: ≤ 1 µsec.

Leakage current:

Line to line:  $\leq$  50  $\mu$ A @  $\pm$ 140 V DC Line to earth:  $\leq$  50  $\mu$ A @  $\pm$ 140 V DC

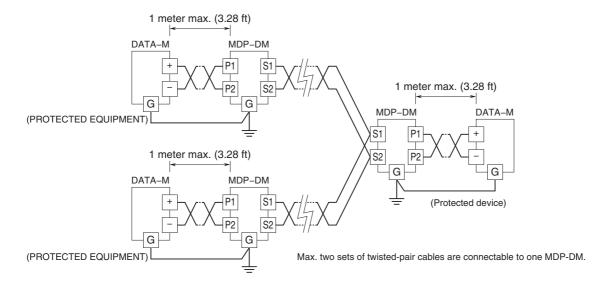
Max. discharge current (Imax):  $5000 \text{ A} (8 / 20 \mu \text{s})$ 

Nominal current (I<sub>N</sub>): 100 mA Internal series resistance:  $\leq 0.1 \Omega$ 

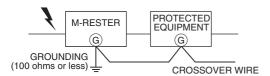
Capacitance @ 1 MHz: Line to line: ≤ 100 pF Line to earth: ≤ 100 pF

Surge protection: IEC 61643-21 Categories C1, C2

## **CONNECTION EXAMPLES**



## **GROUNDING**

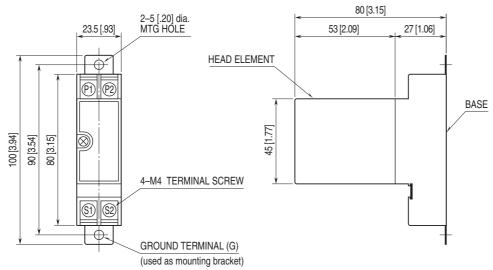


A crossover wire between M-RESTER ground and the ground or metallic housing of the equipment is required for protection. If the protected equipment has no ground terminal, ground the M-RESTER only.

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]

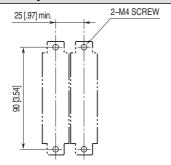
#### ■ STANDARD



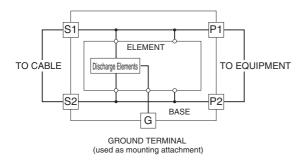
## ■ WITH DIN RAIL MOUNTING ADAPTER [.33] (3.3 [.13]) 80 [3.15] 53 [2.09] 27 [1.06] 23.5 [.93] DIN RAIL 35mm wide P1 2 45 [1.77] 90 [3.54] 80 [3.15] 4-M4 TERMINAL SCREW **S**1 8 2-M4 MOUNTING SCREW

# MOUNTING REQUIREMENTS unit: mm [inch]

(used as ground terminal (G))



# **SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**





Specifications are subject to change without notice.