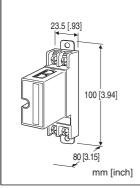
### Lightning Surge Protectors for Electronics Equipment M-RESTER

# LIGHTNING SURGE PROTECTOR FOR TELECOMMUNICATION LINE USE

#### Functions & Features

• Designed specifically to protect telecommunication equipment from lightning surges entering through telecommunication line network

- Easy connection to the protected equipment
- with modular jacks
- Connection with a telephone and a modem in parallel
- No interruption of transmission signal by unplugging the protector element



# MODEL: MDP-TL[1]

#### **ORDERING INFORMATION**

- Code number: MDP-TL[1] Specify a code from below for [1]. (e.g. MDP-TL/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: Modular jack or M4 screw terminals (torque 0.8

N·m) Modular jack cord: 6-pole, 2-core

Screw terminal: Nickel-plated steel Housing material: Flame-resistant resin (black)

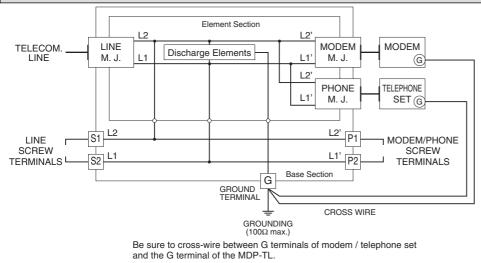
#### INSTALLATION

Operating temperature: -5 to +55°C (23 to 131°F) Operating humidity: 30 to 90 %RH (non-condensing) Mounting: Surface or DIN rail Weight: 120 g (0.26 lb), standard 145 g (0.32 lb), with DIN rail mounting adapter

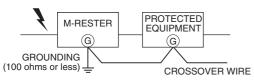
### PERFORMANCE

Max. continuous operating voltage (Uc): Line to line: ±160 V Line to earth: ±160 V Voltage protection level (Up): • @ 1 kV (100 A) Line to line: ±650 V Line to earth: ±900 V • @ 2 kV (1 kA) Line to line: ±550 V Line to earth: ±900 V **Response time**:  $\leq 0.1 \, \mu \text{sec.}$ Leakage current: Line to line:  $\leq$  100 µA @ ±160 V DC Line to earth:  $\leq$  100 µA @ ±160 V DC Max. discharge current (Imax): Modular jack: 500 A (8 / 20 µs) Screw terminal: 1000 A (8 / 20 µs) Nominal current (IN): 500 mA **Internal series resistance**:  $\leq 0.1 \Omega$  (including return) Capacitance @ 1 MHz: Line to line:  $\leq$  1000 pF Line to earth:  $\leq 100 \text{ pF}$ 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

