

Lightning Surge Protectors for Electronics Equipment M-RESTER

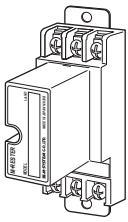
165 g (0.36 lbs), with DIN rail mounting adapter

## LIGHTNING SURGE PROTECTOR FOR TELEMETERING USE

(50 bps)

### Functions & Features

- Designed specifically to protect telemetering systems utilizing leased communication lines
- Applicable for M-System's Telemetering Unit Model DLS with modem model A1
- Absorbs surges only without affecting instrumentation signal
- No interruption of transmission signal by unplugging the protector element



## MODEL: MDP-MFA[1]

## ORDERING INFORMATION

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

## [1] OPTIONS

### DIN rail mounting adapter

blank: Without

/A33: With adapter (model A-33)

## RELATED PRODUCTS

- 50 bps modem (model: MOD)
- 50 bps modem (model: MOD1)

## 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: 140 g (0.31 lbs), standard

## PERFORMANCE

### Max. continuous operating voltage (Uc):

B to C:  $\pm 110$  V min

B or C to A:  $\pm 55$  V min

Line to earth:  $\pm 290$  V min

### Voltage protection level (Up):

- @ 1 kV (100 A)

2 to 3:  $\pm 320$  V max.

2 or 3 to 1:  $\pm 160$  V max.

Line to earth:  $\pm 650$  V max.

- @ 2 kV (1 kA)

2 to 3:  $\pm 320$  V max.

2 or 3 to 1:  $\pm 200$  V max.

Line to earth:  $\pm 800$  V max.

Response time:  $\leq 0.1$   $\mu$ sec.

### Leakage current:

B to C:  $\leq 50$   $\mu$ A @  $\pm 110$  V DC

B or C to A:  $\leq 50$   $\mu$ A @  $\pm 55$  V DC

Line to earth:  $\leq 10$   $\mu$ A @  $\pm 140$  V DC

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

Nominal current (In): 100 mA

Internal series resistance: 20  $\Omega$   $\pm 10$  % (including return)

### Capacitance @ 1 MHz:

Line to line:  $\leq 1000$  pF

Line to earth:  $\leq 100$  pF

## STANDARDS & APPROVALS

Surge protection: IEC 61643-21 (Categories C1, C2)



幸託有限公司  
XIN TOP CORPORATION

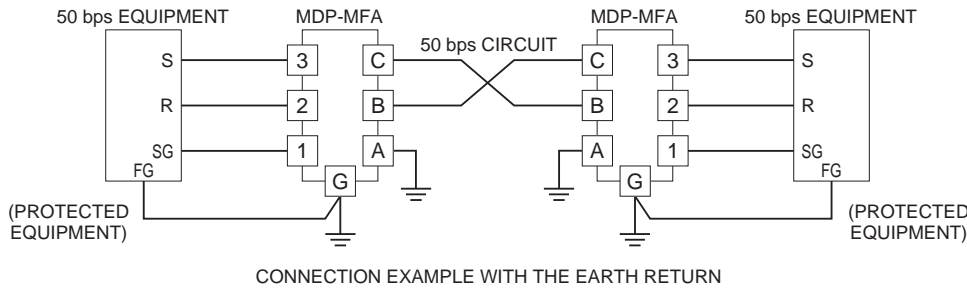
TEL : (02)2598-1199

FAX : (02)2596-2331

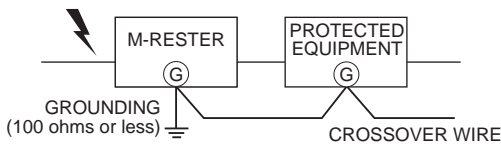
E-mail : info@xintop.com

Website : www.xintop.com

## CONNECTION EXAMPLES



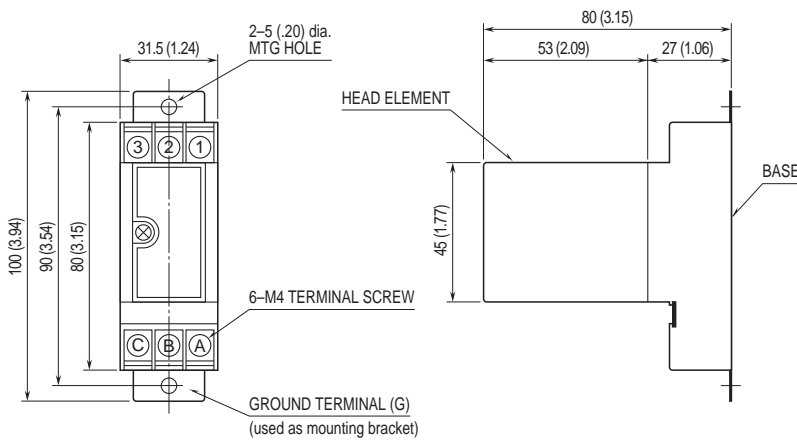
## GROUNDING



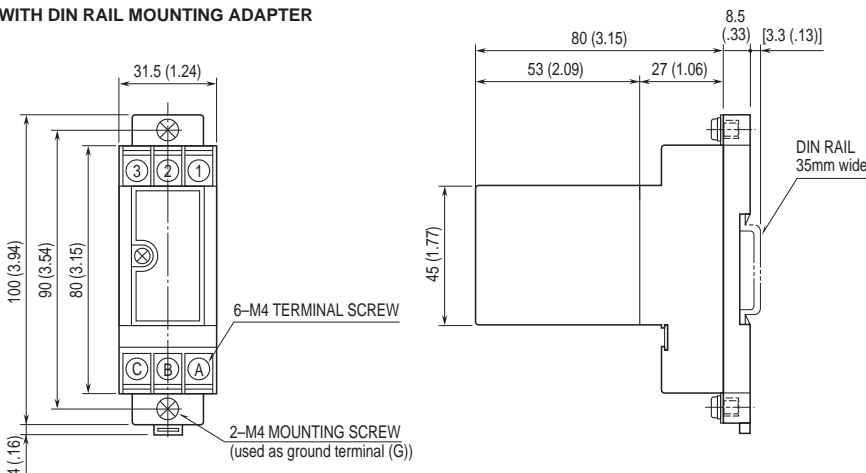
A crossover wire between M-RESTER ground and the ground or metallic housing of the equipment is required for protection. If the protected equipment has no ground terminal, ground the M-RESTER only. When the M-RESTER is mounted with DIN Rail Mounting Adapter, connect the grounding wire to the mounting screw of the M-RESTER.

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

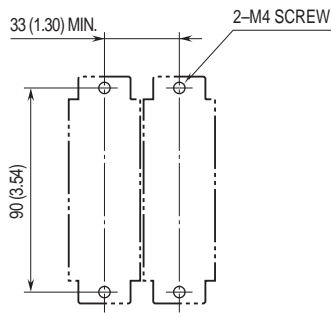
### STANDARD



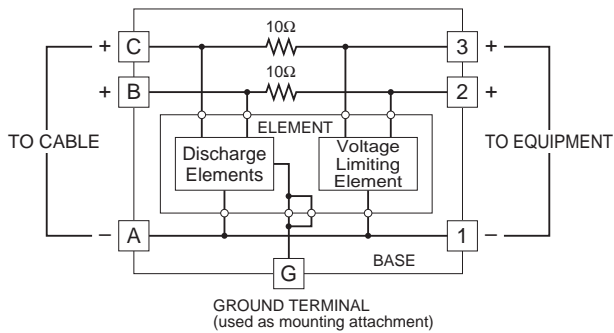
### WITH DIN RAIL MOUNTING ADAPTER



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



**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



Specifications are subject to change without notice.

