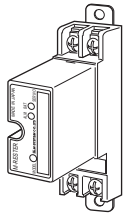


Lightning Surge Protectors for Electronics Equipment M-RESTER

LIGHTNING SURGE PROTECTOR FOR STANDARD SIGNAL LINE & PULSE USE

Functions & Features

- Designed specifically for 4 - 20mA DC and pulse signal line including both 4-wire and 2-wire transmitters
- Life monitor function helps you to decide when you should replace the surge protector; reduces maintenance and prevents downtime
- Pressing CHK (Check) button confirms the degradation and life span of the surge protection circuits with LEDs
- Absorbs surges only without affecting instrumentation signal
- No interruption of signal by unplugging surge protector element



MODEL: MDPA-24[1]

ORDERING INFORMATION

- Code number: MDPA-24[1]
Specify a code from below for [1].
(e.g. MDPA-24/BN)

[1] OPTIONS

Configuration

blank: With Base (model: SK-2E) included

/BN : Element only for replacement

(Not selectable with DIN rail mounting adapter)

DIN rail mounting adapter

blank: Without

/A33: With adapter (model A-33)

RELATED PRODUCTS

- Base (model: SK-2E)

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)

Indicators: Activated by CHK (Check) button, see the status table shown below.

BAT: Green LED

ALM: Red LED

Degradation judged: When the leakage current at the voltage limiter exceed approx. 7.5 μ A.

Life time judged: When the number of discharges of the discharge element reaches the expected life span.

CHK button: Push button; momentary

Battery: Lithium; No recharge or replacement available.

Battery life: 10 years (when used \leq 2 minutes/month)

Discharge element status table

BAT	ALM	Battery	Discharge Element	Voltage Limiter	Replacement
☉	●		Normal		No Need
☉	☉	Normal	Near End	Normal	Near
●	☉	Normal	End of Life	Degraded*1	Immediately Required
●	●	Discharged	Unable to Judge		

☉ : ON ● : OFF

*1. With pulsating line signal or that containing ripples, the LED may flicker or blink when the voltage limiter is degraded.

INSTALLATION

Operating temperature: -5 to +55°C (23 to 131°F)

Operating humidity: 30 to 85 %RH (non-condensing)

Mounting: Surface or DIN rail

Weight: 150 g (0.33 lbs), standard

175 g (0.39 lbs), with DIN rail mounting adapter

PERFORMANCE

Max. continuous operating voltage (Uc):

Line to line: 30 V min

Line to earth: \pm 160 V min

Voltage protection level (Up):

- @ 1 kV (100 A)

Line to line: 45 V max.

Line to earth: \pm 650 V max.

- @ 2 kV (1 kA)

Line to line: 50 V max.

Line to earth: \pm 650 V max.

Response time:

Line to line: \leq 4 nsec.

Line to earth: \leq 20 nsec.

Leakage current:

Line to line: \leq 5 μ A @ 30 V DC

Line to earth: \leq 5 μ A @ \pm 140 V DC

Max. discharge current (Imax): 5000 A (8 / 20 μ s)

Nominal current (In): 100 mA

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

Capacitance @ 1 MHz:



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Website : www.xintop.com

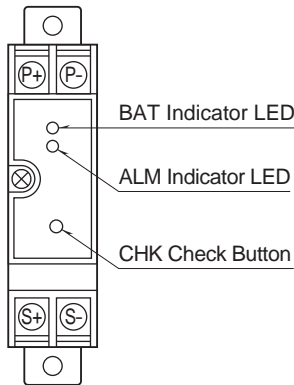
Line to line: ≤ 1000 pF

Line to earth: ≤ 100 pF

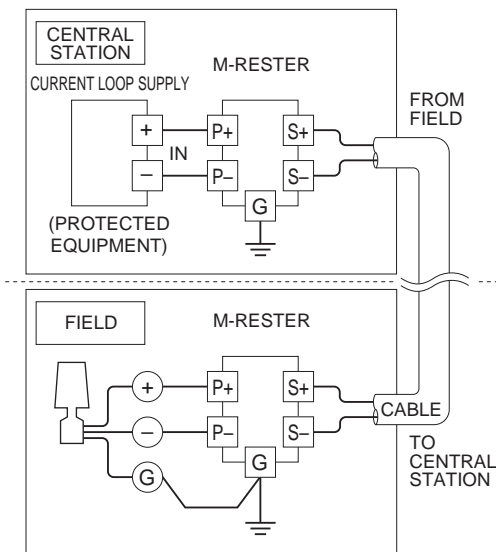
STANDARDS & APPROVALS

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

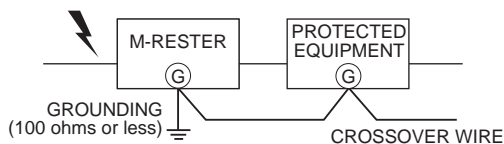
EXTERNAL VIEW



CONNECTION EXAMPLES



GROUNDING

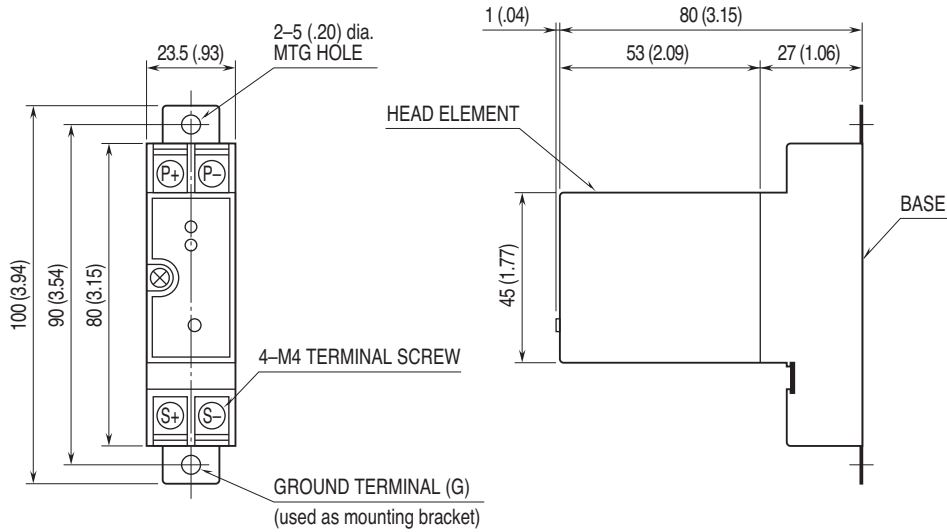


A crossover wire between M-RESTER ground and the ground or metallic housing of the equipment is required for protection.
 If the protected equipment has no ground terminal, ground the M-RESTER only.
 When the M-RESTER is mounted with DIN Rail Mounting Adapter, connect the grounding wire to the mounting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

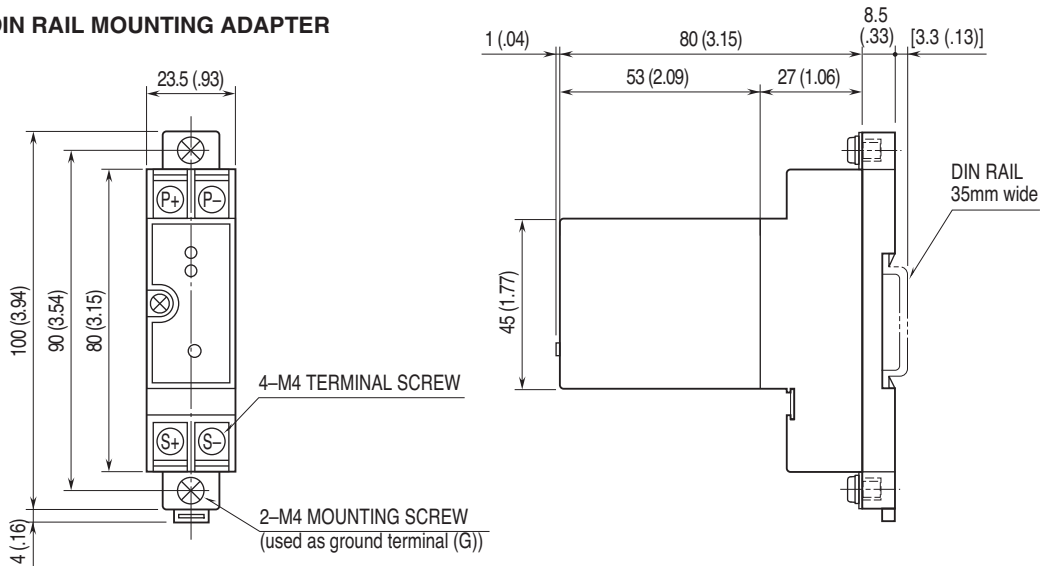


EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)

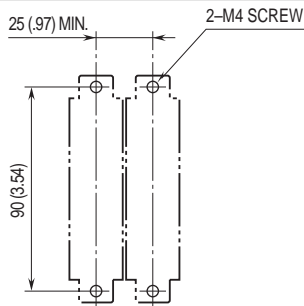
■ STADARD



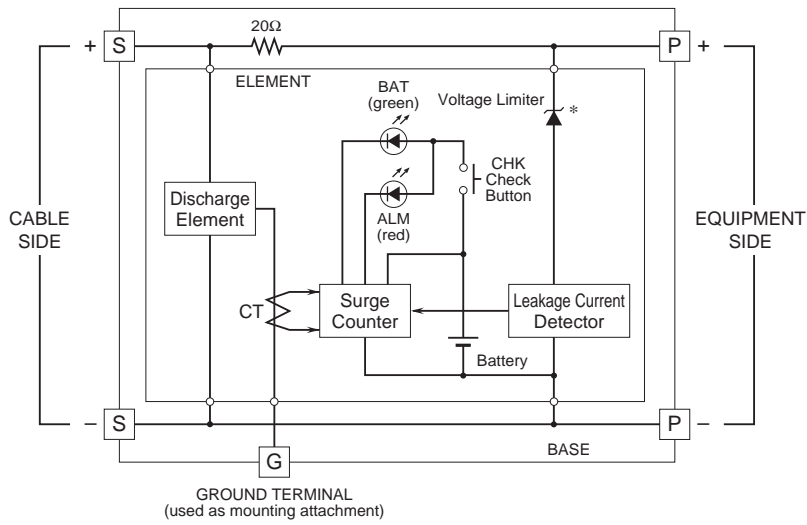
■ WITH DIN RAIL MOUNTING ADAPTER



MOUNTING REQUIREMENTS unit: mm (inch)



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*The zenor diode has polarity.
Zero-cross signal cannot be connected.



Specifications are subject to change without notice.

