

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

**LIGHTNING SURGE PROTECTOR  
FOR LOW FREQUENCY USE**

MODEL **MDP-SP**

**MODEL & SUFFIX CODE SELECTION**

MODEL \_\_\_\_\_ **MDP-SP**

**ORDERING INFORMATION**

Specify code number. (e.g. MDP-SP)

**GENERAL SPECIFICATIONS**

**Construction:** plug-in

**Connection:** M4 screw terminals (nickel-plated steel; torque 0.8 N·m)

**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 (DIN rail adaptor model A-33 is required.)

**Dimensions:** W31.5×H100×D80 mm (1.24"×3.94"×3.15")

**Weight:** 140 g (0.31 lbs)

**PERFORMANCE**

**Discharge voltage**

Between B – C: ±14V min.

Between B or C – A: 14V min.

Between each line – G: ±500V max.

**Maximum surge voltage\***

Between 2 – 3: ±30V max.

Between 2 or 3 – 1: 30V max.

Between each line – G: ±650V max.

\*The maximum voltage that could pass through M-RESTER. Protected equipment must be able to withstand this voltage for very short time period.

**Response time:** ≤0.1 microseconds

**Discharge current capacity:** 5000A (8 / 20 μsec.)

**Maximum load current:** 50mA

**Internal series resistance:** approx. 10Ω

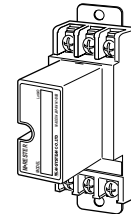
**Leakage current**

Between B – C: ≤10μA at ±14V DC

Between B or C – A: ≤10μA at 14V DC

Between each line – G: ≤10μA at ±140V DC

**Maximum line voltage:** 14V



**Functions & Features**

- Designed specifically to protect frequency generating devices such like flowmeters and frequency transmitters from lightning surge damage that enters on the wiring between these instruments
- Absorbing surges only without affecting instrumentation signal
- No interruption of signal by unplugging arrester element
- CE marking

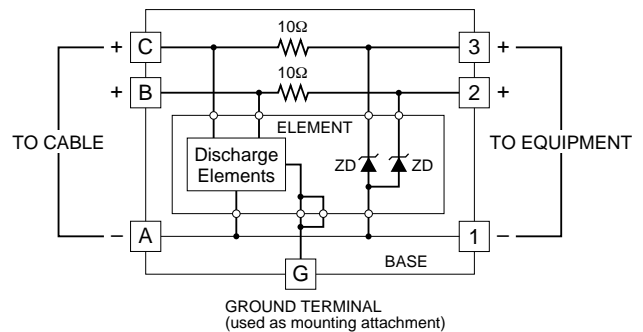
**STANDARDS & APPROVALS**

**CE conformity:** EMC Directive (89/336/EEC)

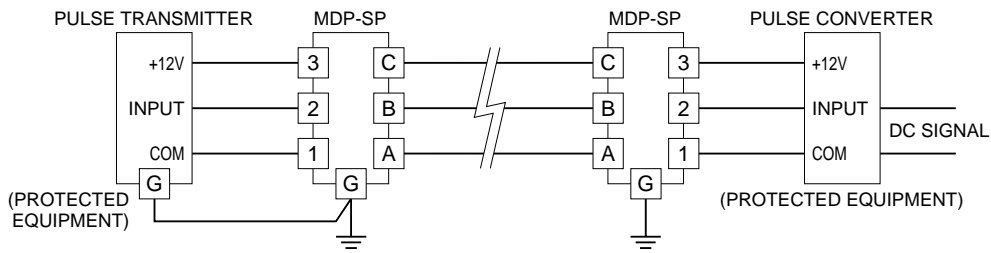
EMI EN61000-6-4

EMS EN61000-6-2

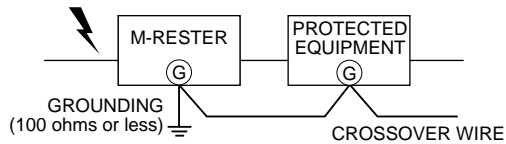
**SCHEMATIC CIRCUITRY**



**CONNECTION DIAGRAM**

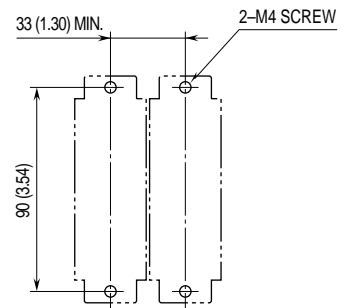


**GROUNDING**



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

**MOUNTING REQUIREMENTS mm (inch)**



**EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENT mm (inch)**

