

Lightning Surge Protectors for Electronics Equipment M-RESTER

MULTI M-RESTER

MODEL MDR-8

MODEL & SUFFIX CODE SELECTION

MODEL _____ **MDR-8**

ORDERING INFORMATION

Specify code number. (e.g. MDR-8)

GENERAL SPECIFICATIONS

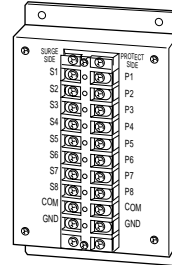
- Construction:** terminal board; terminal cover provided
- Connection:** M3 screw terminals; nickel-plated brass (torque 0.5 N·m)
- Housing material:** SPCC t=1.6 (black)

INSTALLATION

- Operating temperature:** -5 to +55°C (23 to 131°F)
- Operating humidity:** 30 to 90% RH (non-condensing)
- Mounting:** surface
- Dimensions:** W95×H160×D40 mm (3.74"×6.30"×0.16")
- Weight:** 510 g (1.12 lbs)

PERFORMANCE

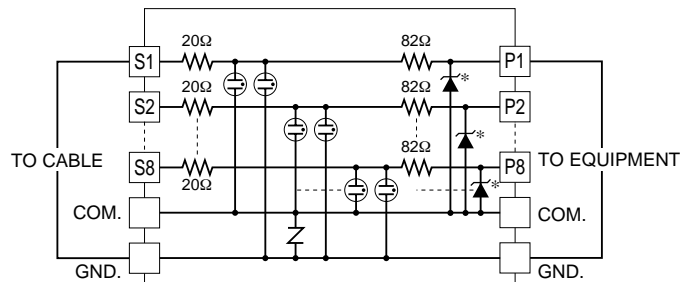
- Discharge voltage**
 - Between each of S1–S8 lines: ±30V min.
 - Each line – COM: 30V min.
 - Each line or COM – G: ±60V min.
 - Maximum surge voltage***
 - Between each of S1–S8 lines: ±40V max.
 - Each line – COM: 40V max.
 - Each line or COM – G: ±650V max.
- *The maximum voltage that could pass 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:** 1000A (8 / 20 μsec.)
 - Maximum load current:** 100mA
 - Internal series resistance:** approx. 100Ω
 - Leakage current**
 - Between each of S1–S8 lines: ≤5μA at ±30V DC
 - Each line – COM: ≤5μA at 30V DC
 - Each line or COM – G: ≤5μA at ±60V DC



Functions & Features

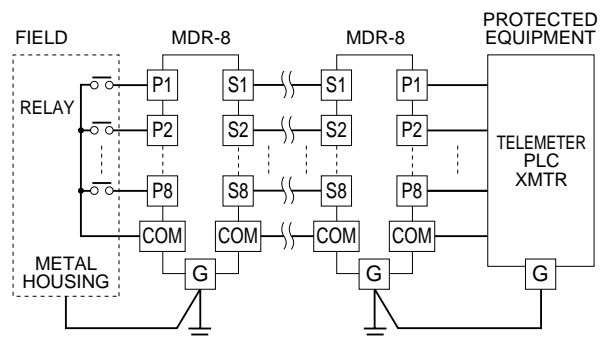
- Designed specifically for ON-OFF signals, protecting semiconductor switches used for ON-OFF outputs from the computer or PLC from lightning surge damage that enters on the wiring between these instruments
- 8 channels
- Most convenient as junction board
- Minimum mounting space

SCHEMATIC CIRCUITRY



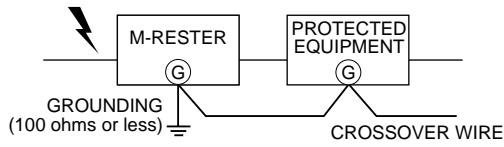
*Zener diode has polarity.
Not applicable to zero-cross signals.

CONNECTION DIAGRAM



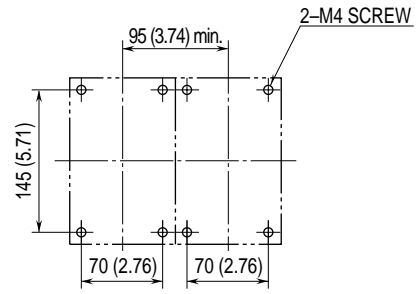
All negative lines are connected to COM.

GROUNDING

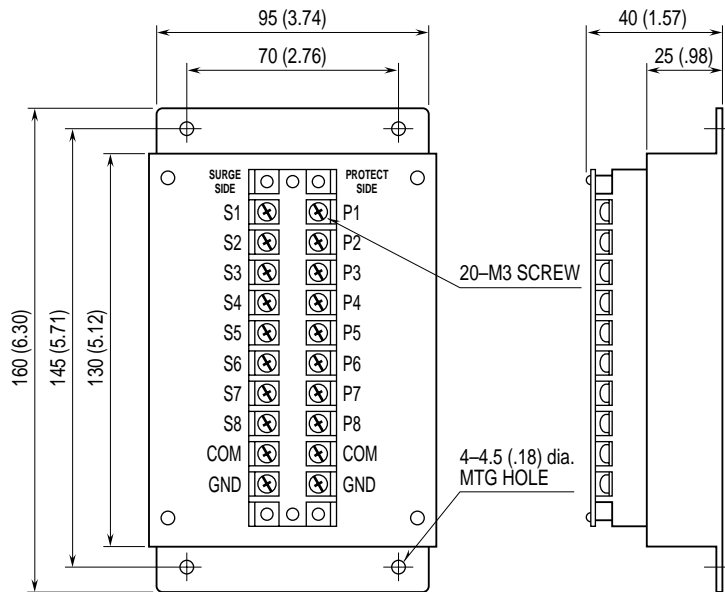


A crossover wire between M-RESTER ground and ground or metallic housing of equipment is required for protection. If the protected equipment has no ground terminal, ground the M-RESTER only.

MOUNTING REQUIREMENTS mm (inch)



EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENT mm (inch)



•When mounting, no extra space is needed between units.