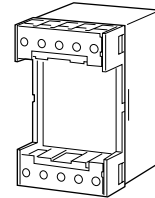


**Lightning Surge Protectors for Electronics Equipment *M-RESTER*****LIGHTNING SURGE PROTECTOR FOR  
STANDARD SIGNAL LINE USE**MODEL **MDK-24****MODEL & SUFFIX CODE SELECTION**

MDK-24

MODEL \_\_\_\_\_

**Functions & Features**

- Designed specifically for 4 – 20mA DC line including both 4-wire and 2-wire transmitters
- Voltage & current signals up to 30V DC
- Absorbing surges only without affecting instrumentation signal
- Shallow depth
- DIN rail mounting

**ORDERING INFORMATION**

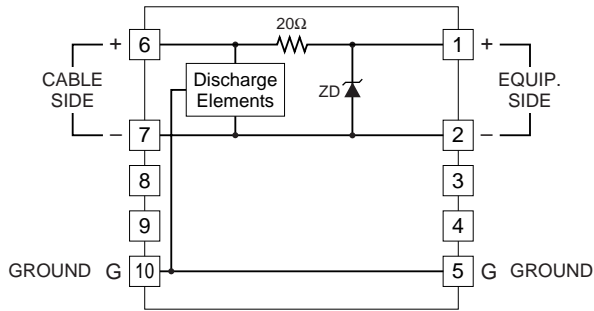
Specify code number. (e.g. MDK-24)

**GENERAL SPECIFICATIONS****Construction:** discrete box, front terminals; terminal cover provided**Connection:** M3.5 screw terminals (nickel-plated steel; torque  $\leq 0.8$  N·m)**Housing material:** flame-resistance resin (black)**INSTALLATION****Operating temperature:** -5 to +55°C (23 to 131°F)**Operating humidity:** 30 to 90% RH (non-condensing)**Mounting:** DIN rail**Dimensions:** W50×H80×D50 mm (1.97"×3.15"×1.97")**Weight:** 150 g (0.33 lbs)**PERFORMANCE****Discharge voltage****Between lines:** 30V min.**Line to ground:**  $\pm 290$ V min.**Maximum surge voltage\*****Between lines:** 40V max.**Line to ground:**  $\pm 650$ V max.

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

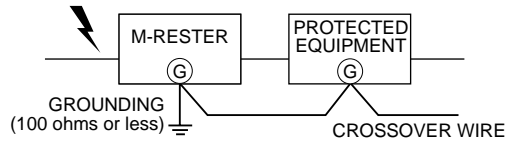
**Response time:**  $\leq 0.1$  microseconds**Discharge current capacity:** 5000A (8 / 20  $\mu$ sec.)**Maximum load current:** 100mA**Internal series resistance:**  $20\Omega \pm 5\%$ **Leakage current****Between lines:**  $\leq 5\mu$ A at 30V DC**Line to ground:**  $\leq 5\mu$ A at  $\pm 290$ V DC**Maximum line voltage:** 30V

**SCHEMATIC CIRCUITRY**



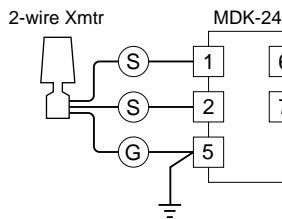
**GROUNDING**

A crossover wire between M-RESTER ground and ground or metallic housing of equipment is required for protection.

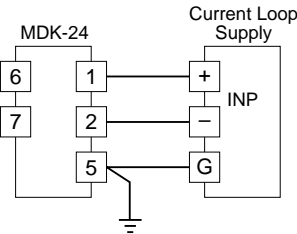


**CONNECTION DIAGRAM**

Protected Equipment

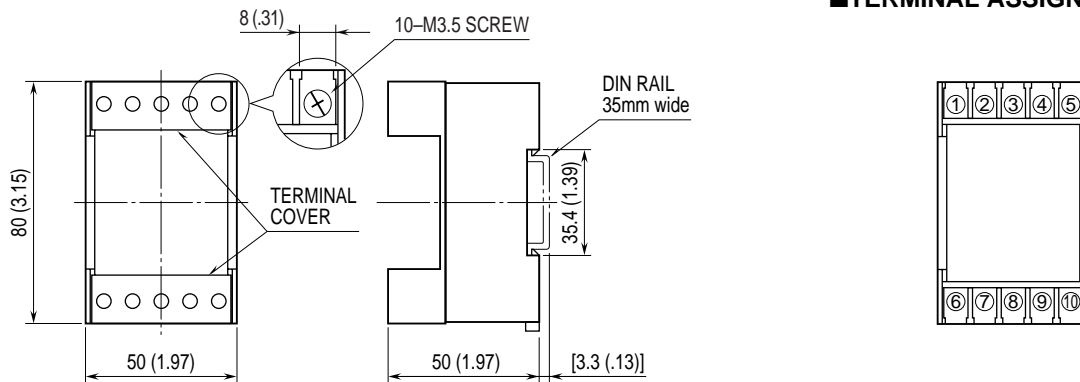


Protected Equipment



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

**■ TERMINAL ASSIGNMENT**



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