

Lightning Surge Protectors for Electronics Equipment *M-RESTER*

**LIGHTNING SURGE PROTECTOR FOR ETHERNET
(100 BASE-TX / 10 BASE-T)**

MODEL **MDM5E-A**

MODEL & SUFFIX CODE SELECTION

MODEL _____ **MDM5E-A**

ORDERING INFORMATION

Specify model number. (e.g. MDM5E-A)

PACKAGE INCLUDES...

- LAN cable connected to the protected device
(STP, CAT5e, 0.5 meters)

GENERAL SPECIFICATIONS

Construction: Terminal block

Connection

Network: RJ-45 modular jack

Grounding: M3.5 screw terminals
(nickel-plated steel; torque 0.8 N·m)

Housing material: Flame-resistant resin (black)

Network cable: Conforms to 100BASE-TX /
10BASE-T

INSTALLATION

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

Operating humidity: 30 to 90% RH (non-condensing)

Mounting: DIN rail

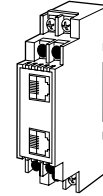
Dimensions: W25×H97×D41 mm (0.98"×3.82"×1.61")

Weight: 80 g (2.8 oz.)

STANDARDS & APPROVALS

JIS Standard: JIS C 5381-21 : 2004

IEC Standard: IEC 61643-21 : 2000



Functions & Features

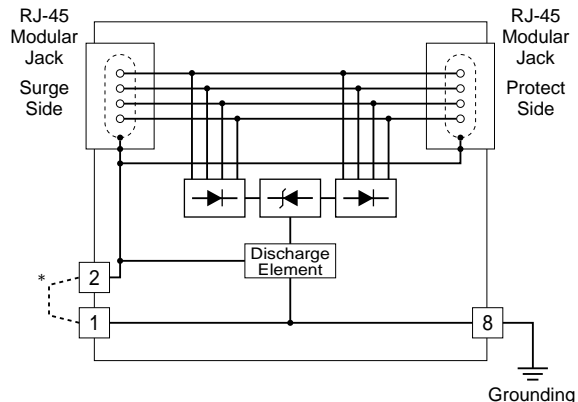
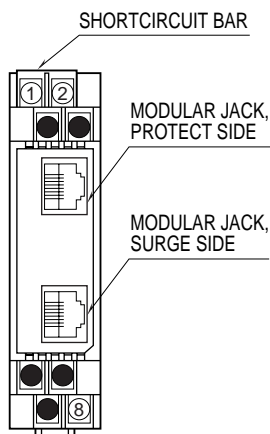
- Designed specifically for Ethernet network
- Conforms both to 100BASE-TX / 10BASE-T
- LAN cable's shield wire can be floating or grounding by a shortcircuit bar.
- DIN rail mounting

PERFORMANCE

	BETWEEN LINES	LINE TO TO GND	SHIELD TO GND
Discharge voltage	±6V min.	±150V min.	±150V min.
Max. surge voltage*	38V max.	±600V max.	±600V max.
Response time	≤4 nsec.	≤20 nsec.	≤20 nsec.
Discharge current (8 / 20 μsec.)	500A	500A	5000A
Leakage current	≤0.1mA @6V DC	≤5μA @±150V DC	≤5μA @±150V DC
Series resistance	Approx. 0Ω		
Impulse durability	Category c1		
Max. line voltage Uc	±6V		
Transmission characteristics	Attenuation 1.5 dB to 100 MHz		

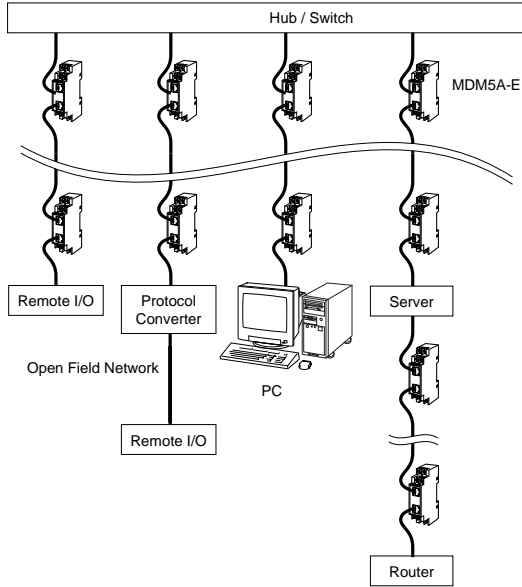
*The maximum voltage that could pass through M-RESTER. Protected equipment must be able to withstand this voltage for a very short time period.

SCHEMATIC CIRCUITRY, CONNECTION DIAGRAM & TERMINAL ASSIGNMENT

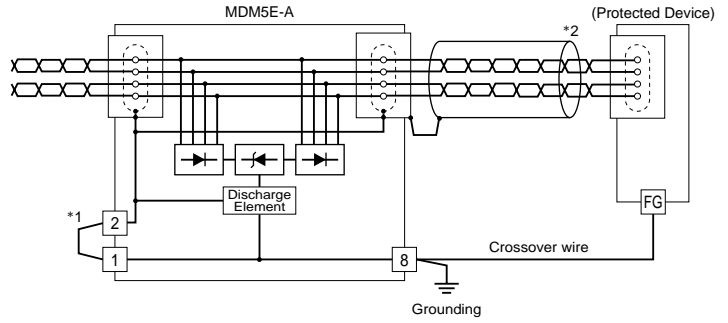


*Remove the shortcircuit bar when the LAN cable's shield wire is floating.

NETWORK CONNECTION

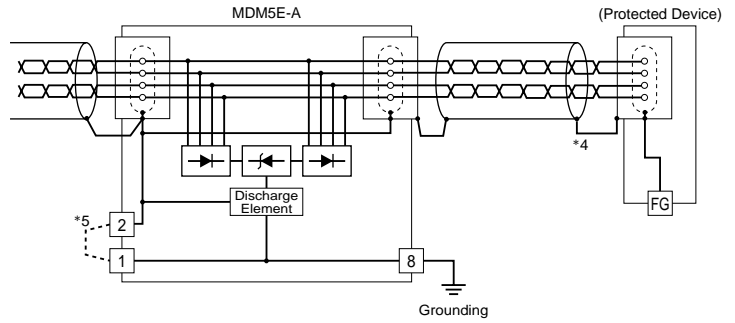


PROTECTING NON-SPT (UTP*3) DEVICE



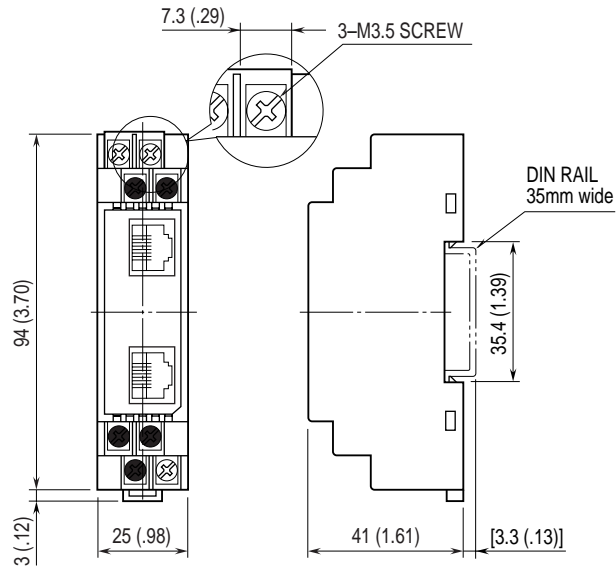
- *1. Maintain the shortcircuit bar. The protected device is 'grounded.'
- *2. Cable included in the product package.
- *3. Unshielded twisted-pair cable

PROTECTING STP*6 DEVICES



- *4. LAN's shield wire (included in the product package) serves as the cross-over wiring.
- *5. The protected device is 'grounded' when the shortcircuit bar is connected. Remove the bar in order to switch to 'floating' state.
- *6. Shielded twisted-pair cable

EXTERNAL DIMENSIONS (unit: mm)



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