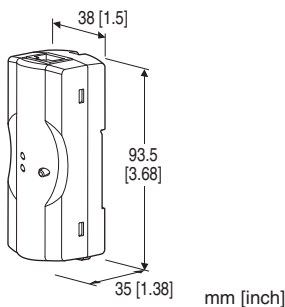


Lightning Surge Protectors for Electronics Equipment M-RESTER

LIGHTNING SURGE PROTECTOR FOR SINGLE PAIR ETHERNET
(PoDL, life monitor)

Functions & Features

- Designed specifically for Ethernet network
- Conforms with PoDL
- LAN cable's shield wire can be floating or grounding by a shortcircuit bar
- Pressing CHK (Check) button confirms with LEDs the life span of the surge protect device
- Compact and light weight
- DIN rail mounting



MODEL: MDCAT-SPE-A-[1]

ORDERING INFORMATION

- Code number: MDCAT-SPE-A-[1]
Specify a code from below for [1].
(e.g. MDCAT-SPE-A/DR/Q)
- Specify the specification for option code /Q
(e.g. /C01)

[1] OPTIONS (multiple selections)

Single mount DIN rail

blank: Without

/DR: With single mount DIN rail

Other Options

blank: none

/Q: Option other than the above (specify the specification)

SPECIFICATIONS OF OPTION: Q

COATING (For the detail, refer to our web site.)

/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

CAUTION

- When this unit is earthed via a DIN rail, use a steel or copper rail. Oxide film on the surface of an aluminium rail may lower the electric conductivity between this module and the ground.
- Single mount DIN rail for option code '/DR' is made of aluminum. Connect to ground with ground terminal when this DIN rail is used.

APPLICABLE NETWORK

10 BASE-T1L: IEEE 802.3cg

PoDL: IEEE802.3bu

GENERAL SPECIFICATIONS

Connection

Network: Euro type connector terminal

(Applicable wire size: 0.2 - 2.5 mm²)

Grounding: M3 screw terminal (torque 0.6 N·m)
or via DIN rail

Screw terminal: Nickel-plated brass

DIN rail material: Aluminum

Housing material: Flame-resistant resin (black)

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

•BAT: Green LED

•ALM: Red LED

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 ≤ 2 minutes/month)

Life status table

BAT	ALM	BATTERY	DISCHARGE ELEMENT	REPLACEMENT
ON	OFF		Normal	No Need
ON	ON	Normal	Near End	Near
OFF	ON	Normal	End of Life	Immediately
OFF	OFF	Discharged	Unable to Judge	Required

INSTALLATION

Operating temperature: -10 to +55°C (14 to 131°F)

Operating humidity: 10 to 95 % RH (non-condensing)

Mounting: DIN Rail (TH35-7.5, 1-mm-thick)

Weight: 80 g (2.8 oz)

PERFORMANCE

Max. continuous operating voltage (Uc)

• ± 60 V

Voltage protection level

• ≤ 600 V (line to earth)

Leakage current (@Uc)

· 5 μ A

Nominal current (I_N): 1.5 A

Impulse durability

· C2 (8/20 μ sec.): 5 kA

· D1 (10/350 μ sec.): 1 kA

Series resistance: approx. 0 Ω

Insertion loss: $\leq$ 0.3 dB (DC - 10 MHz)

Surge protection: IEC 61643-21 Categories C2, D1

STANDARDS & APPROVALS

EU conformity:

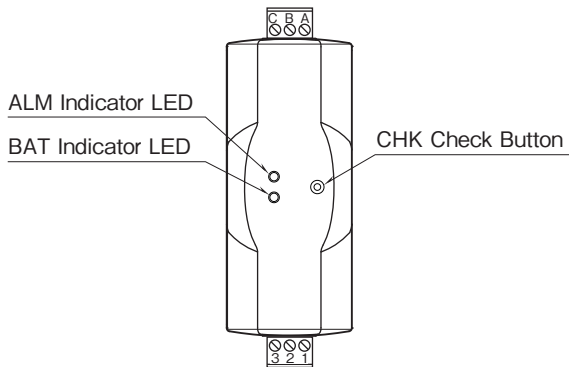
EMC Directive

EMI EN 61000-6-4

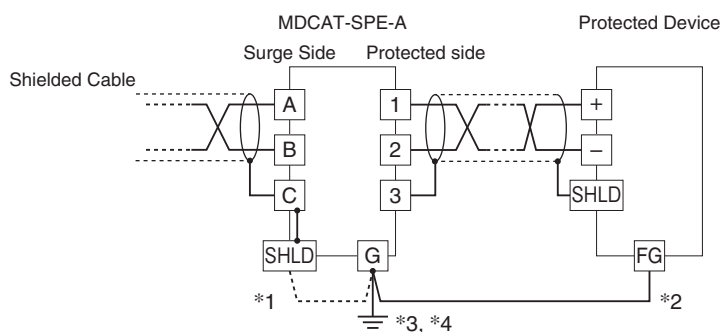
EMS EN 61000-6-2

RoHS Directive

EXTERNAL VIEW



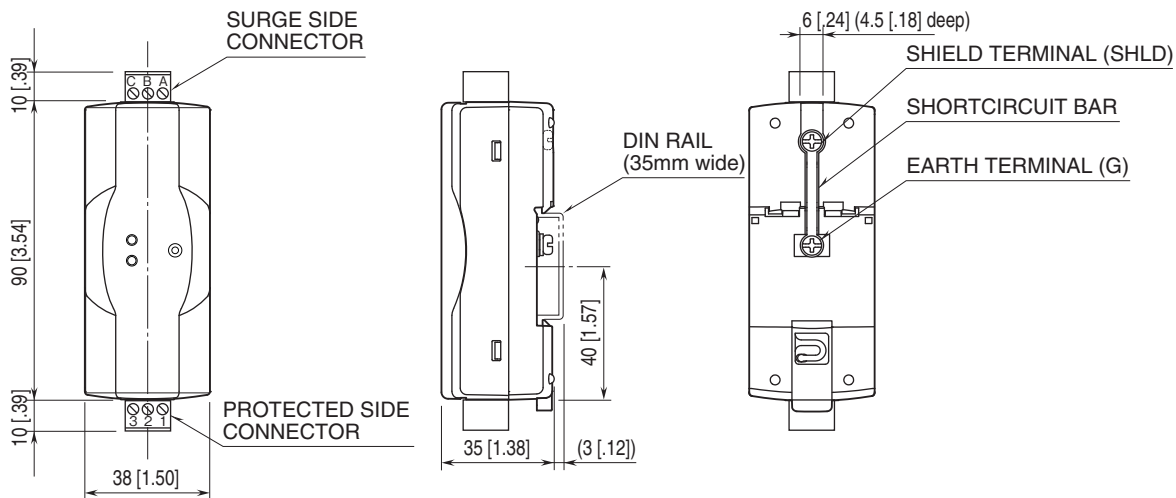
CONNECTION EXAMPLES



- *1. Use shortcircuit bar to ground the shield.
- *2. If the protected device has an FG terminal, connect to the G terminal of the MDCAT-SPE.
- *3. Use a DIN rail made of steel or copper when connecting to ground via the DIN rail.
- *4. Single mount DIN rail for option code 'DR' is made of aluminum.
Connect to ground with ground terminal when this DIN rail is used.

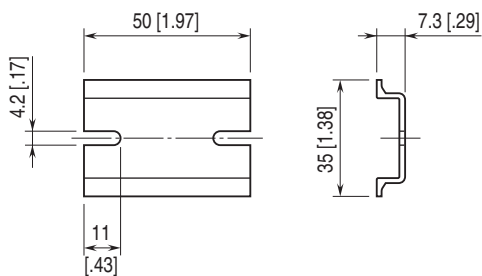
EXTERNAL DIMENSIONS unit: mm [inch]

■ UNIT

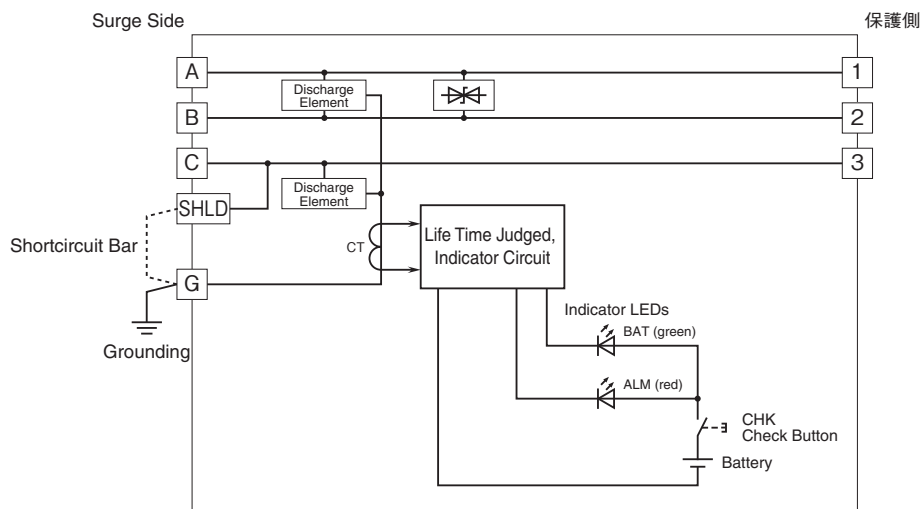


• When mounting, no extra space is needed between units.

■ DIN RAIL



SCHEMATIC CIRCUITRY



Specifications are subject to change without notice.