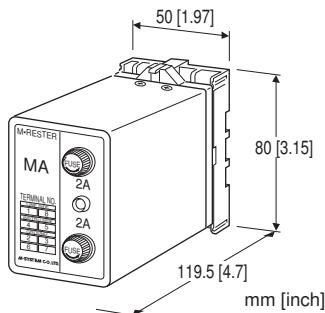


## Lightning Surge Protectors for Electronics Equipment M-RESTER

### LIGHTNING SURGE PROTECTOR FOR POWER SUPPLY (2 A, 200 / 220 / 240 V AC)

#### Functions & Features

- Designed specifically for AC power supplies up to 2 amps
- No degradation of normal (50/60 Hz) line frequency
- Power indicator lamp provided



### MODEL: MA-200[1]

#### ORDERING INFORMATION

- Code number: MA-200[1]
- Specify a code from below for [1].  
(e.g. MA-200/CE)

#### [1] OPTIONS

Standards & Approvals

**blank:** Without CE

**/CE:** CE marking

#### GENERAL SPECIFICATIONS

**Construction:** Plug-in

**Connection:** M3.5 screw terminals (torque 0.8 N·m)

**Screw terminal:** Chromated steel

**Housing material:** Flame-resistant resin (black)

**Monitor lamp:** Red neon lamp turns on when the power is supplied.

#### INSTALLATION

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

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

**Mounting:** Surface or DIN rail

**Weight:** 330 g (0.73 lb)

#### PERFORMANCE

**Discharge voltage (peak voltage)**

Line to line: 410 V min.

Line to ground: 410 V min.

**Maximum surge voltage**

Line to line: 700 V max.

Line to ground: 700 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:** ≤ 0.1 μsec.

**Leakage current**

Line to line: ≤ 1 mA @ 300 V DC

Line to ground: ≤ 1 mA @ 300 V DC

**Max. discharge current (I<sub>max</sub>):** 1000 A (8/ 20 μsec.)

**Max. load current:** 2 A

**Voltage drop:** ≤ 2 V (50/60 Hz)

**Rated line voltage:** 200 V / 220 V / 240 V AC

#### STANDARDS & APPROVALS

**EU conformity:**

EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

Low Voltage Directive

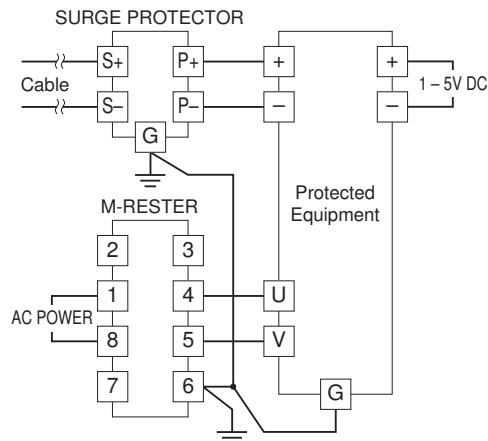
EN 61010-1

Installation Category II

Pollution Degree 2

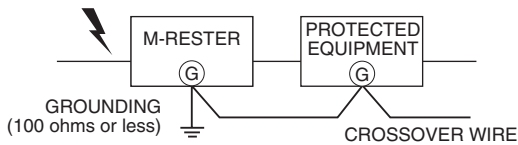
RoHS Directive

## CONNECTION EXAMPLES



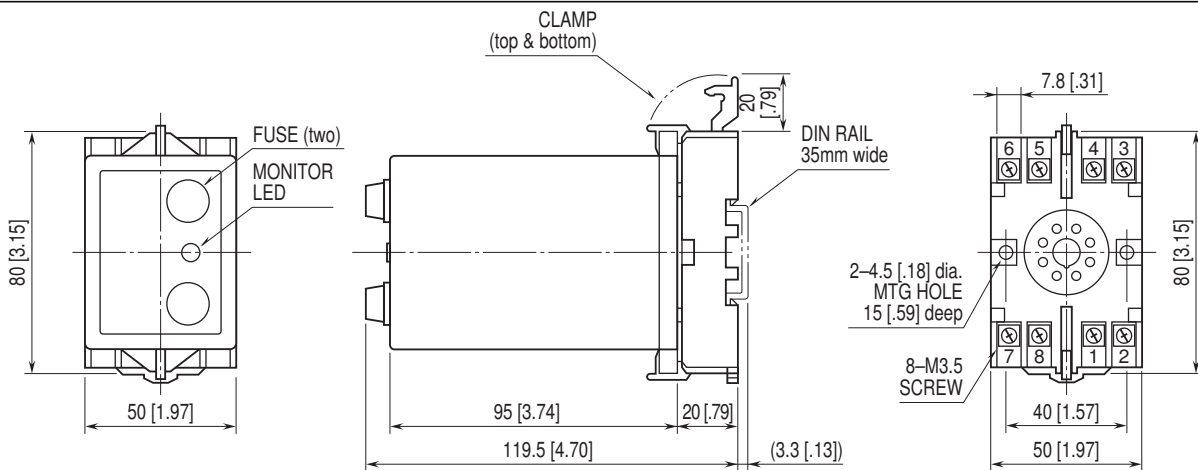
Ground one of the terminals 2, 3, 6 and 7.

## GROUNDING



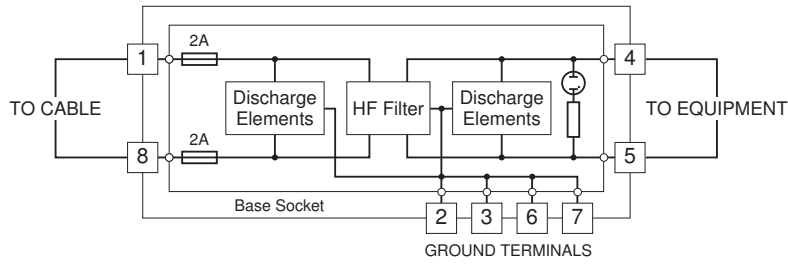
A crossover wire between M-RESTER ground and ground or metallic housing of equipment is required for protection.  
If the protected equipment has no ground terminal, ground the M-RESTER only.

## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENT unit: mm [inch]



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

**SCHEMATIC CIRCUITRY**



Specifications are subject to change without notice.