MODEL: MA-200

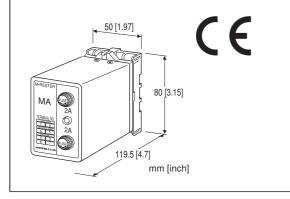
## **Lightning Surge Protectors for Electronics Equipment M-RESTER**

#### 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**:  $\leq 0.1 \, \mu sec.$ 

Leakage current

Line to line: ≤ 1 mA @ 300 V DC Line to ground: ≤ 1 mA @ 300 V DC

Max. discharge current (Imax): 1000 A (8/ 20 μsec.)

Max. load current: 2 A

Voltage drop:  $\leq 2 \text{ V } (50/60 \text{ Hz})$ 

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

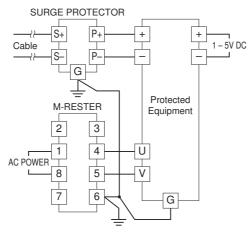
Pollution Degree 2

**RoHS Directive** 



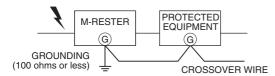
MODEL: MA-200

### **CONNECTION EXAMPLES**



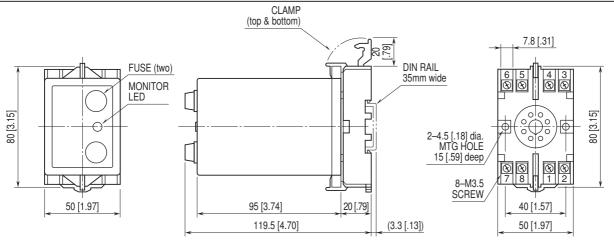
Ground one of the terminals 2, 3, 6 and 7.

### **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]**

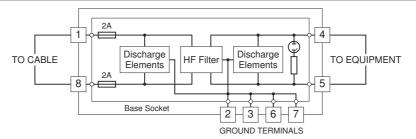


• When mounting, no extra space is needed between units.



MODEL: MA-200

### **SCHEMATIC CIRCUITRY**



Specifications are subject to change without notice.

