

# SF8RM SURGE POWER FILTER

(Single-phase, 43kA aggregate, 3-mode with filtering)



## Technical Specification

The SF8RM is designed to protect equipment against power surges and electrical noise whilst providing a convenient combination of power outlets to suit most applications. The unique mounting system allows mounting in many different modes to suit crowded racks.

## Operational Description

Excess voltage potentials are first diverted to mains neutral and earth using MOVs. Power is then filtered to reduce surge amplitude and high-frequency noise. Finally, the output of the filter is terminated in MOVs to provide further surge reduction and protect against surges caused by reactive loads.

## Functional Description

The SF8RM is a 10A, 8-outlet mains power filter for 19" racks. The unit provides noise filtering and surge protection to ensure a clean power source for critical equipment. The filter circuit provides extensive noise filtering and features surge diversion circuitry on the filter output to reduce surges generated by equipment connected to the unit.

The 8 power sockets are provided at 50mm centres, providing ease of connection for plug-pak style power supplies. The front panel of the SF8RM is recessed by 60mm to provide extra clearance for plugs, plug-paks and cables. A neon indicator lights when power is available and a resettable circuit breaker provides over-current protection. The SF8-R is provided with a 1.8m power cord terminated with an Australian 3-pin plug.

## Installation

The unit is designed for installation into standard 19" racks or may be surface mounted to a wall or trolley. The unit may be installed in a number of different configurations. For horizontal mounting, the unit requires a single 1RU (44mm) rack space for installation. For vertical mounting, the unit requires 3RU (132mm) of rack space.

## Danger

THIS UNIT OPERATES AT HIGH VOLTAGE. DO NOT USE WITHOUT AN EARTH. DO NOT INSERT OBJECTS INTO ANY OPENING. DO NOT OPEN OR MODIFY UNIT. IF FAULTY, RETURN TO SUPPLIER FOR SERVICE. NO USER-SERVICABLE PARTS INSIDE. DO NOT IMMERSE INTO ANY LIQUID OR EXPOSE TO WEATHER OR CONDENSATION. DO NOT USE ENCLOSURE SCREWS AS MOUNTING POINTS.



## Notes

1. Mounting the unit at the top of the rack or directly above a heat-generating device may cause de-rating of the circuit breakers, reducing the trip point to 8A @ 50°C.
2. As the unit does not incorporate a power switch, select a suitable switched power outlet socket close to the equipment to be protected. Ensure that placement of equipment does not obscure the outlet socket /switch.
3. Do not use as a portable device.

## Mounting

1. Select the appropriate mounting position.
2. Carefully remove the two Philips-head screws at each end of the unit.
3. Select the appropriate mounting brackets and fit using the screws from each end.
4. Mount the unit into the rack using appropriate fasteners in all 4 positions, assuring that unit is fixed securely.  
NOTE - Do not use plastic washers under the mounting bolt heads if rack is subject to vibration. Use flat, steel washers instead.
5. Connect to an earthed 10A power outlet.
6. This completes installation; equipment may now be connected.

## Operation

When power is applied, the front panel indicator should light. Power is now available at all 8 outlets. In normal operation, the indicator will be lit. If a fault occurs, the indicator should extinguish.

If the indicator doesn't light with power applied, try resetting the circuit breaker. If this restores operation, it indicates that the unit has been overloaded or has faulty equipment connected to it. If the circuit breaker trips again, disconnect all loads and reconnect one-by-one to establish the cause. If the circuit breaker trips with no load connected, the unit must be returned to the supplier for service.

## Physical And Electrical Specifications

Manufacturers name and model	SF8RM
Number of ports	8 Port
Method of mounting	Fixed.
Input voltage – Uc	200-250VAC 1Ø
Current rating - continuous	10A
Configuration	Single-phase, L/N/E
Surge Protection Category	AS/NZS1768 Category B
Primary Protection Mode	L-N, L-E, and N-E
Secondary Protection Mode	L-N, L-E, and N-E
Surge rating (8/20µS L-N)	22.5KA
Let-through voltage	<700V@ 3KA
Overvoltage withstand	300VRMS
Filter type	Low Q/low C filter providing differential and common-mode filtering.
Filter attenuation	60dB @ 1MHz
Voltage drop	Less than 3V at rated load.
Connections	Inlet - Approved power cord with Australian 10A plug, Outlets – Approved Australian 3 pin 10A (x8)
Location category	Indoor
Enclosure	Steel, powder coated.
Installation instructions	Supplied with unit.
Dimensions	44 x 441 x 120 (H x W x D) without brackets
Weight	1.2kg
Environment	-10 to 70°C, 10 to 95%RH (non-condensing)
Warranty	5 years, workmanship and materials

NOTE:- Installation must be carried out by suitably qualified personnel. Please refer to installation instructions for details.

## Warranty

Eaton Power Quality warrants the SF8RM against faulty parts and workmanship for a period of 5 years from the date of purchase. For further information, refer to EATON Powerware warranty statement.

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