MicroMate®

The Surge Protection Device (SPD) for 1-phase power lines with lightning strike counter is designed, fabricated and tested according to the stringent international standards.

The product, in parallel with the protected loads, can effectively suppress and discharge any over-voltage or over-current caused by inrush spikes or surges by maintaining the potential difference between the power lines with respective to earth. It automatically returns to its normal state after a lightning strike with good or bad status indicator. It is considered open-circuit with respective to earth under working condition.

- Provides lightning surge protection for 1-phase power lines against transient voltages at the intersection of LPZ2 and LPZ3 as defined in GB50343 lightning protection zones.
- Suitable for AC 240V power system distribution.
- Extremely low residual voltage design, fast respond and large current capability.
- With thermal breaker, built-in over-current fused protection to avoid possible fire hazard caused by lightning strikes.
- Core components are selected based on high reliability, multi-level protection and depressed residual performance.
- Suitable for telecommunication rooms, TV or radio broadcasting, automation, server rooms and all electrical equipment in which surge protection for power lines is essential.

Technical Specifications

MODEL	SPC-240-20KA/2	SPC-240-40KA/2	SPC-240-60KA/2	SPC-240-80KA/2	SPC-240-100KA/2
Protection Class	Type D	Type C		Type B	
Operating Voltage (Un)	240V				
Max. Continuous Operating Voltage (Uc)	295V				
Nominal Discharge Current (8/20μs) (In)	10KA	20KA	30KA	40KA	50KA
Max. Discharge Current (8/20μs) (Imax.)	20KA	40KA	60KA	80KA	100KA
Voltage Protection Level (Up)	≤ 1.5KV	≤ 1.8KV	≤ 2.0KV	≤ 2.5KV	≤ 2.8KV
Response Time	< 25ns				
Leakage Current	≤ 20uA				
Protection Mode	L1-, L2-, and L3-PE; N-PE				
Status Indicator	Normal: Green; Deterioration: Red				
Working Environment	Temperature 0°C ~ 70°C; Relative Humidity 5%~90%				
Material of Shell	Metal Box				
Dimension (WxHxD)	260 x 160 x 96mm				
Weight	1.65KG			1.8KG	

Note: Due to the policy of continued product improvement, specifications are subject to change without notice.

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Product Installation

1. The unit is suitable for most AC 240V 1-phase power distribution system. It is installed in parallel with the incoming power lines in the Distribution Board (DB) by using Kevin electrical connection. Ensure that the incoming power source is isolated before doing any electrical connections. Working on live electrical wires pose dead hazard and is therefore strictly prohibited. The unit can be wall-mounted.

2. With reference to the Installation Diagram, connect phases Live (L), Neutral (N) and Earth (PE) in accordance with the labeling on the terminal blocks. Ensure that the connections are correct. Turn on the incoming power source and check if the status LED showing Green color, indicating good working state.

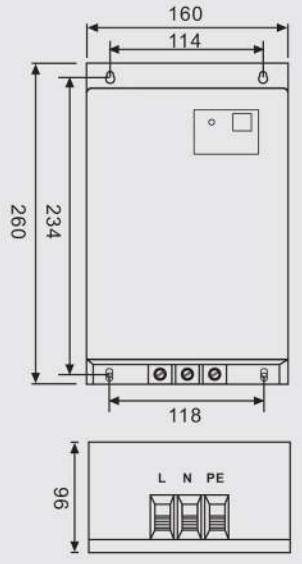
3. Regular checking the working status of the unit is strongly recommended. The status indicator shows Green when the unit is on good working state, while Red means the unit is on deterioration state and needs to be repaired or replaced.

4. The unit is equipped with a lightning strike counter. Press "Display' button for display of the counter if necessary.

5. All electrical wires should be tightened with correct torque.

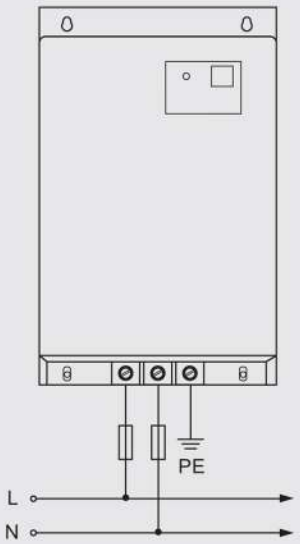
6. The grounding wire should be as short as possible and the grounding resistance should be less than 4 ohm in order to meet the lightning protection requirement.

Dimensions



Unit: mm

Installation Diagram



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