



Description

SETsafe | SETfuse's surge protective device (SPD) SD10C120/240 series is specifically designed for split phase system. The products facilitate surge immunity compliant with IEEE C62.41.2 Location Category C high exposure and protect the facility from lightning surge damage. With built-in thermal protection, SD10C120/240 series could fail safely when suffering sustained overvoltage or its internal varistor degradation.


Features

- Sealed Enclosure, IP66
- Thermal Protection and Failure Indication
- UL1449 Type 1 Listed
- Suit for Split Phase System

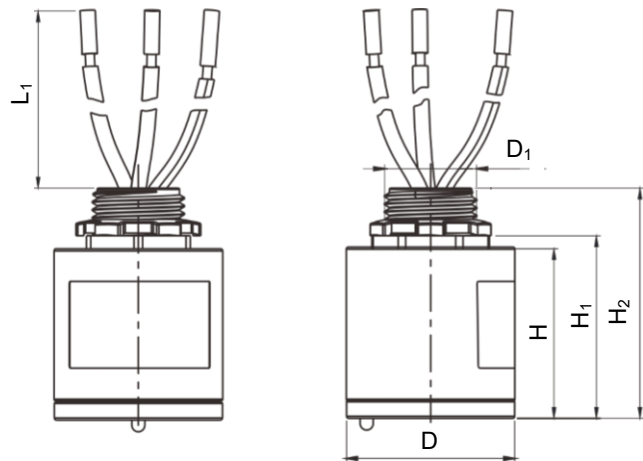
Applications

- Power System of Caravan
- Distribution Panel
- High Voltage Air Conditioning (HVAC)

Agency Approvals

Agency	Standards	No.
	UL1449	on request
Environment	RoHS & REACH	Compliant

Dimensions (mm)

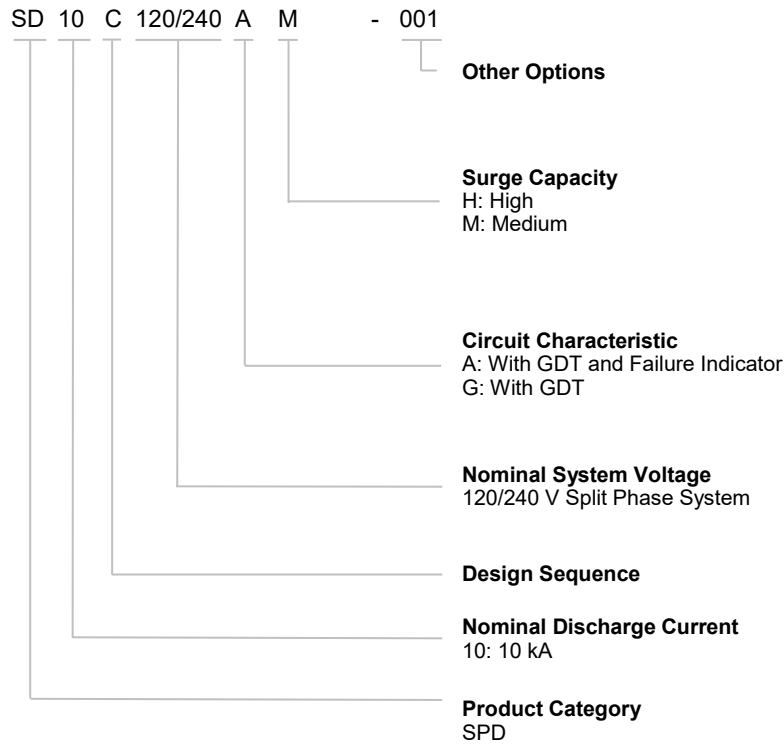


L ₁	H	H ₁	H ₂
150.0±5.0	39.0±1.0	42.0±1.0	53.0±1.0
D	D ₁		
Φ39.0±1.0	1/2-14NPSL		

Note:

The wire length "L₁" can be customized as required.

Part Numbering System



Schematics

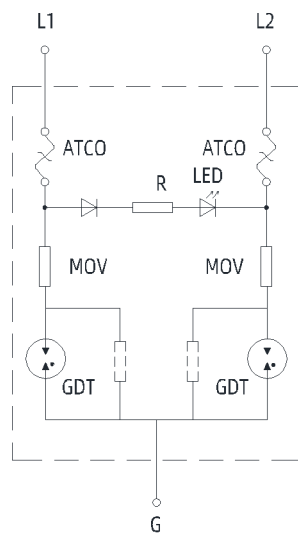


FIGURE SD10C120/240-1

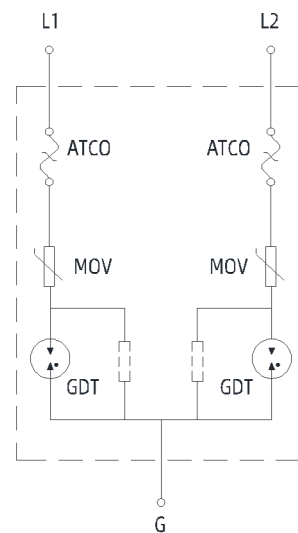



FIGURE SD10C120/240-2

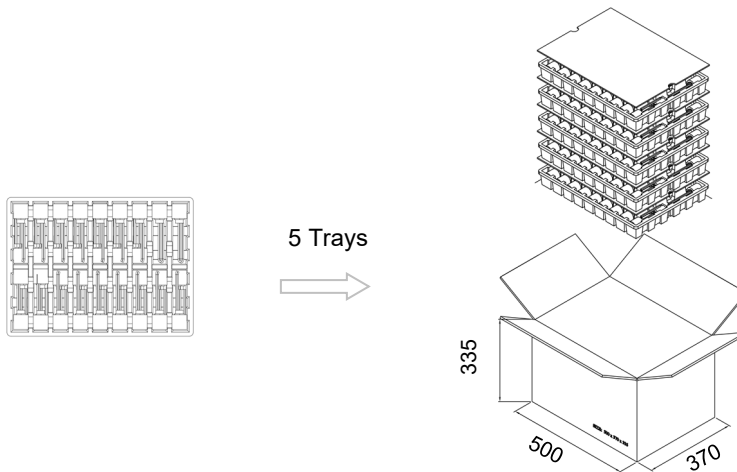
Glossary

Item	Description
U_p	<p>Voltage Protection Level Maximum voltage to be expected at the SPD terminals due to an impulse stress with defined voltage steepness and an impulse stress with a discharge current with given amplitude and wave shape. — (IEC 61643-11)</p>
8/20 μ s	<p>8/20 Current Impulse Current impulse with a nominal virtual front time of 8 μs and a nominal time to half-value of 20 μs. — (IEC 61643-11)</p>
1.2/50 μ s	<p>1.2/50 Voltage Impulse Voltage impulse with a nominal virtual front time of 1.2 μs and a nominal time to half-value of 50 μs. — (IEC 61643-11)</p>
U_c	<p>Maximum Continuous Operating Voltage Maximum r.m.s. voltage, which may be continuously applied to the SPD's mode of protection. — (IEC 61643-11)</p>
I_n	<p>Nominal Discharge Current Crest value of the current through the SPD having a current waveshape of 8/20 μs. — (IEC 61643-11)</p>
I_{max}	<p>Maximum Discharge Current Crest value of a current through the SPD having an 8/20 μs waveshape and magnitude according to the manufacturers specification. I_{max} is equal to or greater than I_n. — (IEC 61643-11)</p>
Modes of Protection	<p>Modes of Protection An intended current path, between terminals that contains protective components, e.g. line-to-line, line-to-earth, line-to-neutral, neutral-to-earth. — (IEC 61643-11)</p>
IP	<p>Degrees of Protection Provided by Enclosure (IP Code) Classification preceded by the symbol IP indicating the extent of protection provided by an enclosure against access to hazardous parts, against ingress of solid foreign objects and possibly harmful ingress of water.</p>
TCO	<p>Thermal-Link A non-resettable device incorporating a THERMAL ELEMENT which will open a circuit once only when exposed for a sufficient length of time to a temperature in excess of that for which it has been designed.</p>
ATCO	<p>Alloy Thermal-Link Alloy Type Thermal-Link, Alloy is the thermal element.</p>

Specifications

Model	Mode	Max. Continuous Operating Voltage	Nominal Discharge Current (8/20 μs)	Max. Discharge Current (8/20 μs)	Voltage Protection Rating	Short Circuit Current Rating	Schematic	Agency Approvals
		MCOV	I_n	I_{max}	VPR	SCCR		
		(VAC)	(kA)	(kA)	(V)	(kA)	FIGURE	UL, CUL
SD10C120/240AH	L-G	150	10	25	1200	200	SD10C120/240-1	●
	L-L	300			2000			
SD10C120/240AM	L-G	150	10	15	1200	200	SD10C120/240-1	●
	L-L	300			2000			
SD10C120/240GH	L-G	150	10	25	1200	200	SD10C120/240-2	●
	L-L	300			2000			
SD10C120/240GM	L-G	150	10	15	1200	200	SD10C120/240-2	●
	L-L	300			2000			

Packaging Information



- Unit: mm
- Please contact us if you have special packaging requirements.

Item	Tray	Carton
Dimensions (mm)	470×350×57	500×370×335
Quantity (PCS)	32	160
Gross Weight (kg)		(25.0 to 26.0)±10%

Note:

The gross weight of each carton will be different because of the difference of product model, It depends on the voltage of the product and the number of wires. The gross weight is for reference only, please contact us for more details.



ATTENTION

Usage

1. Frequency range is from 47 Hz to 63 Hz.
2. The voltage applied continuously to the SPD must not exceed its maximum continuous operating voltage U_c .
3. When atmosphere press is from 80 kPa to 106 kPa, the related altitude shall be from 2000 m to - 500 m.
4. Do not touch the product body or wires directly when power is on, to avoid electric shock.

Replacement

As SPD is a non-repairable product, for safety sake, please use the same type of SPD for replacement.

Storage

Do not store SPD at high temperature, high humidity or corrosive gas environment, to avoid oxidation of the wires. Use them up within 1 year after receiving the goods.

Installation

1. Installation and startup may only be carried out by qualified personnel. The relevant country-specific regulations must be observed.
2. Check the device for external damage before installation. If the device is defective, it must not be used.
3. Pay attention to risk of electric shock. Please cutoff all electrical power before installation or service.
4. Lay the output cables to the surge protective devices (SPDs) as short as possible, without loops.
5. Please install proper backup protection devices in front of SPD.
6. Do not apply mechanical stress to the SPD body during or after the installation.

Maintenance

1. Check SPD status according to instructions before and after the thunderstorm season each year.
2. If the indicator of "failure state" appears, the SPD is damaged. Replace the SPD with same type.
3. Ensure electrical connections and mountings are correct before energizing the circuit.
4. SPD's quality is well controlled and strictly inspected before delivery. If non-functional ones are found during operation, please contact us early enough.