

Intelligent Surge Protective Device (iSPD)

iSPD/C320-4P-SCB

PROSURGE iSPD/C320-4P-SCB is an intelligent and auto self-protected SPD for three phase power systems. It's an innovative solution for most commercial and industrial environments with critical operations, to make your surge protection smart and intelligent. It is composed of two essential parts: surge protective device (SPD), and surge circuit breaker (SCB).



PROSURGE high performance SPDs (Class II per IEC 61643-11) of iSPD/C320-4P-SCB can protect sensitive equipment from the harmful transient voltage surges resulting from:

- Direct and indirect lightning strikes
- Power company load switching
- Upstream load switching at other facilities

PROSURGE SCB provides backup over-current protection for the SPD, which is fully coordinated with the surge protective device. Comparing to normal backup circuit breaker/fuse, the integrated PROSURGE SCB achieve a better balance between surge withstand performance (no tripping while expected surge occurs) and sharp reaction against short circuit and abnormal leakage current.

■ Typical Applications:

- Commercial
- Industrial
- Communications
- Renewable energy
- Critical power (hospitals, data centers, etc)

■ Features:

- High performance KEMA certified SPD inbuilt with I_{max} 40kA 8/20 and I_n 20kA 8/20 for Class II application, comply with IEC/EN 61643-1/11 standards;
- Pluggable module of SPD for easy replacement
- Self protected by PROSURGE innovated Surge circuit breaker technology, SPD will never stop service in the life time and no fire risk while in the end of life
- IP20 enclosure to resist dirt, dust and water

Model: iSPD/C320-4P-SCB

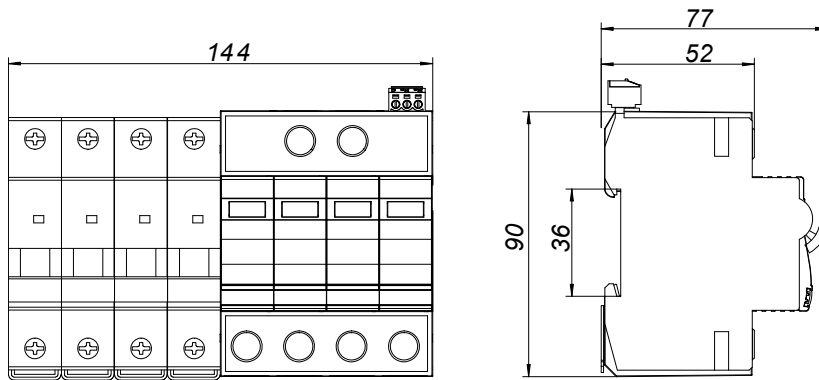
This model is composed of two essential parts: surge protective device (SPD) and surge circuit breaker (SCB). This product is pre-wired and easy to be installed as a completed unit, which is an upgraded design to replace the conventional installation assembly of the SPD and backup over-current protection devices.

PROSURGE SCB provides excellent backup over-current protection and fully coordinated with the SPD. Comparing to normal backup circuit breaker/fuse, the integrated PROSURGE SCB achieves a better balance between surge withstand performance (no tripping while expected surge occurs) and sharp reaction against short circuit and abnormal leakage current.

■ Technical Specification

		iSPD/C320-4P-SCB
SPD Specification		
SPD Category IEC/EN		Class II / T2
Power System		TT/TN 3ph
System Voltage	Un	220/380V ~ 240/415V
Max. Continuous Operating Voltage AC	Uc	320VAC
Nominal Discharge Current (8/20 μs)	In	20kA
Max. Discharge Current (8/20 μs)	Imax	40kA
Voltage Protection Level	Up	1.5kV
Residual Current	Ipe	<0.1mA
TOV- Withstand Mode	U _{toV}	L-N:337V/5s; N-PE:1200V/200ms
Short Circuit Current Rating	I _{sc}	25kArms
Response Time	T _a	≤25 ns
Thermal Disconnecter / Indication		Internal red - failure
SCB Specification		
Operating Short-Circuit Breaking Capacity	I _{cs}	≥10kA
Trip Current	I _t	3 ± 1A
Trip Time	T _t	≤40ms
Surge Withstand Capability	I _w	Match with SPD Max. Surge current
General Parameters		
Connection		Connection in parallel
Connecting Cable		Power line:10-35mm ² ; Remote signal:1.5mm ²
Operation Temperature Range		-40℃~+70℃
Humidity		30%~90%
Degree Of Protection		IP20
Housing Material		UL94V0
Mounting		Wall mounting
Dimension (mm)		Refer to dimension drawing as below

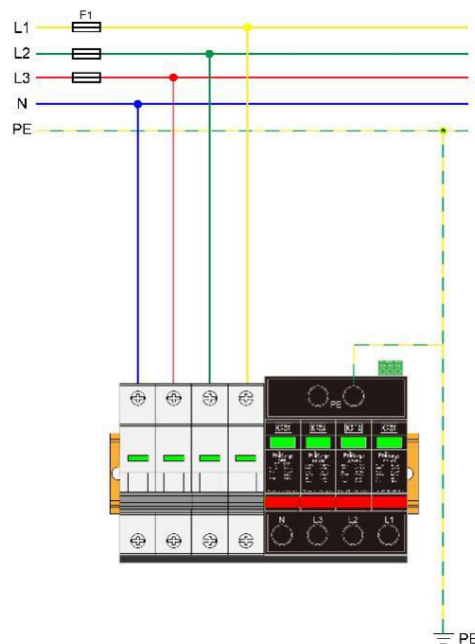
■ Dimensions (unit: mm)



Tolerance without ± 2 mm

iSPD-SCB T2/Class II for three phase (TT/TN)

■ Typical Installation Diagram



Three phase wiring (TT/TN)