TPK-SCB

Backup Protection Device for SPD

This device addresses fire hazards caused by SPD degradation or grid faults, and prevents SPD failure due to false tripping during lightning events. It ensures the SPD does not catch fire and remains continuously effective. Compared with traditional fuses or breakers used as external disconnectors, it eliminates protection blind spots, making it ideal for both voltage-switch and voltage-limiting type SPDs in low-voltage systems.

Product Features

1.Parametric trip mechanism for selective disconnection based on current level.
2.Low residual voltage under surge current, comparable to fuse performance.
3.High-energy contacts for long operational life.
4.Compact MCB design for easy SPD testing.
5.Full model range compatible with Type 1, 2, and 3 SPDs.
6.35mm DIN rail mounting, globally compatible.

Applications

1.Selective disconnection of power-frequency and lightning current prevents SPD short circuits and fire during temporary overvoltage.
2.Protects against SPD degradation that lowers triggering voltage and increases leakage current.
3.No false tripping under lightning current ensures uninterrupted SPD protection.

Applicable Scenarios

Suitable for all SPD-installed environments, including:
civil and industrial buildings, electrical systems, telecom, transportation, petrochemical, and other power supply applications.

TRIL PEAK Surge protection devices

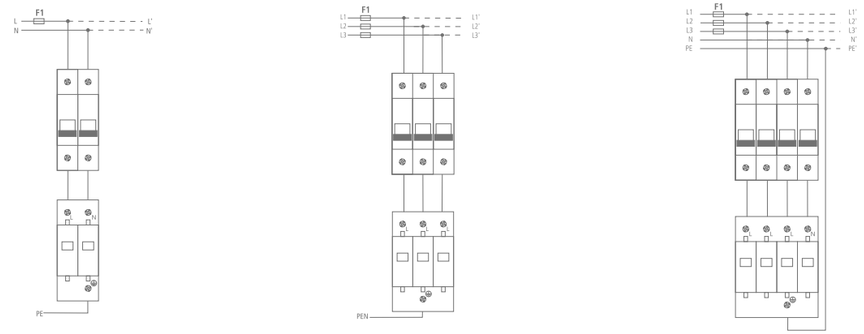
Models

Model	Protection level	Iimp/In	Imax	Width
TPK-SCB-100	T1/T2	≤25kA(10/350)	≤100kA(8/20)	18mm
TPK-SCB-80	T2	≤40kA(8/20)	≤80kA(8/20)	18mm
TPK-SCB-60	T2	≤30kA(8/20)	≤60kA(8/20)	18mm
TPK-SCB-40	T2/T3	≤20kA(8/20)	≤40kA(8/20)	18mm

Data sheet

Specification	T1/T2	T2	T2	T2/T3
Model	TPK-SCB-100	TPK-SCB-80	TPK-SCB-60	TPK-SCB-40
Rated Short-Circuit Breaking Capacity	100kA	50kA	35kA	20kA
Rated Operational Voltage (Ue)	230V/400VAC	230V/400VAC	230V/400VAC	230V/400VAC
Rated Insulation Voltage (Ui)	400VAC	400VAC	400VAC	400VAC
Max Surge Withstand Current (Iemax)	100kA(8/20)	80kA(8/20)	60kA(8/20)	40kA(8/20)
Nominal Surge Current (In)	25kA(10/350)	≤40kA(8/20)	≤30kA(8/20)	≤20kA(8/20)
Power Frequency Tripping Current (Ii)	3±1A	3±1A	3±1A	3±1A
Mechanical Endurance	1000次	1000次	1000次	1000次
Max Terminal Capacity	25mm2	25mm2	25mm2	25mm2
Enclosure Protection Rating (IP)	Ip20	Ip20	Ip20	Ip20
Operating Temperature	-25℃~60℃	-25℃~60℃	-25℃~60℃	-25℃~60℃
Operating Humidity (at room temp)	20%~90%RH	20%~90%RH	20%~90%RH	20%~90%RH
Mounting	EN60715(35MM)	EN60715(35MM)	EN60715(35MM)	EN60715(35MM)

Connection



Dimensions