



TPK-12.5-xxx/3+1/(S) Power supply system: TT

Power Surge Protector Type 1+2 / Class I+II

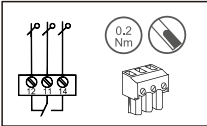
Plug-in format

TPK-12.5-xxx is the range of devices for discharging induced transient overvoltages (Type 1+2 / Class I+II), in accordance with EN/IEC 61643-11. DIN rail plug-in format. Ability to discharge lightning currents (10/350µs) and induced voltage surges (8/20 µs).

- Suitable for the second stage of protection in supply distribution panels.
- Discharge capacity with an 8/20 µs waveform. I<sub>max</sub>: 60 kA.
- Exclusive devices for TT earthing systems.
- Exclusive devices which are compatible with Power Line Communication networks.
- Biconnect - two types of terminal: for rigid or flexible cable and for fork type comb busbar.
- Available with optional remote signalling.

**Application** AC/DC distribution  
Power supplies  
Industrial automation  
Telecommunications  
Motor controls systems  
PLC applications  
Power transfer equipment  
HVAC applications  
AC drives  
UPS systems  
Security systems  
IT / Data centers  
Medical equipment

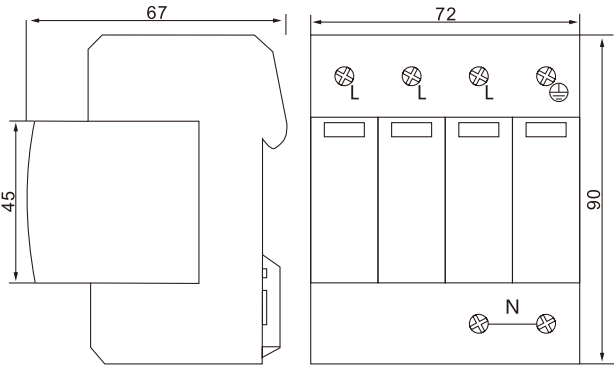
**Features/Benefits**  
Easy installation or retrofit  
Din-rail mountable  
Fail-safe /self-protected design  
Remote indicator (optional) with 3 pin NO/NC contact  
IP20 finger-safe design  
Visual indicator  
Small foot print



Data sheet

Type	TPK-12.5-xxx/3+1/(S)
Technical Data	
Power supply system	TT
Maximum continuous voltage (U <sub>c</sub> )(L-N)	275 / 320 / 385 / 420V
Maximum continuous voltage (U <sub>c</sub> ) (N-PE)	255V
SPD to EN 61643-11, SPD to IEC 61643-11	Type 1+2 , class I+II
Lightning impulse current (10/350µs) (I <sub>imp</sub> )(L-N)	12.5kA
Lightning impulse current (10/350µs) (I <sub>imp</sub> )(N-PE)	50kA
Nominal discharge current (8/20µs) (I <sub>n</sub> )(L-N,N-PE)	30kA
Maximum discharge current (8/20µs) (I <sub>max</sub> )(L-N,N-PE)	60kA
Voltage protection level (U <sub>p</sub> ) (L-N)	≤ 1.4 / 1.6 / 1.8 / 2.0kV
Voltage protection level (U <sub>p</sub> ) (N-PE)	≤ 1.5kV
Response time (t <sub>A</sub> ) (L-N)	< 25ns
Response time (t <sub>A</sub> ) (N-PE)	< 100ns
Operating State/Fault Indication	Green (good) / Red (replace)
Degree of protection	IP 20
Insulating material / flammability class	PA66,UL94 V-0
Temperature range	-40° C~+80° C
Altitude	13123 ft [4000m]
Conductor Cross Section (max)	35mm <sup>2</sup> (Solid) / 25mm <sup>2</sup> (Flexible)
Format	Pluggable
For mounting on	DIN rail 35mm
Place of installation	indoor installation
Remote Contacts (RC)	Optional

Dimensions



Internal configuration

