

TPK-7-PVxxx/2/(S)

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

For photovoltaic applications (PV SPD)

Plug-in format

TPK-7-PVxxx series of DC Surge Protective Device (SPD) for use in Photovoltaic applications. surge protective devices provide protection from lightning current and overvoltage surges in system from 48Vdc to 1000Vdc.

Providing power with photovoltaic solar panels is tremendously interesting in the context of renewable energy sources, as regards economical photovoltaic systems connected to the public electricity network. Because of their exposition, frequently in isolated sites and of the extended surface of photovoltaic systems (PV), lightning strikes are a major components in the risk to be assumed, both for the direct effect of lightning on the structures, and of the surge overvoltages on the installation. Cells are generally associated with inverters. We have developed a specific Din Rail product to protect DC side of cells and inverters against surge in power plant or residential application.

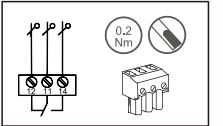
With the MOV (Metal Oxide Varistor), the overvoltage will be limited at the value of the voltage protection level of the TPK-7-PVxxx DC surge protector. Our surge protector, as recommended in standards and guides, insure all protections (between + and-, + and Ground, - and Ground). On each surge arrester, as option, an available auxiliary contact will inform the end life status to ensure a maximum efficiency.

Application

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

Features/Benefits

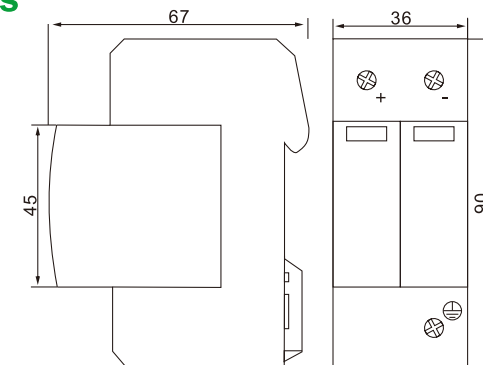
- Easy installation or retrofit
- Din-rail mountable
- Fail-safe /self-protected design
- Remote indicator (optional) with 3 pin NO/NC contact
- IP20 finger-safe design
- Visual indicator
- Small foot print



Data sheet

Type	TPK-7-PVxxx/2/(S)
Technical Data	
Network configuration	Photovoltaic (PV)
Maximum continuous voltage (Uc)	500 / 600 / 800 / 1000Vdc
Type of SPD	Type 1+2 , class I+II
Lightning impulse current (10/350µs) (Iimp)	7kA
Nominal discharge current (8/20µs) (In)	25kA
Maximum discharge current (8/20µs) (Imax)	50kA
Voltage protection level (Up)	≤ 1.8 / 2.5 / 3.2 / 3.5kV
Response time (tA)	< 25ns
Thermal Protection	YES
Operating State/Fault Indication	Green (good) / Red (replace)
Degree of protection	IP 20
Insulating material / flammability class	PA66,UL94 V-0
Protective Elements	High Energy MOV
Temperature range	-40° C~+80° C
Altitude	13123 ft [4000m]
Conductor Cross Section (max)	35mm2 (Solid) / 25mm2 (Flexible)
Remote Contacts (RC)	Optional
Format	Pluggable
Internal configuration	(U)
For mounting on	DIN rail 35mm
Place of installation	indoor installation

Dimensions



Internal configuration

