

SURGE PROTECTION MODULES FOR LED-LIGHTING



The new overvoltage protection modules of **PBSP series** of the manufacturer ProTek Devices are protection module, which are designed to protect against lightning surge currents up to 10000 ampere (PBSP-XXX-10K series) or up to 20000 ampere (PBSP-XXX-20K series). The under UL1449 type 4 recognized modules meet the ANSI

Standard C136.2 / IEEE C62.41.2 Location Category C High Exposure and are IEC61643-11 Class II / EN61643-11 type 2 compliant. In addition to the compact form factor with mounting tabs, the modules are waterproof and dustproof according IP66. The operating temperature is in a range of -40°C to +85°C.

Pulse rating @ 8/20 μ s:

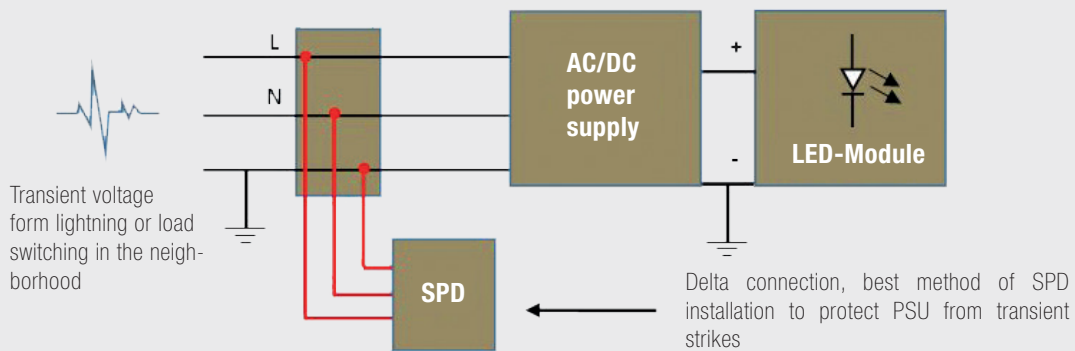
PBSP-10K series:

- 1×10000 A
- 2×6500 A
- 10×3000 A
- 1000×1500 A

PBSP-20K series:

- 1×20000 A
- 2×13000 A
- 10×6000 A
- 1000×3000 A

APPLICATION EXAMPLE/DESIGN SCHEMATIC CIRCUIT



ELECTRICAL CHARACTERISTICS PER LINE

PART NUMBER	RATED STAND-OFF VOLTAGE V_{WM} [V _{AC}]	ENERGY [J] @ 2ms 1× PULSE	MAX. PEAK PULSE CURRENT I_{PP} [A] @ 8/20 μ s	MAX. CLAMPING VOLTAGE [V] @ 8/20 μ s, $I_p=100A$	TYP. CAPACITANCE [pF] @ 0V, 1MHz
PBSP-120-10K	120	275	10000	660	1500
PBSP-220-10K	220	440	10000	1350	750
PBSP-240-10K	240	460	10000	1355	740
PBSP-277-10K	277	500	10000	1400	720
PBSP-380-10K	380	565	10000	1680	600
PBSP-120-20K	120	550	20000	650	3000
PBSP-220-20K	220	880	20000	1350	1500
PBSP-240-20K	240	920	20000	1355	1480
PBSP-277-20K	277	1100	20000	1500	1400