

Surge-Trap® Pluggable STPT2 Series - 40kA PV

SURGE PROTECTION FOR SOLAR-PHOTOVOLTAIC SYSTEMS

DC POWER LINE PROTECTION



STP T2 40 PV is the series of devices that provide advanced overvoltage protection to photovoltaic systems by utilizing Mersen's optimized dynamic thermal disconnection system, which does not require additional overcurrent protection (back-up fuse) due to its high short-circuit withstand rating. These surge protective devices are suitable for all PV applications: large-scale, rooftop and self-consumption (off-grid) DC installations.

TECHNICAL DATA OVERVIEW

Class	Type 2 EN 50539-11; Type 2 UL 1449
Voltage Range DC	660 ... 1500 VDC
I_{scpv}	10000 A
SCCR	50 kA, 65 kA, 100 kA
Body Material	PA6 CT1; V-0
System type	Y PV, U PV
Number of Poles	3, 2
Format	Pluggable
Temperature range	-40 ... 85 ° C
Rigid wire Section	6 ... 35 mm ²
Response Time	25 ns

FEATURES & BENEFITS

- Maximum discharge current (8/20µs): 40 kA
- Nominal discharge current (8/20µs): 10 kA, 20 kA
- U_{cpv} : 65, 80, 660, 1060 Vdc and 1500 Vdc
- I_{scpv} : 10 kA (EN 50539-11), no back-up fuse required
- SCCR: 50 kA, 65 kA, 100 kA (UL 1449 3rd Ed)
- DIN-rail mountable, plug-in format
- Visual and remote end of life indicators
- Reversible chassis to allow cable entry from above or below
- Mechanically coded cartridges to avoid cartridge replacement errors

APPLICATIONS

- Photovoltaic & wind

STANDARDS

- EN 50539-11
- UL 1449 3rd Ed.
- UTE C 61-740-51



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PRODUCT RANGE



STPT2-40K1500V-YPVM

Large-scale and rooftop PV

Catalog number	Reference number	Number of poles/phases	Ucpv	Iscpv	I _{max} (8/20)	I _n (8/20)	U _p at I _n	Remote	Cartridge No L-N
Y PV									
STPT2-40K1000V-YPV	83020140	3	1060 VDC	10000 A	40 kA	20 kA	≤ 4 kV	No	SP2-40K1000V-PV
STPT2-40K1000V-YPVM	83020141	3	1060 VDC	10000 A	40 kA	20 kA	≤ 4 kV	Yes	SP2-40K1000V-PV
STPT2-40K1500V-YPV	83020158	3	1500 VDC	10000 A	40 kA	15 kA	≤ 5 kV	No	SP2-40K1500V-PV
STPT2-40K1500V-YPVM	83020159	3	1500 VDC	10000 A	40 kA	15 kA	≤ 5 kV	Yes	SP2-40K1500V-PV
STPT2-40K600V-YPV	83020138	3	660 VDC	10000 A	40 kA	20 kA	≤ 2.6 kV	No	SP2-40K600V-PV
STPT2-40K600V-YPVM	83020139	3	660 VDC	10000 A	40 kA	20 kA	≤ 2.6 kV	Yes	SP2-40K600V-PV



SP2-40K1000V-PV

Replacement cartridges

Catalog number	Reference number	Ucpv	Iscpv	I _{max} (8/20)	I _n (8/20)	U _p at I _n
PV						
SP2-40K1000V-PV	83020006	530 VDC	10000 A	40 kA	20 kA	≤ 2 kV
SP2-40K1500V-PV	83020010	750 VDC	10000 A	40 kA	15 kA	≤ 2.5 kV
SP2-40K600V-PV	83020005	330 VDC	10000 A	40 kA	20 kA	≤ 1.3 kV
SP2-40K60V	83020008	65 VDC	1000 A	40 kA	20 kA	≤ 0.35 kV
SP2-40K75V	83020009	80 VDC	1000 A	40 kA	20 kA	≤ 0.4 kV



STPT2-40K75V-2PM

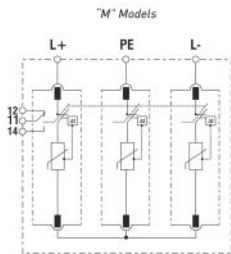
Self-consumption PV

Catalog number	Reference number	Number of poles/phases	Ucpv	Iscpv	I _{max} (8/20)	I _n (8/20)	U _p at I _n	Remote	Cartridge No L-N
U PV									
STPT2-40K60V-2P	83020128	2	65 VDC	1000 A	40 kA	20 kA	≤ 0.7 kV	No	SP2-40K60V
STPT2-40K60V-2PM	83020129	2	65 VDC	1000 A	40 kA	20 kA	≤ 0.7 kV	Yes	SP2-40K60V
STPT2-40K75V-2P	83020130	2	80 VDC	1000 A	40 kA	20 kA	≤ 0.8 kV	No	SP2-40K75V
STPT2-40K75V-2PM	83020131	2	80 VDC	1000 A	40 kA	20 kA	≤ 0.8 kV	Yes	SP2-40K75V

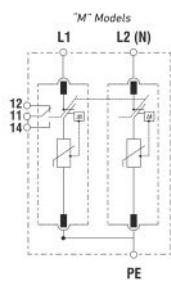
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ELECTRICAL DIAGRAMS

Y PV

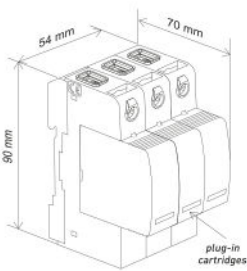


U PV



DIMENSIONS

3 Poles



2 Poles

