Surge-Trap® K - K1 PV

Photovoltaic & Energy Storage SPDs

DIN RAIL - IEC TYPE 1+2 PV



General Data

Internal configuration	+, -, PE
No. Poles	3-Pole
No. DIN rail modules	3
Network configuration	YPV
IEC SPD Type	Class I+II
EN SPD Type	PV Type 1+2
UL SPD Type	Type 1 Component Assembly
Format	Pluggable
Protection Modes	L+/PE, L-/PE, L+/L-
Product standards	IEC/EN 61643-31; UL 1449 5th Edition

PART NUMBERS

XXXX	1000	1500
K1-PV**XXXX**	44120312	44120316
K1-PV**XXXX**-M (with Microswitch)	44120313	44120317

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

K1-PV**XXXX**, K1-PV**XXXX**-M (with Microswitch)	1000	1500
Maximum continuous operating voltage (DC) - Ucpv [V]	1170	1500
Nominal discharge current (8/20)- In [kA]	20	
Max Discharge Current (8/20) - Imax [kA]	50	
Lightning impulse current (10/350) - Iimp [kA]	6.25	5
Voltage protection level at In - Up [kV]	≤4	≤5
Voltage protection level at In - Up (L-PE) [kV]	≤4	≤5
Short Circuit Withstand- Iscpv [kA]	20	
Total discharge current (8/20) - Itotal [kA]	50	
Total discharge current (10/350) - Itotal	12.5	10
Response time - tA [ns]	≤25	
Dynamic thermal disconnection	Yes	
No. of ports	1	

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

K1-PV**XXXX**, K1-PV**XXXX**-M (with Microswitch)	1000	1500
Nominal discharge current (8/20) - In [kA]	20	
Maximum continuous operating voltage - MCOV (DC+ DC-) [V]	1170	1500
Maximum continuous operating voltage - MCOV (DC+ G) [V]	1170	1500
Voltage protection rating - VPR (DC- G) [V]	3000	4000
Voltage protection rating - VPR (DC+ DC-) [V]	3000	4000
Voltage protection rating - VPR (DC+ G) [V]	3000	4000
Short-Circuit Current Rating-SCCR [kA]	50	65

DATASHEET

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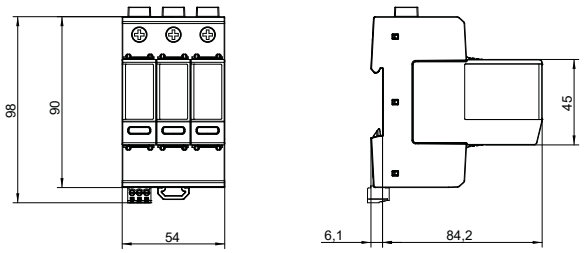
MECHANICAL AND ENVIRONMENTAL FEATURES

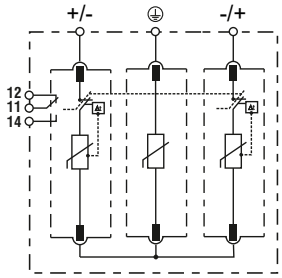
K1-PV**XXXX**, K1-PV**XXXX**-M (with Microswitch)	**1000**	**1500**
Temperature range [ºC]	-40 ... 85	
Humidity range [%]	5 ... 95	
Max. Altitude [m]	2000	
Indication System Type	Green (OK) / Not green (replace)	
Insulating material	PA6 CT1 & PA66 CT1	
Housing color	Grey RAL 7035	
Enclosure - IP	IP20	
Flammability class	UL94 V-0	
Solid conductor cross section	1,5...35 mm²	
Stranded conductor cross section	1,5…25 mm²	
Torque rating [N m]	3	
Remote indication conductor cross section [mm²]	0.5 ... 1.5	
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1	
Remote Indication Torque [N m]	3	

DIMENSIONS AND WEIGHT



K1-PV**XXXX** K1-PV**XXXX**-M (with Microswitch)	**1000**	**1500**
Net Weight [kg]	0.48	0.52
Gross weight [kg]	0.51	0.55
Packaging dimensions (H x W x L) [mm]	118 × 59 × 97	

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

K1-PV**XXXX** K1-PV**XXXX**-M (with Microswitch)	**1000**	**1500**
K1-**XXXX**	44120007	44120009
K1-**XXXX** C	44120008	44120010

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