

Surge-Trap® K - K2 1P

Power Line SPDs
DIN RAIL - IEC TYPE 2



General Data

Internal configuration	1+0
No. Poles	1-Pole
No. DIN rail modules	1
Network configuration	TNS, TNC, TT (only L-N)
IEC SPD Type	Class II
EN SPD Type	Type 2
UL SPD Type	Type 1 Component Assembly
Format	Pluggable
Product standards	*IEC 61643-11 *EN 61643-11 *UL 1449 5th Edition



PART NUMBERS

XXX	275	320	440
K2-1PXXX	44020102	44020106	44020110
K2-1PXXX-M (with Microswitch)	44020103	44020107	44020111

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

K2-1PXXX, K2-1PXXX-M (with Microswitch)	275	320	440
Maximum continuous operating voltage (AC) - Uc [V]	275	320	440
Nominal voltage AC 50-60 Hz - Un [V]	230	277	400
Nominal discharge current (8/20)- In [kA]	20		
Max Discharge Current (8/20) - I _{max} [kA]	50		
Voltage protection level at In - Up [kV]	≤1,5		≤2
Maximum back-up fuse [A [gG]]	315		
Short circuit withstand- I _{scrr} [kA]	25		
Residual current- I _{pe} [mA]	<1		
Response time - t _A [ns]	≤25		
TOV 5s (LV systems, withstand) - Ut [V]	337	403	581
TOV 120min (LV systems, fail safe)- Ut [V]	442.5	528	763
Dynamic thermal disconnection	Yes		
Thermal protection behaviour	OCM (Open Circuit Mode)		
No. of ports	1		

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

K2-1PXXX, K2-1PXXX-M (with Microswitch)	275	320	440
Nominal discharge current (8/20) - In [kA]	20		
Maximum continuous operating voltage - MCOV (L-N) [V]	275	320	440
Maximum continuous operating voltage - MCOV (L-G) [V]	275	320	440
Voltage protection rating - VPR (L-N) [V]	1000	1200	1500
Voltage protection rating - VPR (L-G) [V]	1000	1200	1500
Short-Circuit Current Rating-SCCR [kA]	85	100	42

DATASHEET

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DIN RAIL - IEC TYPE 2

MECHANICAL AND ENVIRONMENTAL FEATURES			
K2-1PXXX, K2-1PXXX-M (with Microswitch)	275	320	440
Temperature range [°C]	-40 ... 85		
Humidity range [%]	5 ... 95		
Max. Altitude [m]	4000		
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...35mm ²		
Stranded conductor cross section	1,5...25mm ²		
Torque rating [N m]	3		
Remote indication conductor cross section [mm ²]	0.5 ... 1.5		
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1		

DIMENSIONS AND WEIGHT

Technical drawing of the Surge-Trap K2 1P showing front and side views with dimensions in mm.

Front view dimensions:

- Total height: 104,6
- Height of the main body: 90
- Width: 18

Side view dimensions:

- Depth: 68,2
- Height of the main body: 45
- Width of the base: 6,1

K2-1P**XXX**

K2-1P**XXX**-M

(with Microswitch)

275

320

440

Net Weight [kg]

0.127

0.125

0.112

Gross weight [kg]

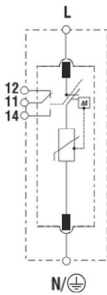
0.149

0.145

0.129

Packaging dimensions (H x W x L) [mm]

97 × 22 × 118

INTERNAL CONFIGURATION		REPLACEMENT CARTRIDGES		
	K2-1PXXX K2-1PXXX-M (with Microswitch)	275	320	440
	K2-XXX (Line)	44020001	44020003	44020005

DATASHEET