

Surge-Trap® K - K1 4P

Power Line SPDs

DIN RAIL - IEC TYPE 1+2



General Data

Internal configuration	4+0
No. Poles	4-Pole
No. DIN rail modules	4
Network configuration	TNS
IEC SPD Type	Class I+II
EN SPD Type	Type 1+2
UL SPD Type	Type 1 Component Assembly
Format	Pluggable
Protection Modes	L-PE / N-PE
Product standards	IEC/EN 61643-11; UL 1449 5th Edition
Certifications	CE, Rohs, UKCA, KEMA-KEUR; ENEC; UL 1449 5th Edition
AC or DC	AC



PART NUMBERS

XXX	275	320
K1-4PXXX	44120404	44120412
K1-4PXXX-M (with Microswitch)	44120405	44120413

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

K1-4PXXX, K1-4PXXX-M (with Microswitch)	275	320
Maximum back-up fuse [A [gG]]		315
Maximum continuous operating voltage (AC) - Uc [V]	275	320
Nominal voltage AC 50-60 Hz - Un [V]	230/400	277/480
Nominal voltage AC 50-60 Hz - Un(L-L) [V]	400	480
Nominal voltage AC 50-60 Hz - Un(L-N) [V]	230	277
Nominal discharge current (8/20)- In [kA]		20
Max Discharge Current (8/20) - I _{max} [kA]		50
Lightning impulse current (10/350) - I _{imp} [kA]		12.5
Voltage protection level at In - Up [kV]		≤1,5
Short circuit withstand- I _{sc} [kA]		25
Residual current- IGND [mA]		<1
Response time - tA [ns]		<25
Specific energy by pole (10/350 μs) - W/R (L-N) [kJ/ohm]		39
Specific energy by pole (10/350 μs) - W/R (N-PE) [kJ/ohm]		39
TOV 5s (LV systems, withstand) - Ut [V]	337	403
TOV 120min (LV systems, fail safe)- Ut [V]	442.5	528
Dynamic thermal disconnection		Yes
Thermal protection behaviour		OCM (Open Circuit Mode)
No. of ports		1

DATASHEET

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Surge-Trap[®] K - K1 4P

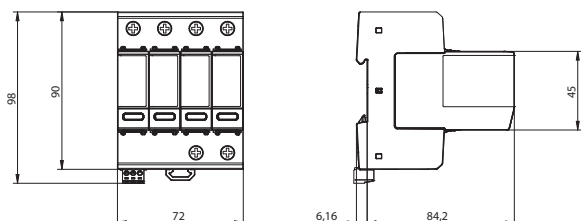
SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

K1-4PXXX, K1-4PXXX-M (with Microswitch)	275	320
Nominal discharge current (8/20) - In [kA]		20
Maximum continuous operating voltage - MCOV (L-L) [V]	550	640
Maximum continuous operating voltage - MCOV (L-N) [V]	275	320
Maximum continuous operating voltage - MCOV (L-G) [V]	275	320
Maximum continuous operating voltage - MCOV (N-G) [V]	275	320
Voltage protection rating - VPR (L-L) [V]		2000
Voltage protection rating - VPR (L-N) [V]		2000
Voltage protection rating - VPR (L-G) [V]		1200
Voltage protection rating - VPR (N-G) [V]		1200
Short-Circuit Current Rating-SCCR [kA]		42

MECHANICAL AND ENVIRONMENTAL FEATURES

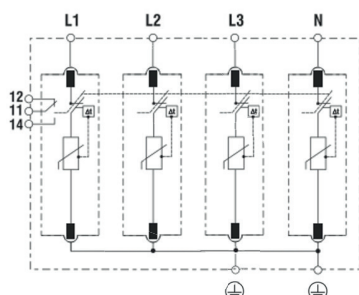
K1-4PXXX, K1-4PXXX-M (with Microswitch)	275	320
Temperature range [°C]		-40 ... 85
Humidity range [%]		5 ... 95
Max. Altitude [m]		4000
Indication System Type		Green (OK) / Not Green (replace)
Insulating material		PA6 CT1 & PA66 CT1
Housing color		Grey RAL 7035
Enclosure - IP		IP20
Flammability class		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



K1-4PXXX K1-4PXXX-M (with Microswitch)	275	320
Net Weight [kg]		0.58
Gross weight [kg]		0.62
Packaging dimensions (H x W x L) [mm]		97 x 78 x 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

K1-4PXXX K1-4PXXX-M (with Microswitch)	275	320
K1-XXX (Line)	44120001	44120003

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