

# Surge-Trap<sup>®</sup> K - K1 LF 1P

Power Line SPDs

DIN RAIL - IEC TYPE 1+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 I+II
EN SPD Type	Type 1+2
UL SPD Type	Type 4 Component Assembly
Format	Pluggable
Leakage current free - LCF	Yes
Product standards	*IEC 61643-11 *EN 61643-11 *UL 1449 5th Edition



## PART NUMBERS

<b>XXX</b>	<b>320</b>
K1-1P <b>XXX</b> LF	44120108
K1-1P <b>XXX</b> LF-M (with Microswitch)	44120109

## SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

K1-1P <b>XXX</b> LF, K1-1P <b>XXX</b> LF-M (with Microswitch)	<b>320</b>
Maximum continuous operating voltage (AC) - U <sub>c</sub> [V]	320
Nominal voltage AC 50-60 Hz - U <sub>n</sub> [V]	230/400
Nominal voltage AC 50-60 Hz - U <sub>n</sub> (L-L) [V]	400
Nominal voltage AC 50-60 Hz - U <sub>n</sub> (L-N) [V]	230
Nominal discharge current (8/20)- I <sub>n</sub> [kA]	20
Max Discharge Current (8/20) - I <sub>max</sub> [kA]	50
Lightning impulse current (10/350) - I <sub>imp</sub> [kA]	12.5
Voltage protection level at I <sub>n</sub> - U <sub>p</sub> [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- I <sub>sc</sub> [kA]	25
Following current - I <sub>fi</sub> [A]	100
Residual current- I <sub>pe</sub> [μA]	<10
Response time - t <sub>A</sub> [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) - U <sub>t</sub> [V]	403
TOV 120min (LV systems, fail safe)- U <sub>t</sub> [V]	528
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

## DATASHEET

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# Surge-Trap<sup>®</sup> K - K1 LF 1P

Power Line SPDs

DIN RAIL - IEC TYPE 1+2

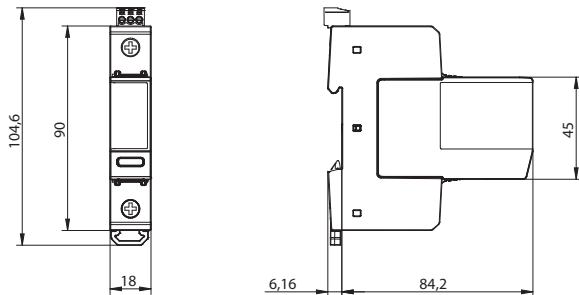
## SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

K1-1PXXXLF, K1-1PXXXLF-M (with Microswitch)	<b>320</b>
Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	320
Maximum continuous operating voltage - MCOV (L-G) [V]	320
Measured limiting voltage - MLV (L-N) [V]	1420
Measured limiting voltage - MLV (L-G) [V]	1420

## MECHANICAL AND ENVIRONMENTAL FEATURES

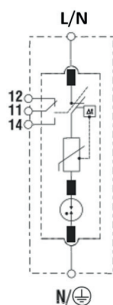
K1-1PXXXLF, K1-1PXXXLF-M (with Microswitch)	<b>320</b>
Temperature range [°C]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5...35mm <sup>2</sup>
Stranded conductor cross section	1,5...25mm <sup>2</sup>
Torque rating [N m]	3
Remote indication conductor cross section [mm <sup>2</sup> ]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

## DIMENSIONS AND WEIGHT



K1-1PXXXLF K1-1PXXXLF-M (with Microswitch)	<b>320</b>
Net Weight [kg]	0.167
Gross weight [kg]	0.188
Packaging dimensions (H x W x L) [mm]	97 × 22 × 118

## INTERNAL CONFIGURATION



## REPLACEMENT CARTRIDGES

K1-1PXXXLF K1-1PXXXLF-M (with Microswitch)	<b>320</b>
K1-XXXLF (Line)	44120004

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# Surge-Trap® K - K1 LF 2P

Power Line SPDs

DIN RAIL - IEC TYPE 1+2



## General Data

Internal configuration	2+0
No. Poles	2-Pole
No. DIN rail modules	2
Network configuration	TNS
IEC SPD Type	Class I+II
EN SPD Type	Type 1+2
UL SPD Type	Type 4 Component Assembly
Format	Pluggable
Protection Modes	L-PE / N-PE
Leakage current free - LCF	Yes
Product standards	*IEC 61643-11 *EN 61643-11 *UL 1449 5th Edition



## PART NUMBERS

<b>XXX</b>	<b>320</b>
K1-2P <b>XXX</b> LF	44120214
K1-2P <b>XXX</b> LF-M (with Microswitch)	44120215

## SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

K1-2P <b>XXX</b> LF, K1-2P <b>XXX</b> LF-M (with Microswitch)	<b>320</b>
Maximum continuous operating voltage (AC) - Uc [V]	320
Nominal voltage AC 50-60 Hz - Un [V]	230/400
Nominal voltage AC 50-60 Hz - Un(L-L) [V]	400
Nominal voltage AC 50-60 Hz - Un(L-N) [V]	230
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - I <sub>max</sub> [kA]	50
Lightning impulse current (10/350) - I <sub>imp</sub> [kA]	12.5
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- I <sub>scrr</sub> [kA]	25
Following current - I <sub>fi</sub> [A]	100
Residual current- I <sub>pe</sub> [μA]	<10
Response time - t <sub>A</sub> [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]	403
TOV 120min (LV systems, fail safe)- Ut [V]	528
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

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# Surge-Trap<sup>®</sup> K - K1 LF 2P

Power Line SPDs

DIN RAIL - IEC TYPE 1+2

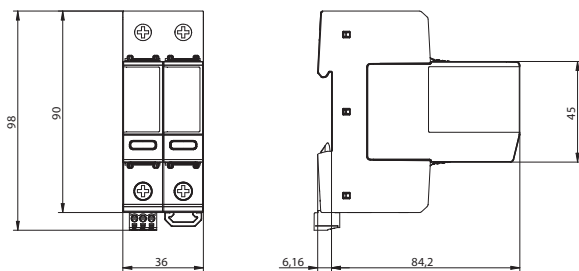
## SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

K1-2PXXXLF, K1-2PXXXLF-M (with Microswitch)	<b>320</b>
Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	640
Maximum continuous operating voltage - MCOV (L-G) [V]	320
Maximum continuous operating voltage - MCOV (N-G) [V]	320
Measured limiting voltage - MLV (L-N) [V]	2820
Measured limiting voltage - MLV (N-G) [V]	1420
Measured limiting voltage - MLV (L-G) [V]	1420

## MECHANICAL AND ENVIRONMENTAL FEATURES

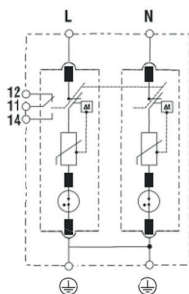
K1-2PXXXLF, K1-2PXXXLF-M (with Microswitch)	<b>320</b>
Temperature range [°C]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5...35mm <sup>2</sup>
Stranded conductor cross section	1,5...25mm <sup>2</sup>
Torque rating [N m]	3
Remote indication conductor cross section [mm <sup>2</sup> ]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

## DIMENSIONS AND WEIGHT



K1-2PXXXLF K1-2PXXXLF-M (with Microswitch)	<b>320</b>
Net Weight [kg]	0.345
Gross weight [kg]	0.375
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

## INTERNAL CONFIGURATION



## REPLACEMENT CARTRIDGES

K1-2PXXXLF K1-2PXXXLF-M (with Microswitch)	<b>320</b>
K1-XXXLF (Line)	44120004

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# Surge-Trap® K - K1 LF 2PG

Power Line SPDs

DIN RAIL - IEC TYPE 1+2



## General Data

Internal configuration	1+1
No. Poles	2-Pole
No. DIN rail modules	2
Network configuration	TT, TNS
IEC SPD Type	Class I+II
EN SPD Type	Type 1+2
UL SPD Type	Type 4 Component Assembly
Format	Pluggable
Protection Modes	L-N / N-PE
Leakage current free - LCF	Yes
Product standards	*IEC 61643-11 *EN 61643-11 *UL 1449 5th Edition



## PART NUMBERS

<b>XXX</b>	<b>320</b>
K1-2PG <b>XXX</b> LF	44120210
K1-2PG <b>XXX</b> LF-M (with Microswitch)	44120211

## SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

K1-2PG <b>XXX</b> LF, K1-2PG <b>XXX</b> LF-M (with Microswitch)	<b>320</b>
Maximum continuous operating voltage (AC) - Uc (L-N) [V]	320
Maximum continuous operating voltage (AC) - Uc (N-PE) [V]	255
Nominal voltage AC 50-60 Hz - Un [V]	230/400
Nominal voltage AC 50-60 Hz - Un(L-L) [V]	400
Nominal voltage AC 50-60 Hz - Un(L-N) [V]	230
Nominal discharge current (8/20) - In (L-N) [kA]	20
Nominal discharge current (8/20) - In (N-PE) [kA]	50
Max Discharge Current (8/20) - I <sub>max</sub> (L-N) [kA]	50
Max Discharge Current (8/20) - I <sub>max</sub> (N-PE) [kA]	100
Lightning impulse current (10/350) - I <sub>imp</sub> (L-N) [kA]	12.5
Lightning impulse current (10/350) - I <sub>imp</sub> (N-PE) [kA]	50
Voltage protection level at In - Up (L-N) [kV]	≤1,5
Voltage protection level at In - Up (L-PE) [kV]	≤1,8
Voltage protection level at In - Up (N-PE) [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- I <sub>sc</sub> [kA]	25
Following current - I <sub>fi</sub> [A]	100
Residual current- I <sub>pe</sub> [μA]	<10
Response time - t <sub>A</sub> (L-N) [ns]	≤25
Response time - t <sub>A</sub> (N-PE) [ns]	≤100
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]	625
TOV 5s (LV systems, withstand)- U <sub>t</sub> (L-N) [V]	403
TOV 120min (LV systems, fail safe)- U <sub>t</sub> (L-N) [V]	528
TOV 200 ms (HV Systems, withstand) - U <sub>t</sub> (N-PE) [V]	1200
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

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# Surge-Trap<sup>®</sup> K - K1 LF 2PG

Power Line SPDs

DIN RAIL - IEC TYPE 1+2

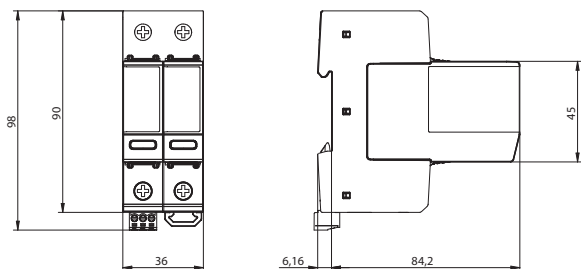
## SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

K1-2PGXXXLF, K1-2PGXXXLF-M (with Microswitch)	<b>320</b>
Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	320
Maximum continuous operating voltage - MCOV (L-G) [V]	320
Maximum continuous operating voltage - MCOV (N-G) [V]	305
Measured limiting voltage - MLV (L-N) [V]	1420
Measured limiting voltage - MLV (N-G) [V]	1400
Measured limiting voltage - MLV (L-G) [V]	2820

## MECHANICAL AND ENVIRONMENTAL FEATURES

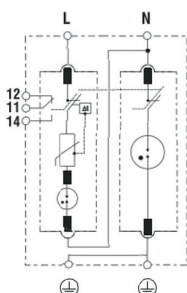
K1-2PGXXXLF, K1-2PGXXXLF-M (with Microswitch)	<b>320</b>
Temperature range [°C]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5...35mm <sup>2</sup>
Stranded conductor cross section	1,5...25mm <sup>2</sup>
Torque rating [N m]	3
Remote indication conductor cross section [mm <sup>2</sup> ]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

## DIMENSIONS AND WEIGHT



K1-2PGXXXLF K1-2PGXXXLF-M (with Microswitch)	<b>320</b>
Net Weight [kg]	0.36
Gross weight [kg]	0.39
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

## INTERNAL CONFIGURATION



## REPLACEMENT CARTRIDGES

K1-2PGXXXLF K1-2PGXXXLF-M (with Microswitch)	<b>320</b>
K1-XXXLF (Line)	44120004
K1-N (Neutral)	44120000

## DATASHEET

# Surge-Trap® K - K1 LF 3P

Power Line SPDs

DIN RAIL - IEC TYPE 1+2



## General Data

Internal configuration	3+0
No. Poles	3-Pole
No. DIN rail modules	3
Network configuration	TNC
IEC SPD Type	Class I+II
EN SPD Type	Type 1+2
UL SPD Type	Type 4 Component Assembly
Format	Pluggable
Protection Modes	L-PE(N)
Leakage current free - LCF	Yes
Product standards	*IEC 61643-11 *EN 61643-11 *UL 1449 5th Edition



## PART NUMBERS

XXX	320
K1-3PXXXXLF	44120306
K1-3PXXXXLF-M (with Microswitch)	44120307

## SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

K1-3PXXXXLF, K1-3PXXXXLF-M (with Microswitch)	320
Maximum continuous operating voltage (AC) - Uc [V]	320
Nominal voltage AC 50-60 Hz - Un [V]	230/400
Nominal voltage AC 50-60 Hz - Un(L-L) [V]	400
Nominal voltage AC 50-60 Hz - Un(L-N) [V]	230
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - I <sub>max</sub> [kA]	50
Lightning impulse current (10/350) - I <sub>imp</sub> [kA]	12.5
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- I <sub>scrr</sub> [kA]	25
Following current - I <sub>fi</sub> [A]	100
Residual current- I <sub>pe</sub> [μA]	<10
Response time - t <sub>A</sub> [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]	403
TOV 120min (LV systems, fail safe)- Ut [V]	528
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

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# Surge-Trap<sup>®</sup> K - K1 LF 3P

Power Line SPDs

DIN RAIL - IEC TYPE 1+2

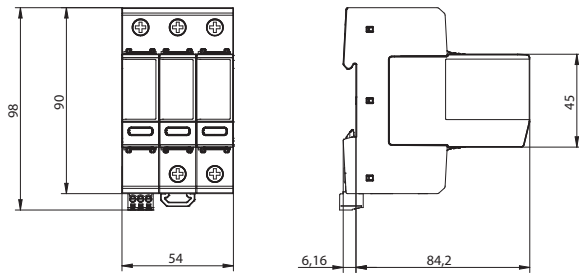
## SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

K1-3PXXXLF, K1-3PXXXLF-M (with Microswitch)	<b>320</b>
Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-L) [V]	640
Maximum continuous operating voltage - MCOV (L-G) [V]	320
Measured limiting voltage - MLV (L-L) [V]	2840
Measured limiting voltage - MLV (L-G) [V]	1420

## MECHANICAL AND ENVIRONMENTAL FEATURES

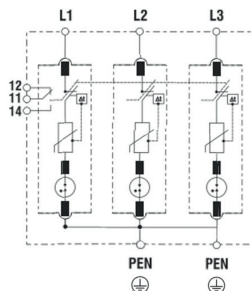
K1-3PXXXLF, K1-3PXXXLF-M (with Microswitch)	<b>320</b>
Temperature range [°C]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5...35mm <sup>2</sup>
Stranded conductor cross section	1,5...25mm <sup>2</sup>
Torque rating [N m]	3
Remote indication conductor cross section [mm <sup>2</sup> ]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

## DIMENSIONS AND WEIGHT



K1-3PXXXLF K1-3PXXXLF-M (with Microswitch)	<b>320</b>
Net Weight [kg]	0.52
Gross weight [kg]	0.55
Packaging dimensions (H x W x L) [mm]	97 × 59 × 118

## INTERNAL CONFIGURATION



## REPLACEMENT CARTRIDGES

K1-3PXXXLF K1-3PXXXLF-M (with Microswitch)	<b>320</b>
K1-XXXLF (Line)	44120004

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# Surge-Trap® K - K1 LF 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 4 Component Assembly
Format	Pluggable
Protection Modes	L-PE / N-PE
Leakage current free - LCF	Yes
Product standards	*IEC 61643-11 *EN 61643-11 *UL 1449 5th Edition



## PART NUMBERS

XXX	320
K1-4PXXXLF	44120414
K1-4PXXXLF-M (with Microswitch)	44120415

## SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

K1-4PXXXLF, K1-4PXXXLF-M (with Microswitch)	320
Maximum continuous operating voltage (AC) - Uc [V]	320
Nominal voltage AC 50-60 Hz - Un [V]	230/400
Nominal voltage AC 50-60 Hz - Un(L-L) [V]	400
Nominal voltage AC 50-60 Hz - Un(L-N) [V]	230
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - I <sub>max</sub> [kA]	50
Lightning impulse current (10/350) - I <sub>imp</sub> [kA]	12.5
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- I <sub>scrr</sub> [kA]	25
Following current - I <sub>fi</sub> [A]	100
Residual current- I <sub>pe</sub> [μA]	<10
Response time - t <sub>A</sub> [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]	403
TOV 120min (LV systems, fail safe)- Ut [V]	528
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

## DATASHEET

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# Surge-Trap<sup>®</sup> K - K1 LF 4P

Power Line SPDs

DIN RAIL - IEC TYPE 1+2

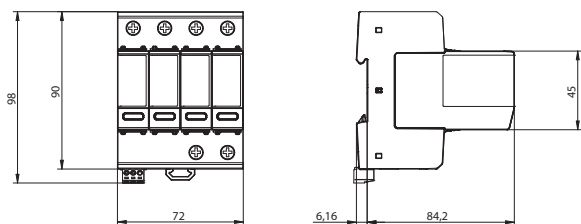
## SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

K1-4PXXXLF, K1-4PXXXLF-M (with Microswitch)	<b>320</b>
Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-L) [V]	640
Maximum continuous operating voltage - MCOV (L-N) [V]	640
Maximum continuous operating voltage - MCOV (L-G) [V]	320
Maximum continuous operating voltage - MCOV (N-G) [V]	320
Measured limiting voltage - MLV (L-L) [V]	2840
Measured limiting voltage - MLV (L-N) [V]	2840
Measured limiting voltage - MLV (N-G) [V]	1420
Measured limiting voltage - MLV (L-G) [V]	1420

## MECHANICAL AND ENVIRONMENTAL FEATURES

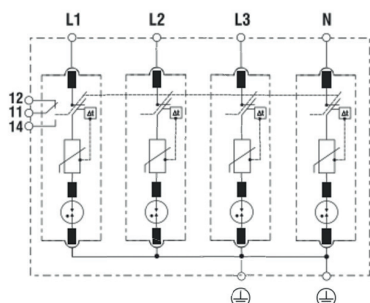
K1-4PXXXLF, K1-4PXXXLF-M (with Microswitch)	<b>320</b>
Temperature range [°C]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5...35mm <sup>2</sup>
Stranded conductor cross section	1,5...25mm <sup>2</sup>
Torque rating [N m]	3
Remote indication conductor cross section [mm <sup>2</sup> ]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

## DIMENSIONS AND WEIGHT



K1-4PXXXLF K1-4PXXXLF-M (with Microswitch)	<b>320</b>
Net Weight [kg]	0.62
Gross weight [kg]	0.68
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

## INTERNAL CONFIGURATION



## REPLACEMENT CARTRIDGES

K1-4PXXXLF K1-4PXXXLF-M (with Microswitch)	<b>320</b>
K1-XXXLF (Line)	44120004

## DATASHEET

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# Surge-Trap® K - K1 LF 4PG

Power Line SPDs

DIN RAIL - IEC TYPE 1+2



## General Data

Internal configuration	3+1
No. Poles	4-Pole
No. DIN rail modules	4
Network configuration	TT, TNS
IEC SPD Type	Class I+II
EN SPD Type	Type 1+2
UL SPD Type	Type 4 Component Assembly
Format	Pluggable
Protection Modes	L-N / N-PE
Leakage current free - LCF	Yes
Product standards	*IEC 61643-11 *EN 61643-11 *UL 1449 5th Edition



## PART NUMBERS

<b>XXX</b>	<b>320</b>
K1-4PG <b>XXX</b> LF	44120410
K1-4PG <b>XXX</b> LF-M (with Microswitch)	44120411

## SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

K1-4PG <b>XXX</b> LF, K1-4PG <b>XXX</b> LF-M (with Microswitch)	<b>320</b>
Maximum continuous operating voltage (AC) - Uc (L-N) [V]	320
Maximum continuous operating voltage (AC) - Uc (N-PE) [V]	255
Nominal voltage AC 50-60 Hz - Un [V]	230/400
Nominal voltage AC 50-60 Hz - Un(L-L) [V]	400
Nominal voltage AC 50-60 Hz - Un(L-N) [V]	230
Nominal discharge current (8/20) - In (L-N) [kA]	20
Nominal discharge current (8/20) - In (N-PE) [kA]	50
Max Discharge Current (8/20) - I <sub>max</sub> (L-N) [kA]	50
Max Discharge Current (8/20) - I <sub>max</sub> (N-PE) [kA]	100
Lightning impulse current (10/350) - I <sub>imp</sub> (L-N) [kA]	12.5
Lightning impulse current (10/350) - I <sub>imp</sub> (N-PE) [kA]	50
Voltage protection level at In - Up (L-N) [kV]	≤1,5
Voltage protection level at In - Up (L-PE) [kV]	≤1,8
Voltage protection level at In - Up (N-PE) [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- I <sub>sc</sub> [kA]	25
Following current - I <sub>fi</sub> [A]	100
Residual current- I <sub>pe</sub> [μA]	<10
Response time - t <sub>A</sub> (L-N) [ns]	≤25
Response time - t <sub>A</sub> (N-PE) [ns]	≤100
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]	625
TOV 5s (LV systems, withstand)- Ut(L-N) [V]	403
TOV 120min (LV systems, fail safe)- Ut(L-N) [V]	528
TOV 200 ms (HV Systems, withstand) - Ut (N-PE) [V]	1200
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

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# Surge-Trap<sup>®</sup> K - K1 LF 4PG

Power Line SPDs

DIN RAIL - IEC TYPE 1+2

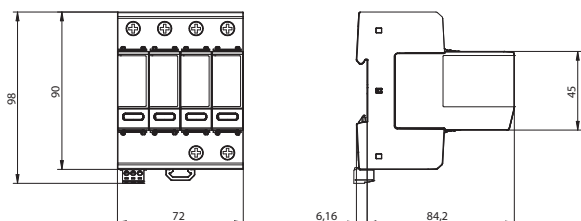
## SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

K1-4PGXXXLF, K1-4PGXXXLF-M (with Microswitch)	<b>320</b>
Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-L) [V]	640
Maximum continuous operating voltage - MCOV (L-N) [V]	320
Maximum continuous operating voltage - MCOV (L-G) [V]	320
Maximum continuous operating voltage - MCOV (N-G) [V]	305
Measured limiting voltage - MLV (L-L) [V]	2840
Measured limiting voltage - MLV (L-N) [V]	1420
Measured limiting voltage - MLV (N-G) [V]	1400
Measured limiting voltage - MLV (L-G) [V]	2820

## MECHANICAL AND ENVIRONMENTAL FEATURES

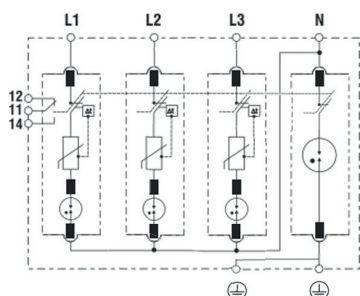
K1-4PGXXXLF, K1-4PGXXXLF-M (with Microswitch)	<b>320</b>
Temperature range [°C]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5...35mm <sup>2</sup>
Stranded conductor cross section	1,5...25mm <sup>2</sup>
Torque rating [N m]	3
Remote indication conductor cross section [mm <sup>2</sup> ]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

## DIMENSIONS AND WEIGHT



K1-4PGXXXLF K1-4PGXXXLF-M (with Microswitch)	<b>320</b>
Net Weight [kg]	0.58
Gross weight [kg]	0.624
Packaging dimensions (H x W x L) [mm]	97 x 78 x 118

## INTERNAL CONFIGURATION



## REPLACEMENT CARTRIDGES

K1-4PGXXXLF K1-4PGXXXLF-M (with Microswitch)	<b>320</b>
K1-XXXLF (Line)	44120004
K1-N (Neutral)	44120000

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