Power Line SPDs

K2-1PG

44020100



Surge protection device Type 2, Imax 50 kA, Uc 255 Vac, 0+1 for TT, TNS earthing systems, pluggable

GENERAL DATA	
Internal configuration	0+1
No. Poles	1-Pole
No. DIN rail modules	1
Network configuration	TT, TNS
IEC SPD Type	Class II
EN SPD Type	Type 2
UL SPD Type	Type 1 Component Assembly
Format	Pluggable
Protection Modes	N-PE
Product standards	*EN IEC 61643-11 *UL 1449 5th Edition

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	255
Nominal voltage AC 50-60 Hz - Un [V]	Neutral
Nominal discharge current (8/20)- In [kA]	50
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Short circuit withstand- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA [ns]	≤100
TOV 200ms (HV systems, withstand)- Ut [V]	1200
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (N-G) [V]	305
Voltage protection rating - VPR (N-G) [V]	900

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-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

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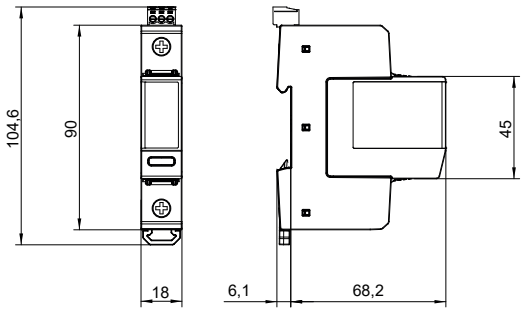
K2-1PG

44020100

Continue MECHANICAL AND ENVIRONMENTAL FEATURES

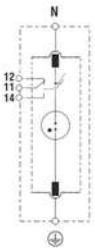
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
Torque rating [N m]	3
Remote indication conductor cross section [mm²]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.119
Gross weight [kg]	0.129
Packaging dimensions (H x W x L) [mm]	97 × 22 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Neutral (N-PE)	44020000	K2-N

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Power Line SPDs

K2-1PG-M

44020101



Surge protection device Type 2, Imax 50 kA, Uc 255 Vac, 0+1 for TT, TNS earthing systems, pluggable, with Microswitch

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	255
Nominal voltage AC 50-60 Hz - Un [V]	Neutral
Nominal discharge current (8/20)- In [kA]	50
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Short circuit withstand- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA [ns]	≤100
TOV 200ms (HV systems, withstand)- Ut [V]	1200
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (N-G)	305
Voltage protection rating - VPR (N-G) [V]	900

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0

DATASHEET

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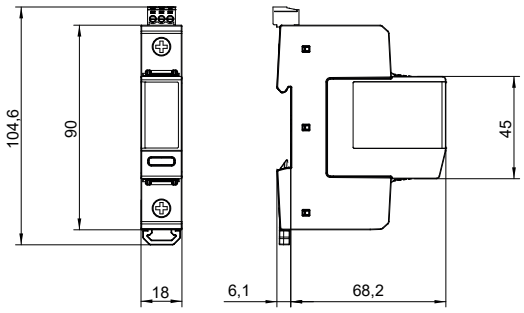
K2-1PG-M

44020101

Continue MECHANICAL AND ENVIRONMENTAL FEATURES

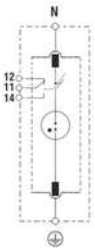
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
Torque rating [N m]	3
Remote indication conductor cross section [mm²]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.111
Gross weight [kg]	0.134
Packaging dimensions (H x W x L) [mm]	97 × 22 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Neutral (N-PE)	44020000	K2-N

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Power Line SPDs

K2-1P275

44020102



Surge protection device Type 2, Imax 50 kA, Uc 275 Vac, 1+0 for 230V TNS, TNC, TT (only L-N) systems, pluggable

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	*EN IEC 61643-11 *UL 1449 5th Edition

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	275
Nominal voltage AC 50-60 Hz - Un [V]	230
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	337
TOV 120min (LV systems, fail safe)- Ut [V]	442.5
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	275
Maximum continuous operating voltage - MCOV (L-G) [V]	275
Voltage protection rating - VPR (L-N) [V]	1000
Voltage protection rating - VPR (L-G) [V]	1000
Short-Circuit Current Rating-SCCR [kA]	85

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Power Line SPDs

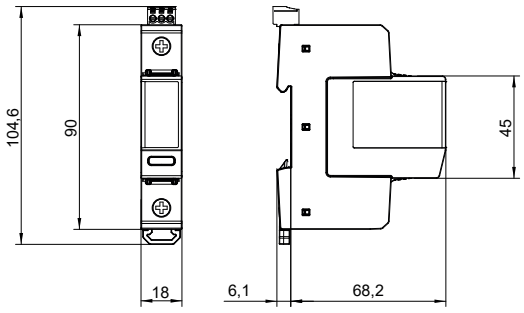
K2-1P275

44020102

MECHANICAL AND ENVIRONMENTAL FEATURES

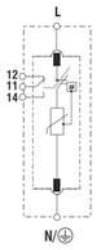
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.117
Gross weight [kg]	0.126
Packaging dimensions (H x W x L) [mm]	97 × 22 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020001	K2-275

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Power Line SPDs

K2-1P275-M

44020103



Surge protection device Type 2, Imax 50 kA, Uc 275 Vac, 1+0 for 230V TNS, TNC, TT (only L-N) systems, pluggable, with Microswitch

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	*EN IEC 61643-11 *UL 1449 5th Edition

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	275
Nominal voltage AC 50-60 Hz - Un [V]	230
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	337
TOV 120min (LV systems, fail safe)- Ut [V]	442.5
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	275
Maximum continuous operating voltage - MCOV (L-G) [V]	275
Voltage protection rating - VPR (L-N) [V]	1000
Voltage protection rating - VPR (L-G) [V]	1000
Short-Circuit Current Rating-SCCR [kA]	85

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Power Line SPDs

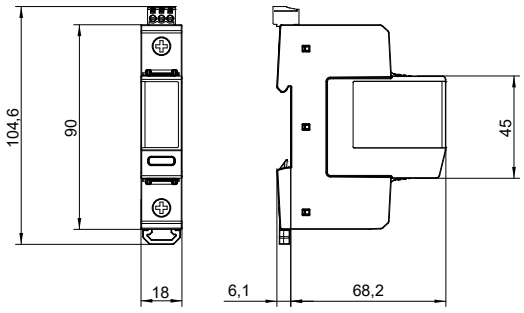
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44020103

MECHANICAL AND ENVIRONMENTAL FEATURES

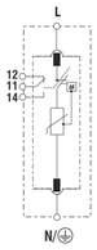
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.117
Gross weight [kg]	0.126
Packaging dimensions (H x W x L) [mm]	97 × 22 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020001	K2-275

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Power Line SPDs

K2-1P320

44020106



Surge protection device Type 2, Imax 50 kA, Uc 320 Vac, 1+0 for 277V TNS, TNC, TT (only L-N) systems, pluggable

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	*EN IEC 61643-11 *UL 1449 5th Edition

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	320
Nominal voltage AC 50-60 Hz - Un [V]	277
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

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
Voltage protection rating - VPR (L-N) [V]	1200
Voltage protection rating - VPR (L-G) [V]	1200
Short-Circuit Current Rating-SCCR [kA]	100

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Power Line SPDs

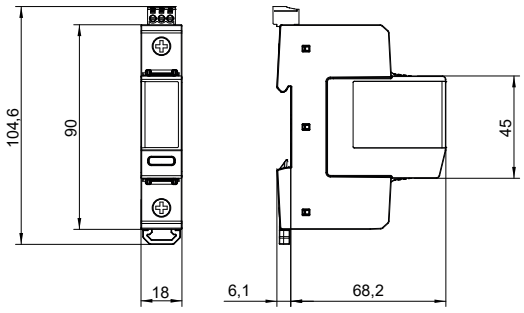
K2-1P320

44020106

MECHANICAL AND ENVIRONMENTAL FEATURES

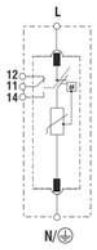
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.125
Gross weight [kg]	0.134
Packaging dimensions (H x W x L) [mm]	97 × 22 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020003	K2-320

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Power Line SPDs

K2-1P320-M

44020107



Surge protection device Type 2, Imax 50 kA, Uc 320 Vac, 1+0 for 277V TNS, TNC, TT (only L-N) systems, pluggable, with Microswitch

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	*EN IEC 61643-11 *UL 1449 5th Edition

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES	
Maximum continuous operating voltage (AC) - Uc [V]	320
Nominal voltage AC 50-60 Hz - Un [V]	277
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
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

ADDITIONAL TESTING – TECHNICAL FEATURES	
Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES	
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
Voltage protection rating - VPR (L-N) [V]	1200
Voltage protection rating - VPR (L-G) [V]	1200
Short-Circuit Current Rating-SCCR [kA]	100

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Power Line SPDs

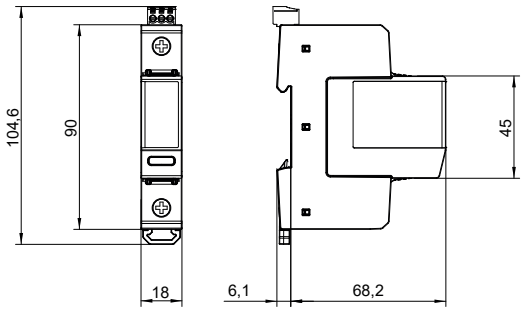
K2-1P320-M

44020107

MECHANICAL AND ENVIRONMENTAL FEATURES

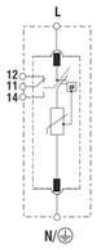
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.125
Gross weight [kg]	0.134
Packaging dimensions (H x W x L) [mm]	97 × 22 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020003	K2-320

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Power Line SPDs

K2-1P440

44020110



Surge protection device Type 2, Imax 50 kA, Uc 440 Vac, 1+0 for 400V TNS, TNC, TT (only L-N) systems, pluggable

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	*EN IEC 61643-11 *UL 1449 5th Edition

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	440
Nominal voltage AC 50-60 Hz - Un [V]	400
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤2
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	581
TOV 120min (LV systems, fail safe)- Ut [V]	763
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	440
Maximum continuous operating voltage - MCOV (L-G) [V]	440
Voltage protection rating - VPR (L-N) [V]	1500
Voltage protection rating - VPR (L-G) [V]	1500
Short-Circuit Current Rating-SCCR [kA]	42

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Power Line SPDs

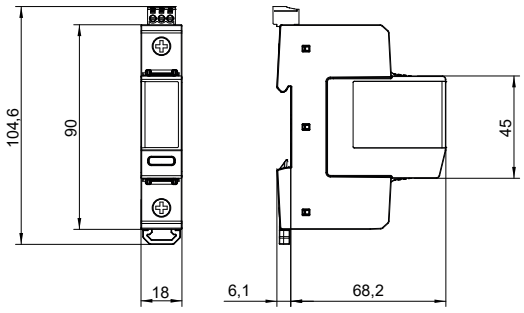
K2-1P440

44020110

MECHANICAL AND ENVIRONMENTAL FEATURES

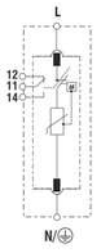
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.129
Gross weight [kg]	0.138
Packaging dimensions (H x W x L) [mm]	97 × 22 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020005	K2-440

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Power Line SPDs

K2-1P440-M

44020111



Surge protection device Type 2, Imax 50 kA, Uc 440 Vac, 1+0 for 400V TNS, TNC, TT (only L-N) systems, pluggable, with Microswitch

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	*EN IEC 61643-11 *UL 1449 5th Edition

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	440
Nominal voltage AC 50-60 Hz - Un [V]	400
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤2
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	581
TOV 120min (LV systems, fail safe)- Ut [V]	763
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	440
Maximum continuous operating voltage - MCOV (L-G) [V]	440
Voltage protection rating - VPR (L-N) [V]	1500
Voltage protection rating - VPR (L-G) [V]	1500
Short-Circuit Current Rating-SCCR [kA]	42

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Power Line SPDs

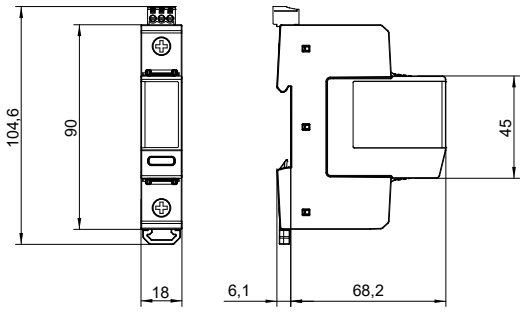
K2-1P440-M

44020111

MECHANICAL AND ENVIRONMENTAL FEATURES

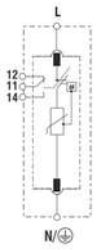
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.129
Gross weight [kg]	0.138
Packaging dimensions (H x W x L) [mm]	97 × 22 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020005	K2-440

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Power Line SPDs

K2-1PG440

44020114



Surge protection device Type 2, Imax 50 kA, Uc 440 Vac, 0+1 for TT, TNS earthing systems, pluggable

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	440
Nominal voltage AC 50-60 Hz - Un	Neutral
Nominal discharge current (8/20)- In [kA]	50
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤2
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA [ns]	≤100
TOV 200ms (HV systems, withstand)- Ut [V]	1200
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (N-G) [V]	440
Voltage protection rating - VPR (N-G) [V]	1000

MECHANICAL AND ENVIRONMENTAL FEATURES

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

DATASHEET

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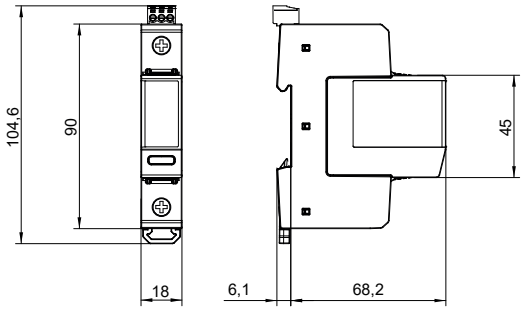
K2-1PG440

44020114

Continue MECHANICAL AND ENVIRONMENTAL FEATURES

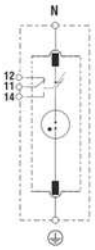
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
Torque rating [N m]	3
Remote indication conductor cross section [mm²]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.117
Gross weight [kg]	0.126
Packaging dimensions (H x W x L) [mm]	97 × 22 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Neutral (N-PE)	44020013	K2-N440

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Power Line SPDs

K2-1PG440-M

44020115



Surge protection device Type 2, Imax 50 kA, Uc 440 Vac, 0+1 for TT, TNS earthing systems, pluggable, with Microswitch

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	440
Nominal voltage AC 50-60 Hz - Un	Neutral
Nominal discharge current (8/20)- In [kA]	50
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤2
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA [ns]	≤100
TOV 200ms (HV systems, withstand)- Ut [V]	1200
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (N-G) [V]	440
Voltage protection rating - VPR (N-G) [V]	1000

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1

DATASHEET

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Power Line SPDs

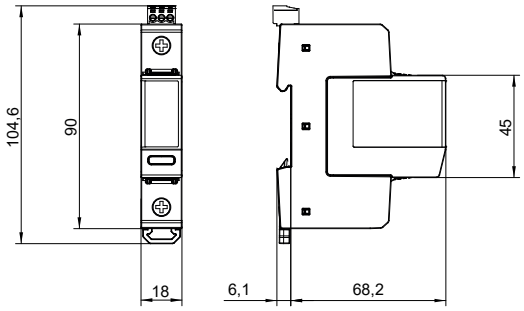
K2-1PG440-M

44020115

Continue MECHANICAL AND ENVIRONMENTAL FEATURES

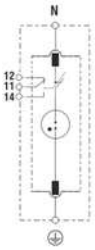
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
Torque rating [N m]	3
Remote indication conductor cross section [mm²]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.117
Gross weight [kg]	0.126
Packaging dimensions (H x W x L) [mm]	97 × 22 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Neutral (N-PE)	44020013	K2-N440

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Power Line SPDs

K2-1P175

44020116



Surge protection device Type 2, Imax 50 kA, Uc 175 Vac, 1+0 for 120V TNS, TNC, TT (only L-N) systems, pluggable

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
Format	Pluggable
Product standards	*EN IEC 61643-11

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	175
Nominal voltage AC 50-60 Hz - Un [V]	120
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	175
TOV 120min (LV systems, fail safe)- Ut [V]	229
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-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

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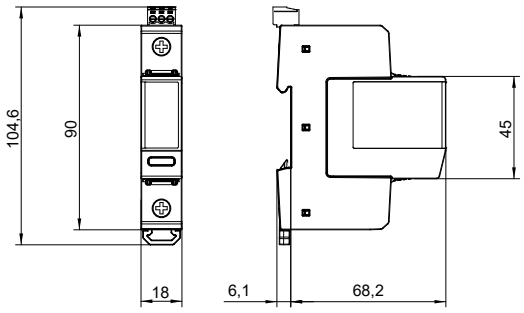
K2-1P175

44020116

Continue MECHANICAL AND ENVIRONMENTAL FEATURES

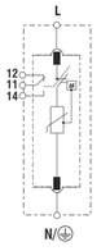
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
Torque rating [N m]	3
Remote indication conductor cross section [mm²]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.117
Gross weight [kg]	0.126
Packaging dimensions (H x W x L) [mm]	97 × 22 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020011	K2-175

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Power Line SPDs

K2-1P175-M

44020117



Surge protection device Type 2, Imax 50 kA, Uc 175 Vac, 1+0 for 120V TNS, TNC, TT (only L-N) systems, pluggable, with Microswitch

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
Format	Pluggable
Product standards	*EN IEC 61643-11

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	175
Nominal voltage AC 50-60 Hz - Un [V]	120
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	175
TOV 120min (LV systems, fail safe)- Ut [V]	229
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0

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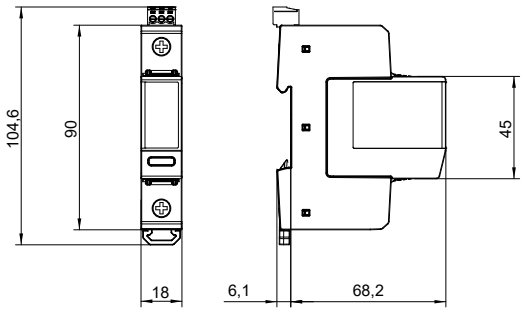
K2-1P175-M

44020117

Continue MECHANICAL AND ENVIRONMENTAL FEATURES

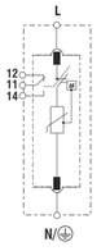
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
Torque rating [N m]	3
Remote indication conductor cross section [mm²]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.117
Gross weight [kg]	0.126
Packaging dimensions (H x W x L) [mm]	97 × 22 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020011	K2-175

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Power Line SPDs

K2-2PG275

44020200



Surge protection device Type 2, Imax 50 kA, Uc 275 Vac, 1+1 for 230V TT, TNS systems, pluggable

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc (L-N) [V]	275
Maximum continuous operating voltage (AC) - Uc (N-PE) [V]	255
Nominal voltage AC 50-60 Hz - Un [V]	230
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (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- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
TOV 5s (LV systems, withstand)- Ut(L-N) [V]	337
TOV 120min (LV systems, fail safe)- Ut(L-N) [V]	442.5
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

K2-2PG275

44020200

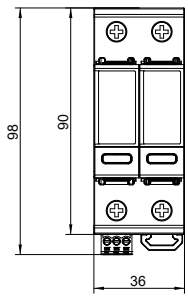
SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

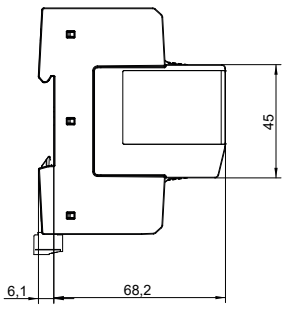
Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	275
Maximum continuous operating voltage - MCOV (L-G) [V]	275
Maximum continuous operating voltage - MCOV (N-G) [V]	305
Voltage protection rating - VPR (L-N) [V]	1000
Voltage protection rating - VPR (L-G) [V]	1000
Voltage protection rating - VPR (N-G) [V]	900
Short-Circuit Current Rating-SCCR [kA]	85

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-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…35mm²
Stranded conductor cross section	1,5…25mm²
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

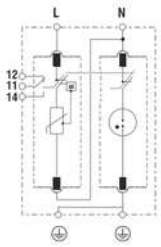
DIMENSIONS AND WEIGHT





Net Weight [kg]	0.242
Gross weight [kg]	0.272
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020001	K2-275
Neutral (N-PE)	44020000	K2-N

DATASHEET

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Power Line SPDs

K2-2PG275-M

44020201



Surge protection device Type 2, Imax 50 kA, Uc 275 Vac, 1+1 for 230V TT, TNS systems, pluggable, with Microswitch

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc (L-N) [V]	275
Maximum continuous operating voltage (AC) - Uc (N-PE) [V]	255
Nominal voltage AC 50-60 Hz - Un [V]	230
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (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- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
TOV 5s (LV systems, withstand)- Ut(L-N) [V]	337
TOV 120min (LV systems, fail safe)- Ut(L-N) [V]	442.5
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

K2-2PG275-M

44020201

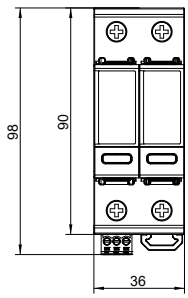
SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

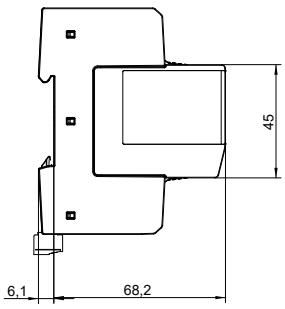
Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	275
Maximum continuous operating voltage - MCOV (L-G) [V]	275
Maximum continuous operating voltage - MCOV (N-G) [V]	305
Voltage protection rating - VPR (L-N) [V]	1000
Voltage protection rating - VPR (L-G) [V]	1500
Voltage protection rating - VPR (N-G) [V]	900
Short-Circuit Current Rating-SCCR [kA]	85

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
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…35mm²
Stranded conductor cross section	1,5…25mm²
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

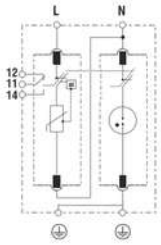
DIMENSIONS AND WEIGHT





Net Weight [kg]	0.242
Gross weight [kg]	0.272
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020001	K2-275
Neutral (N-PE)	44020000	K2-N

DATASHEET

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Power Line SPDs

K2-2P275

44020202



Surge protection device Type 2, Imax 50 kA, Uc 275 Vac, 2+0 for 230V TNS systems, pluggable

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	275
Nominal voltage AC 50-60 Hz - Un [V]	230
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	337
TOV 120min (LV systems, fail safe)- Ut [V]	442.5
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	550
Maximum continuous operating voltage - MCOV (L-G) [V]	275
Maximum continuous operating voltage - MCOV (N-G) [V]	275
Voltage protection rating - VPR (L-N) [V]	1800
Voltage protection rating - VPR (L-G) [V]	1000
Voltage protection rating - VPR (N-G) [V]	1000
Short-Circuit Current Rating-SCCR [kA]	85

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Power Line SPDs

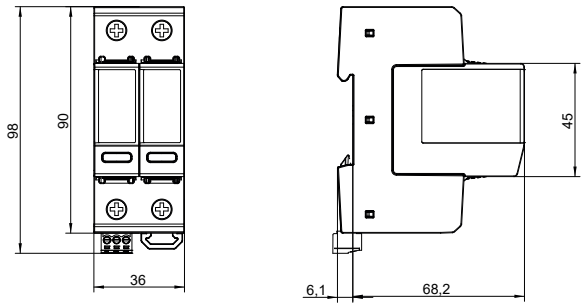
K2-2P275

44020202

MECHANICAL AND ENVIRONMENTAL FEATURES

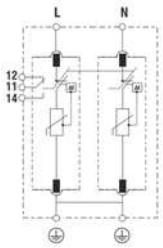
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.242
Gross weight [kg]	0.272
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020001	K2-275

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Power Line SPDs

K2-2P275-M

44020203



Surge protection device Type 2, Imax 50 kA, Uc 275 Vac, 2+0 for 230V TNS systems, pluggable, with Microswitch

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	275
Nominal voltage AC 50-60 Hz - Un [V]	230
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	337
TOV 120min (LV systems, fail safe)- Ut [V]	442.5
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	550
Maximum continuous operating voltage - MCOV (L-G) [V]	275
Maximum continuous operating voltage - MCOV (N-G) [V]	275
Voltage protection rating - VPR (L-N) [V]	1800
Voltage protection rating - VPR (L-G) [V]	1000
Voltage protection rating - VPR (N-G) [V]	1000
Short-Circuit Current Rating-SCCR [kA]	85

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Power Line SPDs

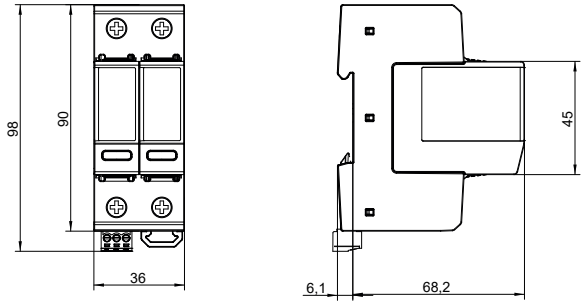
K2-2P275-M

44020203

MECHANICAL AND ENVIRONMENTAL FEATURES

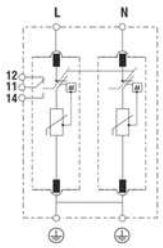
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.242
Gross weight [kg]	0.272
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020001	K2-275

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Power Line SPDs

K2-2PG320

44020208



Surge protection device Type 2, Imax 50 kA, Uc 320 Vac, 1+1 for 277V TT, TNS systems, pluggable

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

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]	277
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (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- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

K2-2PG320

44020208

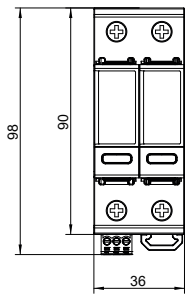
SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

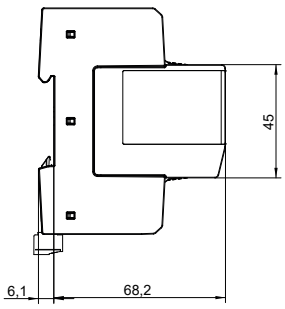
Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	320
Maximum continuous operating voltage - MCOV (L-G) [V]	320
Maximum continuous operating voltage - MCOV (N-G) [V]	305
Voltage protection rating - VPR (L-N) [V]	1200
Voltage protection rating - VPR (L-G) [V]	1500
Voltage protection rating - VPR (N-G) [V]	900
Short-Circuit Current Rating-SCCR [kA]	100

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-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…35mm²
Stranded conductor cross section	1,5…25mm²
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

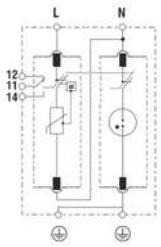
DIMENSIONS AND WEIGHT





Net Weight [kg]	0.232
Gross weight [kg]	0.256
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020003	K2-320
Neutral (N-PE)	44020000	K2-N

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Power Line SPDs

K2-2PG320-M

44020209



Surge protection device Type 2, Imax 50 kA, Uc 320 Vac, 1+1 for 277V TT, TNS systems, pluggable, with Microswitch

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

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]	277
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (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- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

K2-2PG320-M

44020209

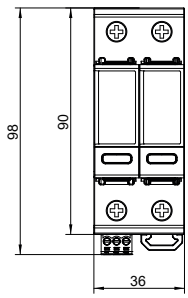
SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

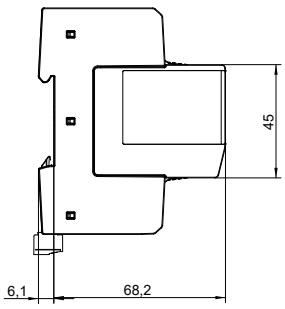
Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	320
Maximum continuous operating voltage - MCOV (L-G) [V]	320
Maximum continuous operating voltage - MCOV (N-G) [V]	305
Voltage protection rating - VPR (L-N) [V]	1200
Voltage protection rating - VPR (L-G) [V]	1500
Voltage protection rating - VPR (N-G) [V]	900
Short-Circuit Current Rating-SCCR [kA]	100

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
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…35mm²
Stranded conductor cross section	1,5…25mm²
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

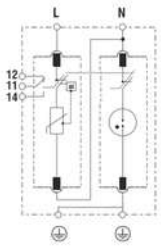
DIMENSIONS AND WEIGHT





Net Weight [kg]	0.232
Gross weight [kg]	0.256
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020003	K2-320
Neutral (N-PE)	44020000	K2-N

DATASHEET

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Power Line SPDs

K2-2P320

44020210



Surge protection device Type 2, Imax 50 kA, Uc 320 Vac, 2+0 for 277V TNS systems, pluggable

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	320
Nominal voltage AC 50-60 Hz - Un [V]	277
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

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
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]	100

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Power Line SPDs

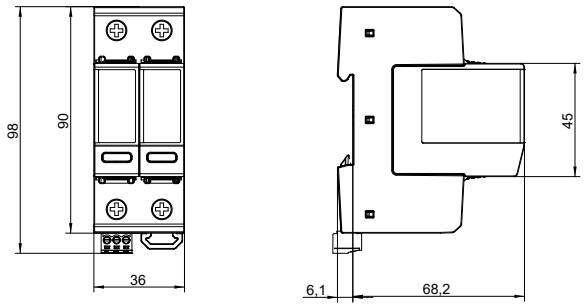
K2-2P320

44020210

MECHANICAL AND ENVIRONMENTAL FEATURES

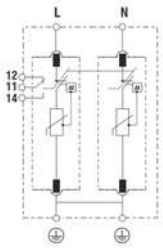
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.232
Gross weight [kg]	0.256
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020003	K2-320

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Power Line SPDs

K2-2P320-M

44020211



Surge protection device Type 2, Imax 50 kA, Uc 320 Vac, 2+0 for 277V TNS systems, pluggable, with Microswitch

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	320
Nominal voltage AC 50-60 Hz - Un [V]	277
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

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
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]	100

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Power Line SPDs

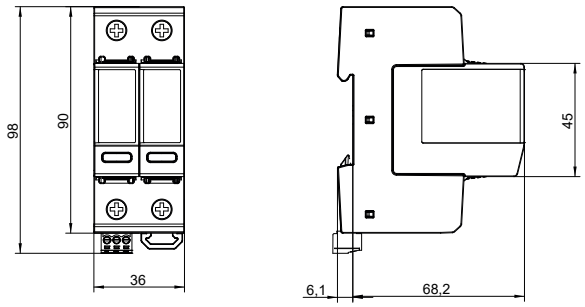
K2-2P320-M

44020211

MECHANICAL AND ENVIRONMENTAL FEATURES

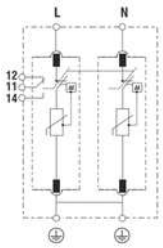
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.232
Gross weight [kg]	0.256
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020003	K2-320

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Power Line SPDs

K2-2PG440

44020216



Surge protection device Type 2, Imax 50 kA, Uc 440 Vac, 1+1 for 400V TT, TNS systems, pluggable

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc (L-N) [V]	440
Maximum continuous operating voltage (AC) - Uc (N-PE) [V]	440
Nominal voltage AC 50-60 Hz - Un [V]	400
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (N-PE) [kA]	50
Voltage protection level at In - Up (L-N) [kV]	≤2
Voltage protection level at In - Up (L-PE) [kV]	≤2,5
Voltage protection level at In - Up (N-PE) [kV]	≤2
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
TOV 5s (LV systems, withstand)- Ut(L-N) [V]	581
TOV 120min (LV systems, fail safe)- Ut(L-N) [V]	763
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

K2-2PG440

44020216

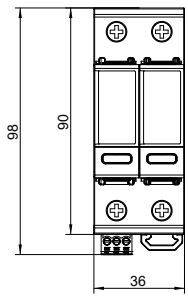
SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

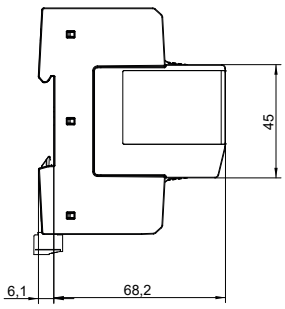
Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	440
Maximum continuous operating voltage - MCOV (L-G) [V]	440
Maximum continuous operating voltage - MCOV (N-G) [V]	440
Voltage protection rating - VPR (L-N) [V]	1500
Voltage protection rating - VPR (L-G) [V]	2000
Voltage protection rating - VPR (N-G) [V]	1000
Short-Circuit Current Rating-SCCR [kA]	42

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-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…35mm²
Stranded conductor cross section	1,5…25mm²
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

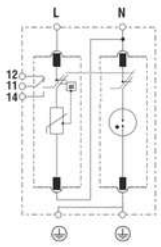
DIMENSIONS AND WEIGHT





Net Weight [kg]	0.223
Gross weight [kg]	0.252
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020005	K2-440
Neutral (N-PE)	44020013	K2-N440

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Power Line SPDs

K2-2PG440-M

44020217



Surge protection device Type 2, Imax 50 kA, Uc 440 Vac, 1+1 for 400V TT, TNS systems, pluggable, with Microswitch

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc (L-N) [V]	440
Maximum continuous operating voltage (AC) - Uc (N-PE) [V]	440
Nominal voltage AC 50-60 Hz - Un [V]	400
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (N-PE) [kA]	50
Voltage protection level at In - Up (L-N) [kV]	≤2
Voltage protection level at In - Up (L-PE) [kV]	≤2,5
Voltage protection level at In - Up (N-PE) [kV]	≤2
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
TOV 5s (LV systems, withstand)- Ut(L-N) [V]	581
TOV 120min (LV systems, fail safe)- Ut(L-N) [V]	763
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

K2-2PG440-M

44020217

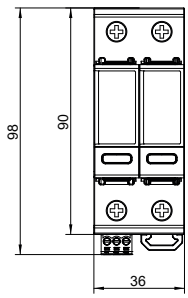
SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

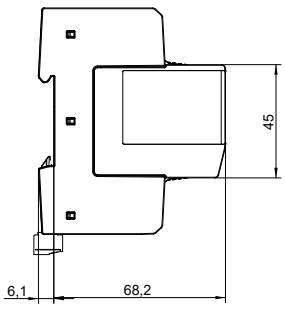
Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	440
Maximum continuous operating voltage - MCOV (L-G) [V]	440
Maximum continuous operating voltage - MCOV (N-G) [V]	440
Voltage protection rating - VPR (L-N) [V]	1500
Voltage protection rating - VPR (L-G) [V]	2000
Voltage protection rating - VPR (N-G) [V]	1000
Short-Circuit Current Rating-SCCR [kA]	42

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
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…35mm²
Stranded conductor cross section	1,5…25mm²
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

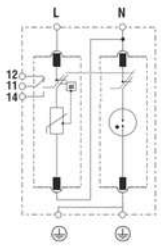
DIMENSIONS AND WEIGHT





Net Weight [kg]	0.223
Gross weight [kg]	0.252
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020005	K2-440
Neutral (N-PE)	44020013	K2-N440

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Power Line SPDs

K2-2P440

44020218



Surge protection device Type 2, Imax 50 kA, Uc 440 Vac, 2+0 for 400V TNS systems, pluggable

GENERAL DATA

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

[1] *Also suitable for 230V IT network configuration.*

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	440
Nominal voltage AC 50-60 Hz - Un [V]	400
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤2
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	581
TOV 120min (LV systems, fail safe)- Ut [V]	763
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	880
Maximum continuous operating voltage - MCOV (L-G) [V]	440
Maximum continuous operating voltage - MCOV (N-G) [V]	440
Voltage protection rating - VPR (L-N) [V]	2500
Voltage protection rating - VPR (L-G) [V]	1500
Voltage protection rating - VPR (N-G) [V]	1500
Short-Circuit Current Rating-SCCR [kA]	42

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Power Line SPDs

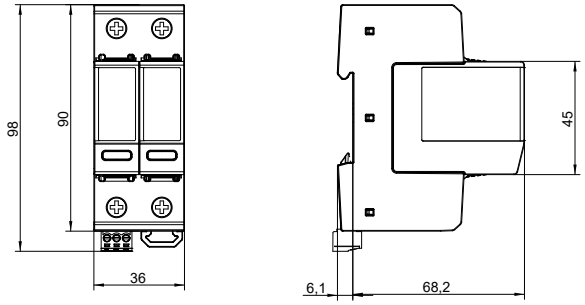
K2-2P440

44020218

MECHANICAL AND ENVIRONMENTAL FEATURES

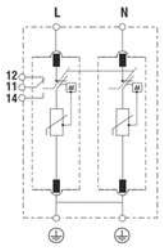
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.223
Gross weight [kg]	0.252
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020005	K2-440

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Power Line SPDs

K2-2P440-M

44020219



Surge protection device Type 2, Imax 50 kA, Uc 440 Vac, 2+0 for 400V TNS systems, pluggable, with Microswitch

GENERAL DATA

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

[1] *Also suitable for 230V IT network configuration.*

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	440
Nominal voltage AC 50-60 Hz - Un [V]	400
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤2
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	581
TOV 120min (LV systems, fail safe)- Ut [V]	763
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-N) [V]	880
Maximum continuous operating voltage - MCOV (L-G) [V]	440
Maximum continuous operating voltage - MCOV (N-G) [V]	440
Voltage protection rating - VPR (L-N) [V]	2500
Voltage protection rating - VPR (L-G) [V]	1500
Voltage protection rating - VPR (N-G) [V]	1500
Short-Circuit Current Rating-SCCR [kA]	42

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Power Line SPDs

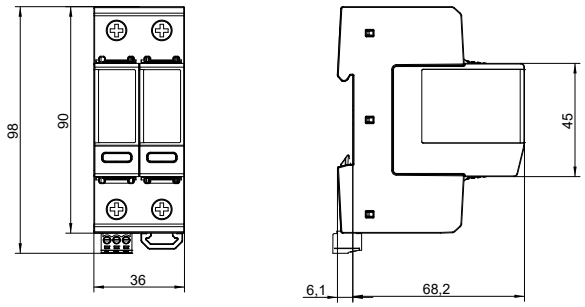
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44020219

MECHANICAL AND ENVIRONMENTAL FEATURES

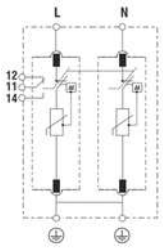
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.223
Gross weight [kg]	0.252
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020005	K2-440

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Power Line SPDs

K2-2PG175

44020228



Surge protection device Type 2, Imax 50 kA, Uc 175 Vac, 1+1 for 120V TT, TNS systems, pluggable

GENERAL DATA

Internal configuration	1+1
No. Poles	2-Pole
No. DIN rail modules	2
Network configuration	TT, TNS
IEC SPD Type	Class II
EN SPD Type	Type 2
Format	Pluggable
Protection Modes	L-N / N-PE
Product standards	*EN IEC 61643-11

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc (L-N) [V]	175
Maximum continuous operating voltage (AC) - Uc (N-PE) [V]	255
Nominal voltage AC 50-60 Hz - Un [V]	120
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (N-PE) [kA]	50
Voltage protection level at In - Up (L-N) [kV]	≤1
Voltage protection level at In - Up (L-PE) [kV]	≤1,5
Voltage protection level at In - Up (N-PE) [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
TOV 5s (LV systems, withstand)- Ut(L-N) [V]	175
TOV 120min (LV systems, fail safe)- Ut(L-N) [V]	229
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

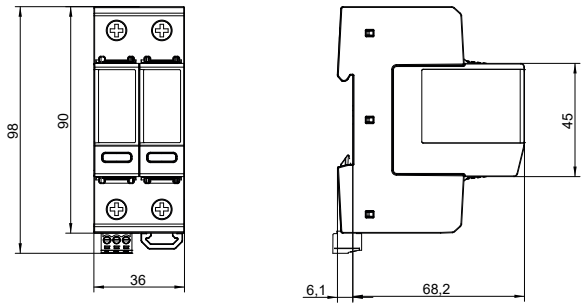
K2-2PG175

44020228

MECHANICAL AND ENVIRONMENTAL FEATURES

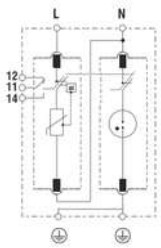
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.242
Gross weight [kg]	0.272
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020011	K2-175
Neutral (N-PE)	44020000	K2-N

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Power Line SPDs

K2-2PG175-M

44020229



Surge protection device Type 2, Imax 50 kA, Uc 175 Vac, 1+1 for 120V TT, TNS systems, pluggable, with Microswitch

GENERAL DATA

Internal configuration	1+1
No. Poles	2-Pole
No. DIN rail modules	2
Network configuration	TT, TNS
IEC SPD Type	Class II
EN SPD Type	Type 2
Format	Pluggable
Protection Modes	L-N / N-PE
Product standards	*EN IEC 61643-11

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc (L-N) [V]	175
Maximum continuous operating voltage (AC) - Uc (N-PE) [V]	255
Nominal voltage AC 50-60 Hz - Un [V]	120
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (N-PE) [kA]	50
Voltage protection level at In - Up (L-N) [kV]	≤1
Voltage protection level at In - Up (L-PE) [kV]	≤1,5
Voltage protection level at In - Up (N-PE) [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
TOV 5s (LV systems, withstand)- Ut(L-N) [V]	175
TOV 120min (LV systems, fail safe)- Ut(L-N) [V]	229
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

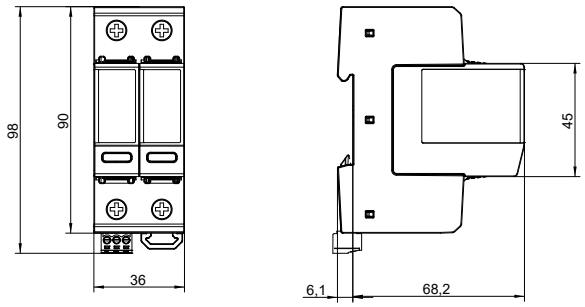
K2-2PG175-M

44020229

MECHANICAL AND ENVIRONMENTAL FEATURES

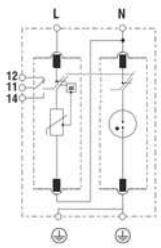
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.242
Gross weight [kg]	0.272
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020011	K2-175
Neutral (N-PE)	44020000	K2-N

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Power Line SPDs

K2-2P175

44020230



Surge protection device Type 2, Imax 50 kA, Uc 175 Vac, 2+0 for 120V TNS systems, pluggable

GENERAL DATA	
Internal configuration	2+0
No. Poles	2-Pole
No. DIN rail modules	2
Network configuration	TNS
IEC SPD Type	Class II
EN SPD Type	Type 2
Format	Pluggable
Protection Modes	L-PE / N-PE
Product standards	*EN IEC 61643-11

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES	
Maximum continuous operating voltage (AC) - Uc [V]	175
Nominal voltage AC 50-60 Hz - Un [V]	120
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	175
TOV 120min (LV systems, fail safe)- Ut [V]	229
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES	
Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

MECHANICAL AND ENVIRONMENTAL FEATURES	
Temperature range [ºC]	-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

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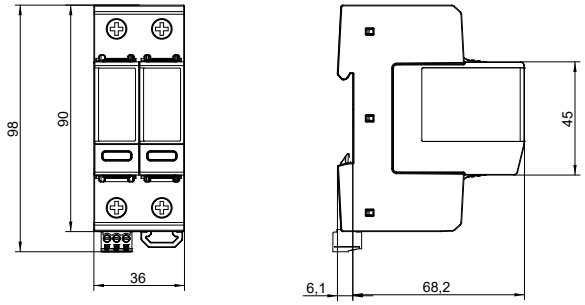
K2-2P175

44020230

Continue MECHANICAL AND ENVIRONMENTAL FEATURES

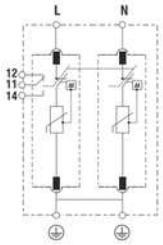
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
Torque rating [N m]	3
Remote indication conductor cross section [mm²]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.242
Gross weight [kg]	0.272
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020011	K2-175

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Power Line SPDs

K2-2P175-M

44020231



Surge protection device Type 2, Imax 50 kA, Uc 175 Vac, 2+0 for 120V TNS systems, pluggable, with Microswitch

GENERAL DATA

Internal configuration	2+0
No. Poles	2-Pole
No. DIN rail modules	2
Network configuration	TNS
IEC SPD Type	Class II
EN SPD Type	Type 2
Format	Pluggable
Protection Modes	L-PE / N-PE
Product standards	*EN IEC 61643-11

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	175
Nominal voltage AC 50-60 Hz - Un [V]	120
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	175
TOV 120min (LV systems, fail safe)- Ut [V]	229
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0

DATASHEET

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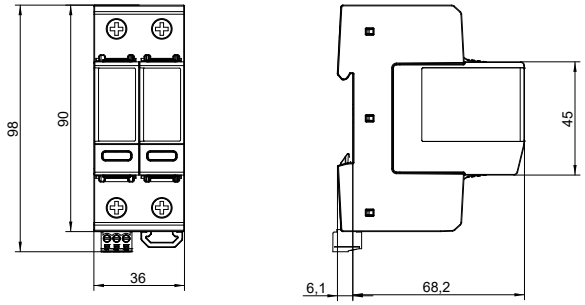
K2-2P175-M

44020231

Continue MECHANICAL AND ENVIRONMENTAL FEATURES

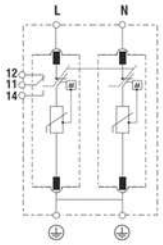
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
Torque rating [N m]	3
Remote indication conductor cross section [mm²]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.242
Gross weight [kg]	0.272
Packaging dimensions (H x W x L) [mm]	97 × 38 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020011	K2-175

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Power Line SPDs

K2-3P275

44020300



Surge protection device Type 2, Imax 50 kA, Uc 275 Vac, 3+0 for 230/400V TNC systems, pluggable

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	275
Nominal voltage AC 50-60 Hz - Un [V]	230/400
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	337
TOV 120min (LV systems, fail safe)- Ut [V]	442.5
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-L) [V]	550
Maximum continuous operating voltage - MCOV (L-G) [V]	275
Voltage protection rating - VPR (L-L) [V]	1800
Voltage protection rating - VPR (L-G) [V]	1000
Short-Circuit Current Rating-SCCR [kA]	85

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Power Line SPDs

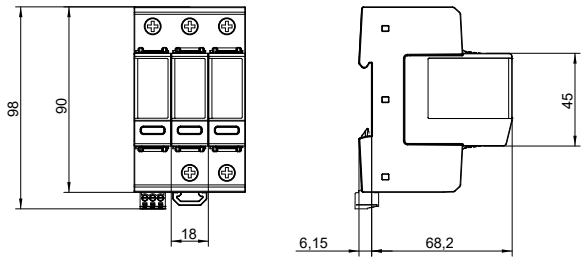
K2-3P275

44020300

MECHANICAL AND ENVIRONMENTAL FEATURES

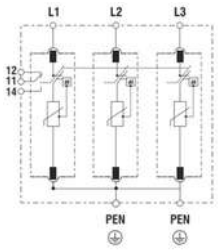
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.362
Gross weight [kg]	0.397
Packaging dimensions (H x W x L) [mm]	97 × 59 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020001	K2-275

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Power Line SPDs

K2-3P275-M

44020301



Surge protection device Type 2, Imax 50 kA, Uc 275 Vac, 3+0 for 230/400V TNC systems, pluggable, with Microswitch

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	275
Nominal voltage AC 50-60 Hz - Un [V]	230/400
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	337
TOV 120min (LV systems, fail safe)- Ut [V]	442.5
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-L) [V]	550
Maximum continuous operating voltage - MCOV (L-G) [V]	275
Voltage protection rating - VPR (L-L) [V]	1800
Voltage protection rating - VPR (L-G) [V]	1000
Short-Circuit Current Rating-SCCR [kA]	85

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Power Line SPDs

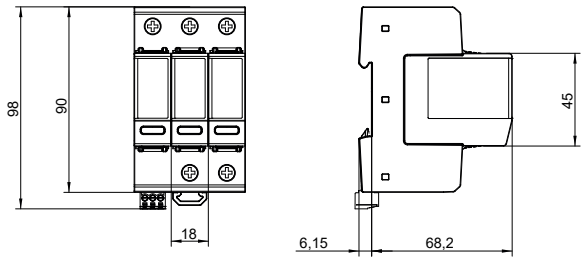
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44020301

MECHANICAL AND ENVIRONMENTAL FEATURES

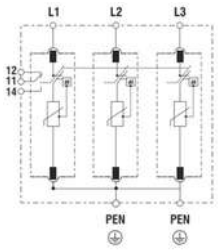
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.362
Gross weight [kg]	0.397
Packaging dimensions (H x W x L) [mm]	97 × 59 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020001	K2-275

DATASHEET

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Power Line SPDs

K2-3P320

44020304



Surge protection device Type 2, Imax 50 kA, Uc 320 Vac, 3+0 for 277/480V TNC systems, pluggable

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	320
Nominal voltage AC 50-60 Hz - Un [V]	277/480
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

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
Voltage protection rating - VPR (L-L) [V]	2000
Voltage protection rating - VPR (L-G) [V]	1200
Short-Circuit Current Rating-SCCR [kA]	100

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Power Line SPDs

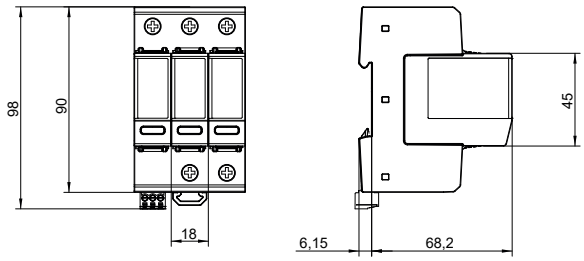
K2-3P320

44020304

MECHANICAL AND ENVIRONMENTAL FEATURES

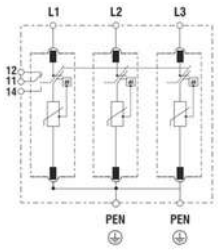
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.378
Gross weight [kg]	0.402
Packaging dimensions (H x W x L) [mm]	97 × 59 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020003	K2-320

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Power Line SPDs

K2-3P320-M

44020305



Surge protection device Type 2, Imax 50 kA, Uc 320 Vac, 3+0 for 277/480V TNC systems, pluggable, with Microswitch

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	320
Nominal voltage AC 50-60 Hz - Un [V]	277/480
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

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
Voltage protection rating - VPR (L-L) [V]	2000
Voltage protection rating - VPR (L-G) [V]	1200
Short-Circuit Current Rating-SCCR [kA]	100

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Power Line SPDs

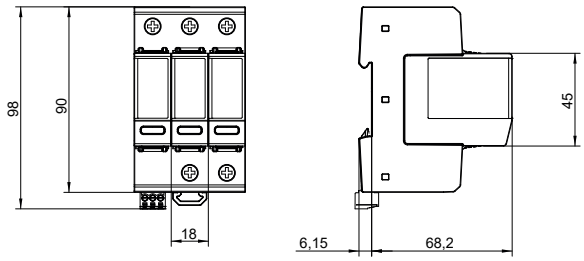
K2-3P320-M

44020305

MECHANICAL AND ENVIRONMENTAL FEATURES

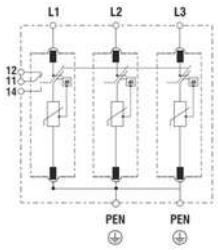
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.378
Gross weight [kg]	0.402
Packaging dimensions (H x W x L) [mm]	97 × 59 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020003	K2-320

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Power Line SPDs

K2-3P440

44020308



Surge protection device Type 2, Imax 50 kA, Uc 440 Vac, 3+0 for 400/690V TNC systems, pluggable

GENERAL DATA

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

[1] Also suitable for -/400V IT network configuration.

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	440
Nominal voltage AC 50-60 Hz - Un [V]	400/690
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤2
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	581
TOV 120min (LV systems, fail safe)- Ut [V]	763
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-L) [V]	880
Maximum continuous operating voltage - MCOV (L-G) [V]	440
Voltage protection rating - VPR (L-L) [V]	2500
Voltage protection rating - VPR (L-G) [V]	1500
Short-Circuit Current Rating-SCCR [kA]	42

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Power Line SPDs

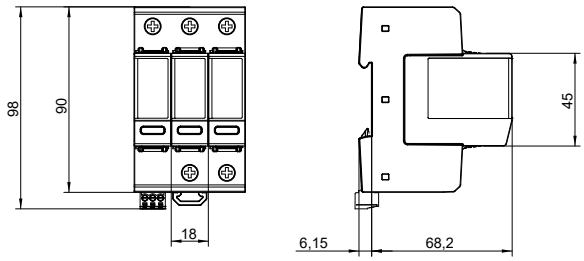
K2-3P440

44020308

MECHANICAL AND ENVIRONMENTAL FEATURES

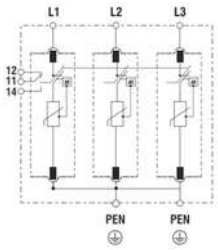
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.391
Gross weight [kg]	0.415
Packaging dimensions (H x W x L) [mm]	97 × 59 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020005	K2-440

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Power Line SPDs

K2-3P440-M

44020309



Surge protection device Type 2, Imax 50 kA, Uc 440 Vac, 3+0 for 400/690V TNC systems, pluggable, with Microswitch

GENERAL DATA

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

[1] Also suitable for -/400V IT network configuration.

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	440
Nominal voltage AC 50-60 Hz - Un [V]	400/690
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤2
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	581
TOV 120min (LV systems, fail safe)- Ut [V]	763
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-L) [V]	880
Maximum continuous operating voltage - MCOV (L-G) [V]	440
Voltage protection rating - VPR (L-L) [V]	2500
Voltage protection rating - VPR (L-G) [V]	1500
Short-Circuit Current Rating-SCCR [kA]	42

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Power Line SPDs

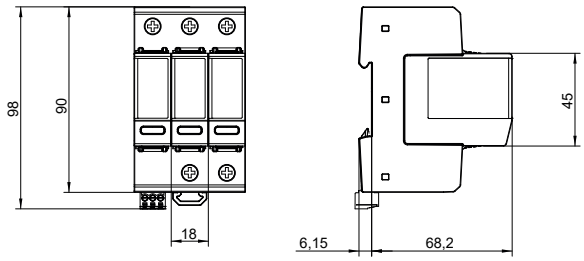
K2-3P440-M

44020309

MECHANICAL AND ENVIRONMENTAL FEATURES

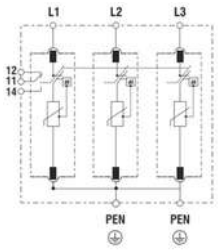
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.391
Gross weight [kg]	0.415
Packaging dimensions (H x W x L) [mm]	97 × 59 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020005	K2-440

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Power Line SPDs

K2-3P175

44020324



Surge protection device Type 2, Imax 50 kA, Uc 175 Vac, 3+0 for 120/208V TNC systems, pluggable

GENERAL DATA

Internal configuration	3+0
No. Poles	3-Pole
No. DIN rail modules	3
Network configuration	TNC
IEC SPD Type	Class II
EN SPD Type	Type 2
Format	Pluggable
Protection Modes	L-PE(N)
Product standards	*EN IEC 61643-11

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	175
Nominal voltage AC 50-60 Hz - Un [V]	120/208
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	175
TOV 120min (LV systems, fail safe)- Ut [V]	229
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-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

DATASHEET

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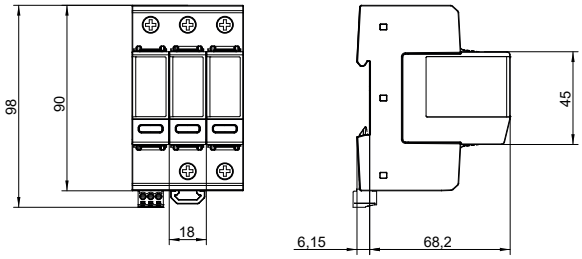
K2-3P175

44020324

Continue MECHANICAL AND ENVIRONMENTAL FEATURES

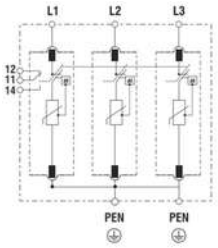
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
Torque rating [N m]	3
Remote indication conductor cross section [mm²]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.362
Gross weight [kg]	0.397
Packaging dimensions (H x W x L) [mm]	97 × 59 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020011	K2-175

DATASHEET

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Power Line SPDs

K2-3P175-M

44020325



Surge protection device Type 2, Imax 50 kA, Uc 175 Vac, 3+0 for 120/208V TNC systems, pluggable, with Microswitch

GENERAL DATA

Internal configuration	3+0
No. Poles	3-Pole
No. DIN rail modules	3
Network configuration	TNC
IEC SPD Type	Class II
EN SPD Type	Type 2
Format	Pluggable
Protection Modes	L-PE(N)
Product standards	*EN IEC 61643-11

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	175
Nominal voltage AC 50-60 Hz - Un [V]	120/208
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	175
TOV 120min (LV systems, fail safe)- Ut [V]	229
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0

DATASHEET

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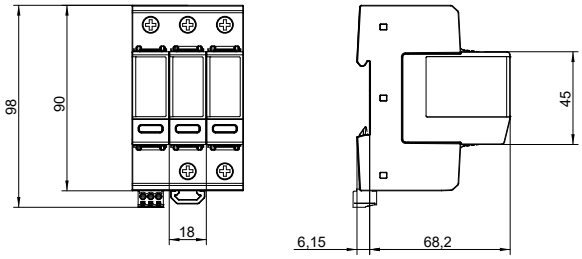
K2-3P175-M

44020325

Continue MECHANICAL AND ENVIRONMENTAL FEATURES

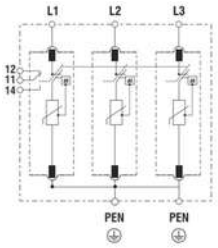
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
Torque rating [N m]	3
Remote indication conductor cross section [mm²]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.362
Gross weight [kg]	0.397
Packaging dimensions (H x W x L) [mm]	97 × 59 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020011	K2-175

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Power Line SPDs

K2-4PG275

44020400



Surge protection device Type 2, Imax 50 kA, Uc 275 Vac, 3+1 for 230/400V TT, TNS systems, pluggable

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc (L-N) [V]	275
Maximum continuous operating voltage (AC) - Uc (N-PE) [V]	255
Nominal voltage AC 50-60 Hz - Un [V]	230/400
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (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- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
TOV 5s (LV systems, withstand)- Ut(L-N) [V]	337
TOV 120min (LV systems, fail safe)- Ut(L-N) [V]	442.5
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

K2-4PG275

44020400

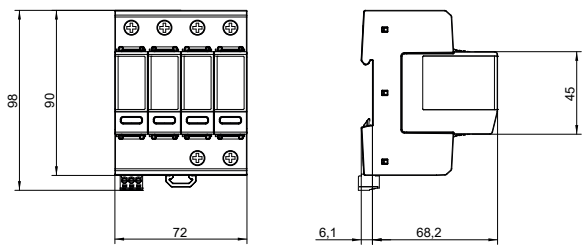
SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-L) [V]	550
Maximum continuous operating voltage - MCOV (L-N) [V]	275
Maximum continuous operating voltage - MCOV (L-G) [V]	275
Maximum continuous operating voltage - MCOV (N-G) [V]	305
Voltage protection rating - VPR (L-L) [V]	1800
Voltage protection rating - VPR (L-N) [V]	1000
Voltage protection rating - VPR (L-G) [V]	1500
Voltage protection rating - VPR (N-G) [V]	900
Short-Circuit Current Rating-SCCR [kA]	85

MECHANICAL AND ENVIRONMENTAL FEATURES

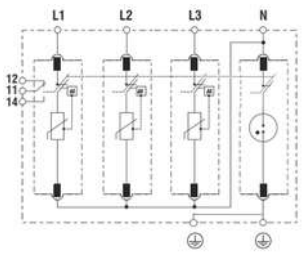
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.429
Gross weight [kg]	0.474
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020001	K2-275
Neutral (N-PE)	44020000	K2-N

DATASHEET

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Power Line SPDs

K2-4PG275-M

44020401



Surge protection device Type 2, Imax 50 kA, Uc 275 Vac, 3+1 for 230/400V TT, TNS systems, pluggable, with Microswitch

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc (L-N) [V]	275
Maximum continuous operating voltage (AC) - Uc (N-PE) [V]	255
Nominal voltage AC 50-60 Hz - Un [V]	230/400
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (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- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
TOV 5s (LV systems, withstand)- Ut(L-N) [V]	337
TOV 120min (LV systems, fail safe)- Ut(L-N) [V]	442.5
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

K2-4PG275-M

44020401

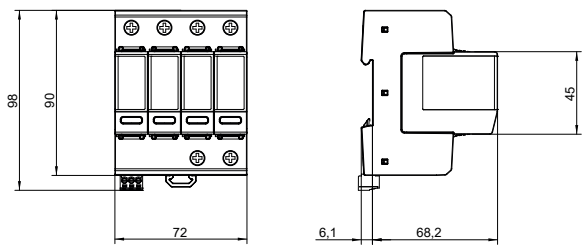
SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-L) [V]	550
Maximum continuous operating voltage - MCOV (L-N) [V]	275
Maximum continuous operating voltage - MCOV (L-G) [V]	275
Maximum continuous operating voltage - MCOV (N-G) [V]	305
Voltage protection rating - VPR (L-L) [V]	1800
Voltage protection rating - VPR (L-N) [V]	1000
Voltage protection rating - VPR (L-G) [V]	1500
Voltage protection rating - VPR (N-G) [V]	900
Short-Circuit Current Rating-SCCR [kA]	85

MECHANICAL AND ENVIRONMENTAL FEATURES

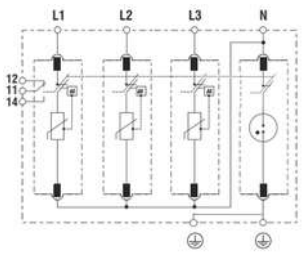
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.429
Gross weight [kg]	0.474
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020001	K2-275
Neutral (N-PE)	44020000	K2-N

DATASHEET

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Power Line SPDs

K2-4P275

44020404



Surge protection device Type 2, Imax 50 kA, Uc 275 Vac, 4+0 for 230/400V TNS systems, pluggable

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	275
Nominal voltage AC 50-60 Hz - Un [V]	230/400
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	337
TOV 120min (LV systems, fail safe)- Ut [V]	442.5
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-L) [V]	550
Maximum continuous operating voltage - MCOV (L-N) [V]	550
Maximum continuous operating voltage - MCOV (L-G) [V]	275
Maximum continuous operating voltage - MCOV (N-G) [V]	275
Voltage protection rating - VPR (L-L) [V]	1800
Voltage protection rating - VPR (L-N) [V]	1800
Voltage protection rating - VPR (L-G) [V]	1000

DATASHEET

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K2-4P275

44020404

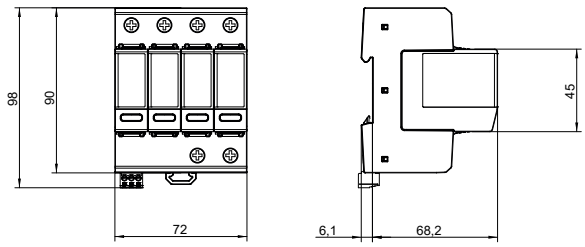
Continue SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Voltage protection rating - VPR (N-G) [V]	1000
Short-Circuit Current Rating-SCCR [kA]	85

MECHANICAL AND ENVIRONMENTAL FEATURES

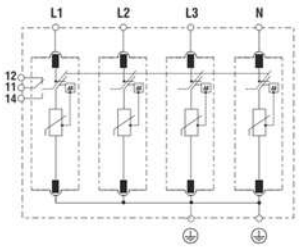
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.435
Gross weight [kg]	0.48
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020001	K2-275

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Power Line SPDs

K2-4P275-M

44020405



Surge protection device Type 2, Imax 50 kA, Uc 275 Vac, 4+0 for 230/400V TNS systems, pluggable, with Microswitch

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES	
Maximum continuous operating voltage (AC) - Uc [V]	275
Nominal voltage AC 50-60 Hz - Un [V]	230/400
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	337
TOV 120min (LV systems, fail safe)- Ut [V]	442.5
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES	
Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES	
Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-L) [V]	550
Maximum continuous operating voltage - MCOV (L-N) [V]	550
Maximum continuous operating voltage - MCOV (L-G) [V]	275
Maximum continuous operating voltage - MCOV (N-G) [V]	275
Voltage protection rating - VPR (L-L) [V]	1800
Voltage protection rating - VPR (L-N) [V]	1800
Voltage protection rating - VPR (L-G) [V]	1000

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K2-4P275-M

44020405

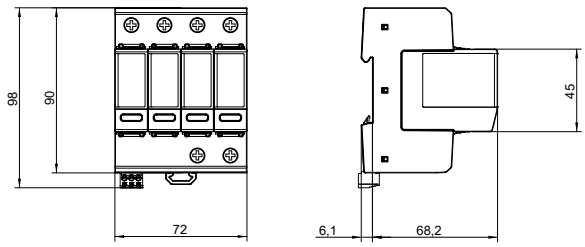
Continue SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Voltage protection rating - VPR (N-G) [V]	1000
Short-Circuit Current Rating-SCCR [kA]	85

MECHANICAL AND ENVIRONMENTAL FEATURES

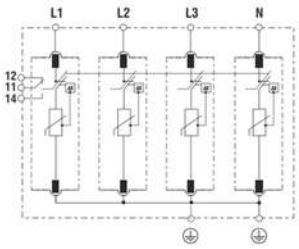
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.435
Gross weight [kg]	0.48
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020001	K2-275

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Power Line SPDs

K2-4PG320

44020408



Surge protection device Type 2, Imax 50 kA, Uc 320 Vac, 3+1 for 277/480V TT, TNS systems, pluggable

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

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]	277/480
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (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- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

K2-4PG320

44020408

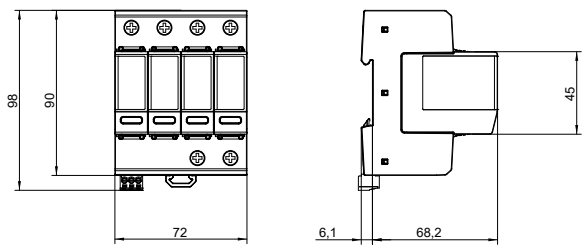
SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

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
Voltage protection rating - VPR (L-L) [V]	2000
Voltage protection rating - VPR (L-N) [V]	1200
Voltage protection rating - VPR (L-G) [V]	1500
Voltage protection rating - VPR (N-G) [V]	900
Short-Circuit Current Rating-SCCR [kA]	100

MECHANICAL AND ENVIRONMENTAL FEATURES

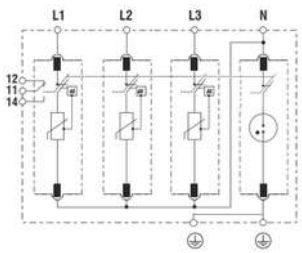
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.442
Gross weight [kg]	0.487
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020003	K2-320
Neutral (N-PE)	44020000	K2-N

DATASHEET

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Power Line SPDs

K2-4PG320-M

44020409



Surge protection device Type 2, Imax 50 kA, Uc 320 Vac, 3+1 for 277/480V TT, TNS systems, pluggable, with Microswitch

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

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]	277/480
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (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- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

K2-4PG320-M

44020409

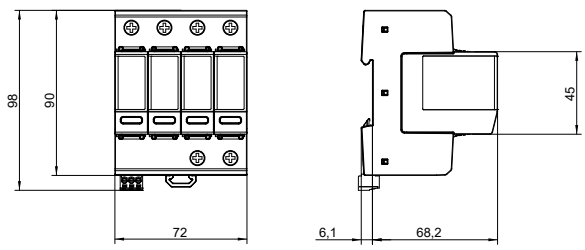
SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

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
Voltage protection rating - VPR (L-L) [V]	2000
Voltage protection rating - VPR (L-N) [V]	1200
Voltage protection rating - VPR (L-G) [V]	1500
Voltage protection rating - VPR (N-G) [V]	900
Short-Circuit Current Rating-SCCR [kA]	100

MECHANICAL AND ENVIRONMENTAL FEATURES

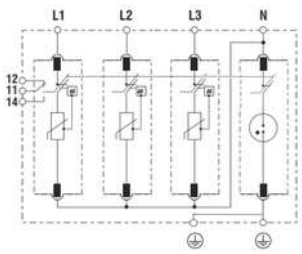
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.442
Gross weight [kg]	0.487
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020003	K2-320
Neutral (N-PE)	44020000	K2-N

DATASHEET

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Power Line SPDs

K2-4P320

44020412



Surge protection device Type 2, Imax 50 kA, Uc 320 Vac, 4+0 for 277/480V TNS systems, pluggable

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	320
Nominal voltage AC 50-60 Hz - Un [V]	277/480
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

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
Voltage protection rating - VPR (L-L) [V]	2000
Voltage protection rating - VPR (L-N) [V]	2000
Voltage protection rating - VPR (L-G) [V]	1200

DATASHEET

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K2-4P320

44020412

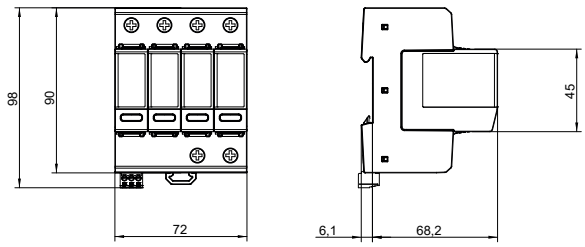
Continue SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Voltage protection rating - VPR (N-G) [V]	1200
Short-Circuit Current Rating-SCCR [kA]	100

MECHANICAL AND ENVIRONMENTAL FEATURES

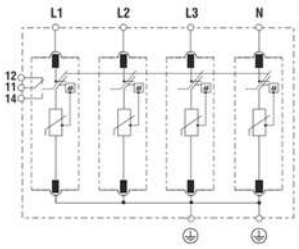
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.448
Gross weight [kg]	0.493
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020003	K2-320

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Power Line SPDs

K2-4P320-M

44020413



Surge protection device Type 2, Imax 50 kA, Uc 320 Vac, 4+0 for 277/480V TNS systems, pluggable, with Microswitch

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES	
Maximum continuous operating voltage (AC) - Uc [V]	320
Nominal voltage AC 50-60 Hz - Un [V]	277/480
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
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

ADDITIONAL TESTING – TECHNICAL FEATURES	
Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES	
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
Voltage protection rating - VPR (L-L) [V]	2000
Voltage protection rating - VPR (L-N) [V]	2000
Voltage protection rating - VPR (L-G) [V]	1200

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K2-4P320-M

44020413

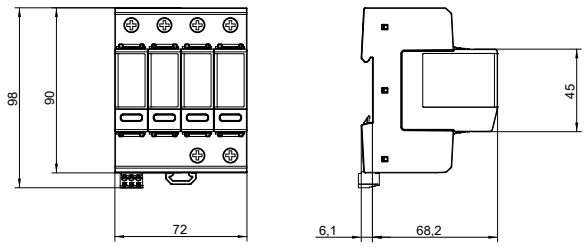
Continue SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Voltage protection rating - VPR (N-G) [V]	1200
Short-Circuit Current Rating-SCCR [kA]	100

MECHANICAL AND ENVIRONMENTAL FEATURES

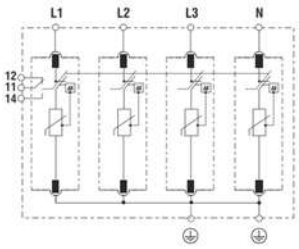
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.448
Gross weight [kg]	0.493
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020003	K2-320

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Power Line SPDs

K2-4PG440

44020416



Surge protection device Type 2, Imax 50 kA, Uc 440 Vac, 3+1 for 400/690V TT, TNS systems, pluggable

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc (L-N) [V]	440
Maximum continuous operating voltage (AC) - Uc (N-PE) [V]	440
Nominal voltage AC 50-60 Hz - Un [V]	400/690
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (N-PE) [kA]	50
Voltage protection level at In - Up (L-N) [kV]	≤2
Voltage protection level at In - Up (L-PE) [kV]	≤2,5
Voltage protection level at In - Up (N-PE) [kV]	≤2
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
TOV 5s (LV systems, withstand)- Ut(L-N) [V]	581
TOV 120min (LV systems, fail safe)- Ut(L-N) [V]	763
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

K2-4PG440

44020416

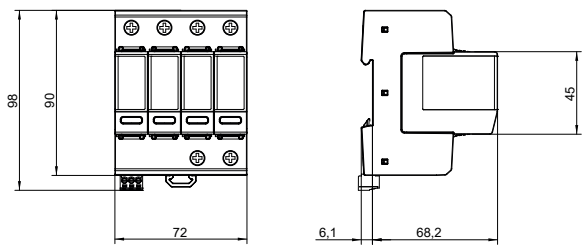
SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-L) [V]	880
Maximum continuous operating voltage - MCOV (L-N) [V]	440
Maximum continuous operating voltage - MCOV (L-G) [V]	440
Maximum continuous operating voltage - MCOV (N-G) [V]	440
Voltage protection rating - VPR (L-L) [V]	2500
Voltage protection rating - VPR (L-N) [V]	1500
Voltage protection rating - VPR (L-G) [V]	2000
Voltage protection rating - VPR (N-G) [V]	1000
Short-Circuit Current Rating-SCCR [kA]	42

MECHANICAL AND ENVIRONMENTAL FEATURES

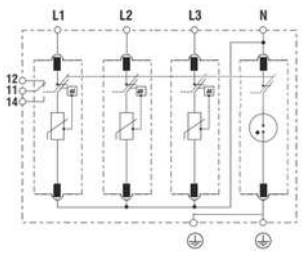
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.455
Gross weight [kg]	0.499
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020005	K2-440
Neutral (N-PE)	44020013	K2-N440

DATASHEET

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Power Line SPDs

K2-4PG440-M

44020417



Surge protection device Type 2, Imax 50 kA, Uc 440 Vac, 3+1 for 400/690V TT, TNS systems, pluggable, with Microswitch

GENERAL DATA

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

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc (L-N) [V]	440
Maximum continuous operating voltage (AC) - Uc (N-PE) [V]	440
Nominal voltage AC 50-60 Hz - Un [V]	400/690
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (N-PE) [kA]	50
Voltage protection level at In - Up (L-N) [kV]	≤2
Voltage protection level at In - Up (L-PE) [kV]	≤2,5
Voltage protection level at In - Up (N-PE) [kV]	≤2
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
TOV 5s (LV systems, withstand)- Ut(L-N) [V]	581
TOV 120min (LV systems, fail safe)- Ut(L-N) [V]	763
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

K2-4PG440-M

44020417

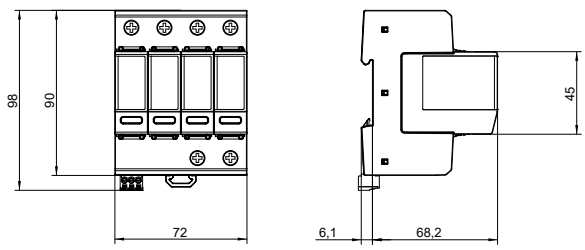
SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-L) [V]	880
Maximum continuous operating voltage - MCOV (L-N) [V]	440
Maximum continuous operating voltage - MCOV (L-G) [V]	440
Maximum continuous operating voltage - MCOV (N-G) [V]	440
Voltage protection rating - VPR (L-L) [V]	2500
Voltage protection rating - VPR (L-N) [V]	1500
Voltage protection rating - VPR (L-G) [V]	2000
Voltage protection rating - VPR (N-G) [V]	1000
Short-Circuit Current Rating-SCCR [kA]	42

MECHANICAL AND ENVIRONMENTAL FEATURES

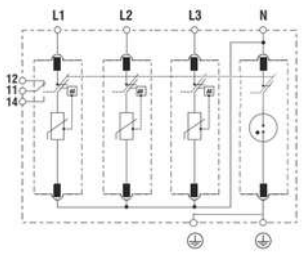
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.455
Gross weight [kg]	0.499
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020005	K2-440
Neutral (N-PE)	44020013	K2-N440

DATASHEET

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Power Line SPDs

K2-4P440

44020420



Surge protection device Type 2, Imax 50 kA, Uc 440 Vac, 4+0 for 400/690V TNS systems, pluggable

GENERAL DATA

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

[1] Also suitable for 230/400V IT network configuration.

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	440
Nominal voltage AC 50-60 Hz - Un [V]	400/690
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤2
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	581
TOV 120min (LV systems, fail safe)- Ut [V]	763
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-L) [V]	880
Maximum continuous operating voltage - MCOV (L-N) [V]	880
Maximum continuous operating voltage - MCOV (L-G) [V]	440
Maximum continuous operating voltage - MCOV (N-G) [V]	440
Voltage protection rating - VPR (L-L) [V]	2500
Voltage protection rating - VPR (L-N) [V]	2500
Voltage protection rating - VPR (L-G) [V]	1500

DATASHEET

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K2-4P440

44020420

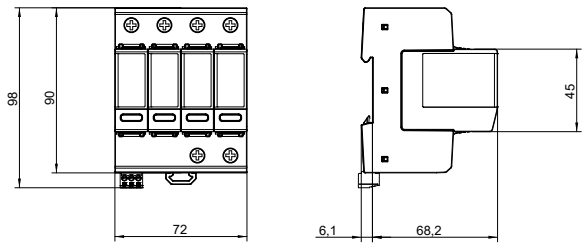
Continue SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Voltage protection rating - VPR (N-G) [V]	1500
Short-Circuit Current Rating-SCCR [kA]	42

MECHANICAL AND ENVIRONMENTAL FEATURES

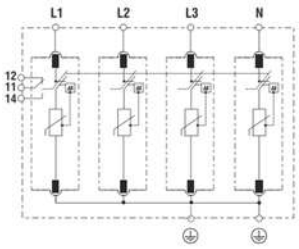
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.461
Gross weight [kg]	0.506
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020005	K2-440

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Power Line SPDs

K2-4P440-M

44020421



Surge protection device Type 2, Imax 50 kA, Uc 440 Vac, 4+0 for 400/690V TNS systems, pluggable, with Microswitch

GENERAL DATA

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

[1] Also suitable for 230/400V IT network configuration.

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	440
Nominal voltage AC 50-60 Hz - Un [V]	400/690
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤2
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	581
TOV 120min (LV systems, fail safe)- Ut [V]	763
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Nominal discharge current (8/20) - In [kA]	20
Maximum continuous operating voltage - MCOV (L-L) [V]	880
Maximum continuous operating voltage - MCOV (L-N) [V]	880
Maximum continuous operating voltage - MCOV (L-G) [V]	440
Maximum continuous operating voltage - MCOV (N-G) [V]	440
Voltage protection rating - VPR (L-L) [V]	2500
Voltage protection rating - VPR (L-N) [V]	2500
Voltage protection rating - VPR (L-G) [V]	1500

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K2-4P440-M

44020421

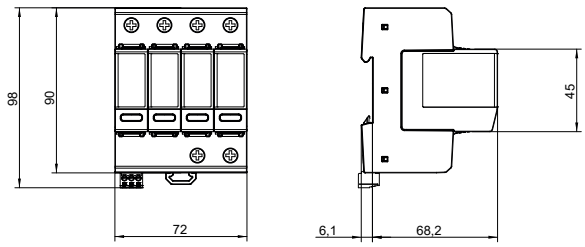
Continue SURGE PROTECTION DEVICE (SPD) - UL TECHNICAL FEATURES

Voltage protection rating - VPR (N-G) [V]	1500
Short-Circuit Current Rating-SCCR [kA]	42

MECHANICAL AND ENVIRONMENTAL FEATURES

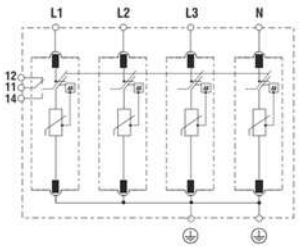
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.461
Gross weight [kg]	0.506
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020005	K2-440

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Power Line SPDs

K2-4PG175

44020426



Surge protection device Type 2, Imax 50 kA, Uc 175 Vac, 3+1 for 120/208V TT, TNS systems, pluggable

GENERAL DATA

Internal configuration	3+1
No. Poles	4-Pole
No. DIN rail modules	4
Network configuration	TT, TNS
IEC SPD Type	Class II
EN SPD Type	Type 2
Format	Pluggable
Protection Modes	L-N / N-PE
Product standards	*EN IEC 61643-11

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc (L-N) [V]	175
Maximum continuous operating voltage (AC) - Uc (N-PE) [V]	255
Nominal voltage AC 50-60 Hz - Un [V]	120/208
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (N-PE) [kA]	50
Voltage protection level at In - Up (L-N) [kV]	≤1
Voltage protection level at In - Up (L-PE) [kV]	≤1,5
Voltage protection level at In - Up (N-PE) [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
TOV 5s (LV systems, withstand)- Ut(L-N) [V]	175
TOV 120min (LV systems, fail safe)- Ut(L-N) [V]	229
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

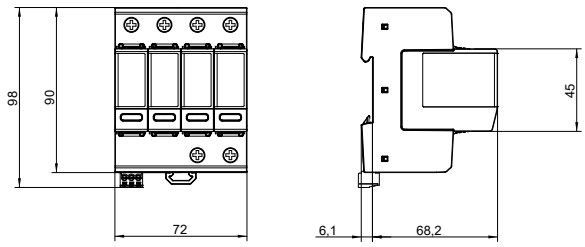
K2-4PG175

44020426

MECHANICAL AND ENVIRONMENTAL FEATURES

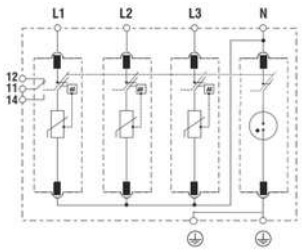
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace)
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.429
Gross weight [kg]	0.474
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020011	K2-175
Neutral (N-PE)	44020000	K2-N

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Power Line SPDs

K2-4PG175-M

44020427



Surge protection device Type 2, Imax 50 kA, Uc 175 Vac, 3+1 for 120/208V TT, TNS systems, pluggable, with Microswitch

GENERAL DATA

Internal configuration	3+1
No. Poles	4-Pole
No. DIN rail modules	4
Network configuration	TT, TNS
IEC SPD Type	Class II
EN SPD Type	Type 2
Format	Pluggable
Protection Modes	L-N / N-PE
Product standards	*EN IEC 61643-11

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc (L-N) [V]	175
Maximum continuous operating voltage (AC) - Uc (N-PE) [V]	255
Nominal voltage AC 50-60 Hz - Un [V]	120/208
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Max Discharge Current (8/20) - Imax (L-N) [kA]	50
Max Discharge Current (8/20) - Imax (N-PE) [kA]	50
Voltage protection level at In - Up (L-N) [kV]	≤1
Voltage protection level at In - Up (L-PE) [kV]	≤1,5
Voltage protection level at In - Up (N-PE) [kV]	≤1,5
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Following current - Ifi [A]	100
Residual current- Ipe [µA]	<10
Response time - tA (L-N) [ns]	≤25
Response time - tA (N-PE) [ns]	≤100
TOV 5s (LV systems, withstand)- Ut(L-N) [V]	175
TOV 120min (LV systems, fail safe)- Ut(L-N) [V]	229
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

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

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Power Line SPDs

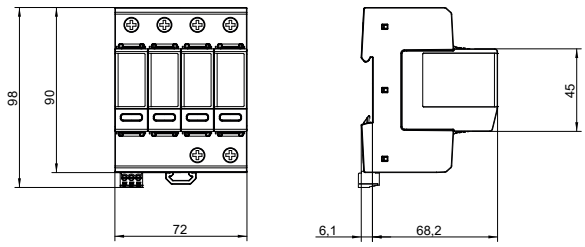
K2-4PG175-M

44020427

MECHANICAL AND ENVIRONMENTAL FEATURES

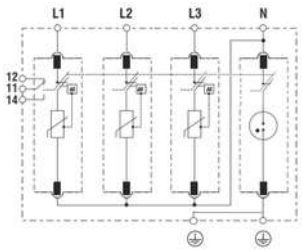
Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
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

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.429
Gross weight [kg]	0.474
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L-N)	44020011	K2-175
Neutral (N-PE)	44020000	K2-N

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Power Line SPDs

K2-4P175

44020428



Surge protection device Type 2, Imax 50 kA, Uc 175 Vac, 4+0 for 120/208V TNS systems, pluggable

GENERAL DATA

Internal configuration	4+0
No. Poles	4-Pole
No. DIN rail modules	4
Network configuration	TNS
IEC SPD Type	Class II
EN SPD Type	Type 2
Format	Pluggable
Protection Modes	L-PE / N-PE
Product standards	*EN IEC 61643-11

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	175
Nominal voltage AC 50-60 Hz - Un [V]	120/208
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	175
TOV 120min (LV systems, fail safe)- Ut [V]	229
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-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

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Power Line SPDs

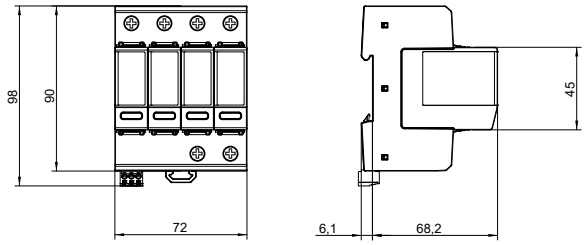
K2-4P175

44020428

Continue MECHANICAL AND ENVIRONMENTAL FEATURES

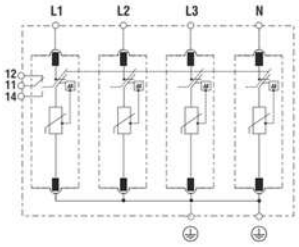
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
Torque rating [N m]	3
Remote indication conductor cross section [mm²]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.435
Gross weight [kg]	0.48
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020011	K2-175

DATASHEET

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Power Line SPDs

K2-4P175-M

44020429



Surge protection device Type 2, Imax 50 kA, Uc 175 Vac, 4+0 for 120/208V TNS systems, pluggable, with Microswitch

GENERAL DATA

Internal configuration	4+0
No. Poles	4-Pole
No. DIN rail modules	4
Network configuration	TNS
IEC SPD Type	Class II
EN SPD Type	Type 2
Format	Pluggable
Protection Modes	L-PE / N-PE
Product standards	*EN IEC 61643-11

SURGE PROTECTION DEVICE (SPD) - IEC TECHNICAL FEATURES

Maximum continuous operating voltage (AC) - Uc [V]	175
Nominal voltage AC 50-60 Hz - Un [V]	120/208
Nominal discharge current (8/20)- In [kA]	20
Max Discharge Current (8/20) - Imax [kA]	50
Voltage protection level at In - Up [kV]	≤1
Maximum back-up fuse [A [gG]]	315
Short circuit withstand- Isccr [kA]	25
Residual current- Ipe [mA]	<1
Response time - tA [ns]	≤25
TOV 5s (LV systems, withstand) - Ut [V]	175
TOV 120min (LV systems, fail safe)- Ut [V]	229
Dynamic thermal disconnection	Yes
Thermal protection behaviour	OCM (Open Circuit Mode)
No. of ports	1

ADDITIONAL TESTING – TECHNICAL FEATURES

Typical surge current (withstanding 200 impulses) - Ityp [kA]	5

MECHANICAL AND ENVIRONMENTAL FEATURES

Temperature range [ºC]	-40 ... 85
Humidity range [%]	5 ... 95
Max. Altitude [m]	4000
Indication System Type	Green (OK) / Not green (replace), Microswitch
Insulating material	PA6 CT1 & PA66 CT1
Housing color	Grey RAL 7035
Enclosure - IP	IP20
Flammability class	UL94 V-0

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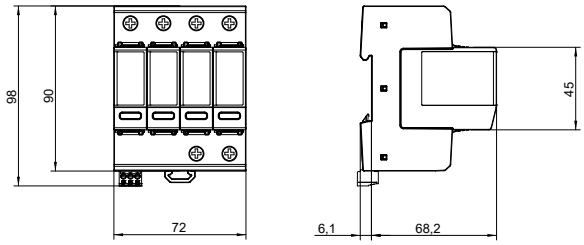
K2-4P175-M

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Continue MECHANICAL AND ENVIRONMENTAL FEATURES

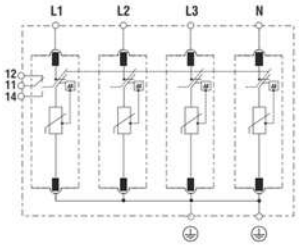
Solid conductor cross section	1,5…35mm²
Stranded conductor cross section	1,5…25mm²
Torque rating [N m]	3
Remote indication conductor cross section [mm²]	0.5 ... 1.5
Remote indication switching capacity [V/A]	AC: 250/0.5 DC: 30/1

DIMENSIONS AND WEIGHT



Net Weight [kg]	0.435
Gross weight [kg]	0.48
Packaging dimensions (H x W x L) [mm]	97 × 78 × 118

INTERNAL CONFIGURATION



REPLACEMENT CARTRIDGES

	Code	Description
Line (L)	44020011	K2-175

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