Type 3 surge protection device - BT-1S-230AC/A - 2803409

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Type 3 arrester for universal mounting in installation boxes, sill-type trunking, underfloor installations or directly in the termination device. Circuit with thermal monitoring, acoustic fault warning. Installation in branch or through wiring. Design: 230 V AC

RoHS

Key Commercial Data

Packing unit	10 pc
GTIN	4 046356 350976
GTIN	4046356350976
Weight per Piece (excluding packing)	27.350 g
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	43 mm
Width	22.5 mm
Depth	26.2 mm

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-30 °C ... 75 °C
Ambient temperature (storage/transport)	-30 °C ... 75 °C
Altitude	≤ 2000 m (amsl (above mean sea level))
Permissible humidity (operation)	5 % ... 95 %

General

EN type	T3
IEC power supply system	TN-S
	TT
	IT with N conductor

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Technical data

General

Number of ports	One
Mode of protection	L-N
	L-PE
	N-PE
Mounting type	Screw mounting
Color	jet black RAL 9005
Housing material	PA 6.6
Degree of pollution	2
Distance between live and grounded parts	3 mm
Flammability rating according to UL 94	V-0
Type	Installation module
Number of positions	2
Surge protection fault message	Acoustic

Protective circuit

Nominal voltage U_N	230/400 V AC (TN-S)
	230/400 V AC (TT - only in use with RCD)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous operating voltage U_C (L-N)	275 V AC
Maximum continuous operating voltage U_C (L-PE)	440 V AC
Maximum continuous operating voltage U_C (N-PE)	440 V AC
Rated load current I_L	16 A (30 °C)
Residual current I_{PE}	≤ 3 µA
Nominal discharge current I_n (8/20) µs	3 kA
Standby power consumption P_C	≤ 400 mVA
Reference test voltage U_{REF}	255 V AC
Max. discharge current I_{max} (8/20) µs	8 kA
Combination wave U_{OC}	6 kV
Voltage protection level U_p (L-N)	≤ 1.3 kV
Voltage protection level U_p (L-PE)	≤ 1.5 kV
Voltage protection level U_p (N-PE)	≤ 1.5 kV
TOV behavior at U_T (L-N)	335 V AC (5 s / withstand mode)
	440 V AC (120 min / safe failure mode)
TOV behavior at U_T (L-PE)	440 V AC (5 s / withstand mode)
	440 V AC (120 min / withstand mode)
	1455 V AC (200 ms / safe failure mode)
TOV behavior at U_T (N-PE)	1200 V AC (200 ms / safe failure mode)
Response time t_A (L-N)	≤ 25 ns
Response time t_A (L-PE)	≤ 100 ns
Max. required back-up fuse	16 A (MCB B)

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Protective circuit

Short-circuit current rating I_{SCCR}	1 kA AC
Max. backup fuse with branch wiring	16 A (MCB B)
Maximum backup fuse for through wiring	16 A (MCB B)

Connection data

Connection method	Spring-cage connection
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section solid	0.2 mm² ... 2.5 mm²
Conductor cross section AWG	24 ... 14
Stripping length	10 mm

Standards and Regulations

Standards/specifications	IEC 61643-11 2011
	EN 61643-11 2012

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

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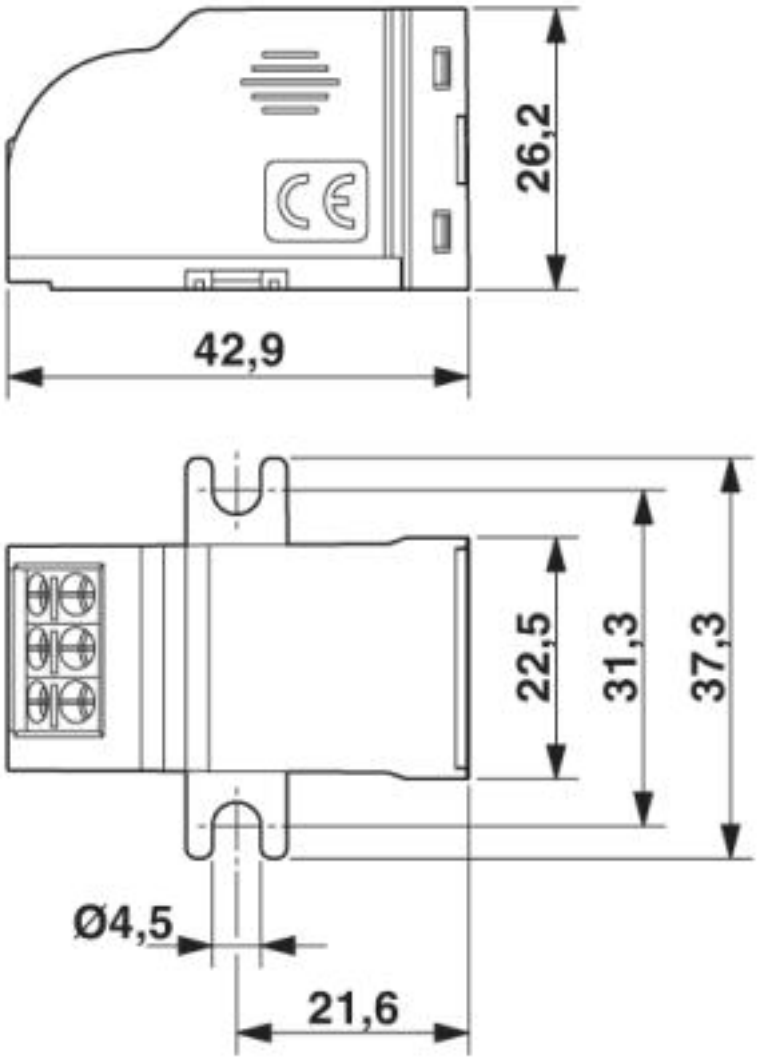
Dimensional drawing



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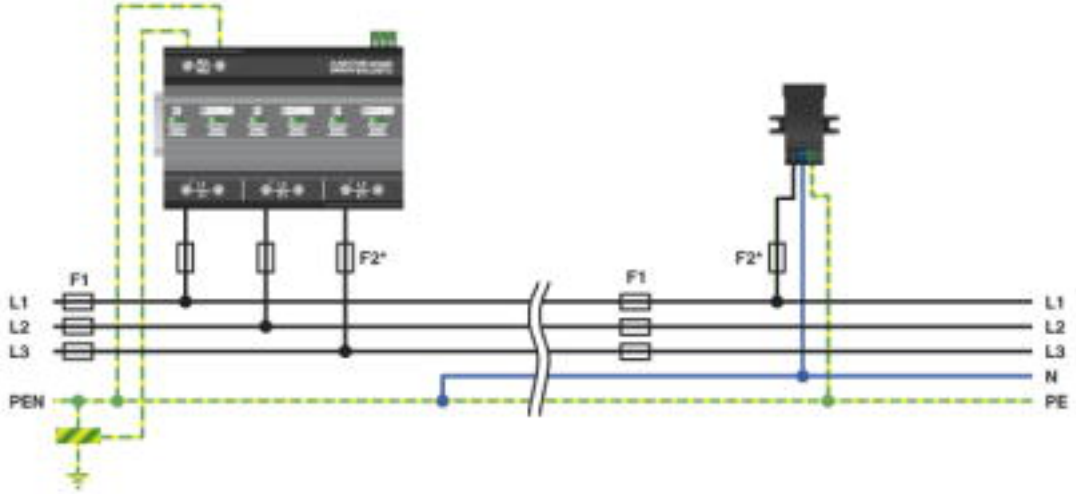
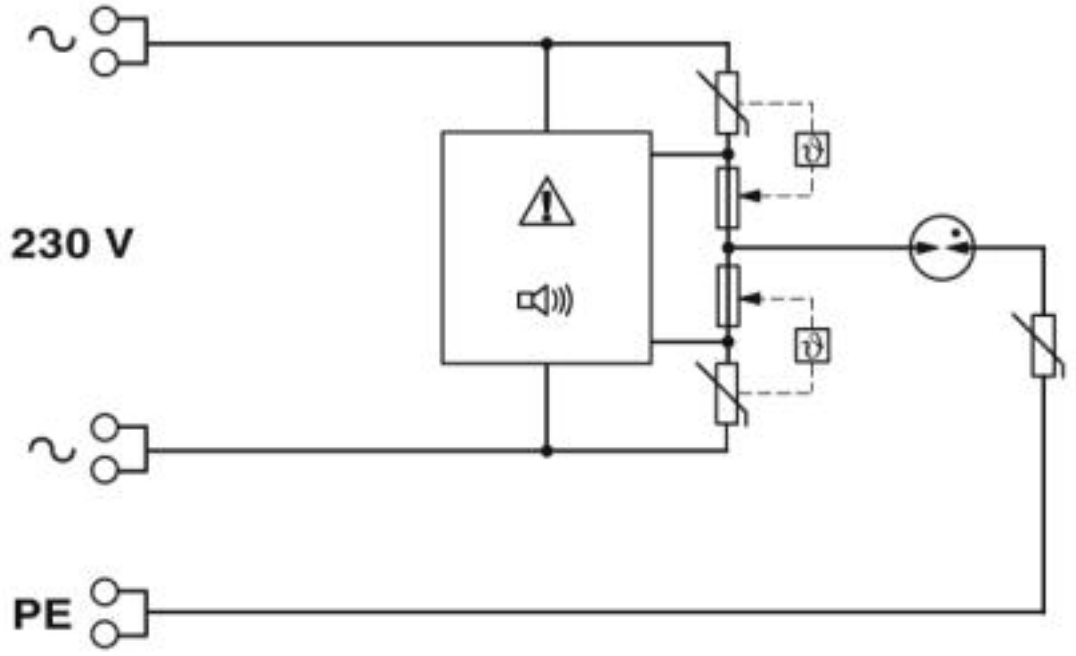
Application drawing



Circuit diagram



Classifications

eCl@ss

eCl@ss 4.0	27130800
eCl@ss 4.1	27130800
eCl@ss 5.0	27130800
eCl@ss 5.1	27130800
eCl@ss 6.0	27130800

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Classifications

eCl@ss

eCl@ss 7.0	27130806
eCl@ss 8.0	27130806
eCl@ss 9.0	27130806

ETIM

ETIM 2.0	EC000942
ETIM 3.0	EC000942
ETIM 4.0	EC000942
ETIM 5.0	EC000942
ETIM 6.0	EC000942
ETIM 7.0	EC000942

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620
UNSPSC 18.0	39121620
UNSPSC 19.0	39121620
UNSPSC 20.0	39121620
UNSPSC 21.0	39121620

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approval details

EAC	EAC	RU C-DE.A*30.B01561