

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



Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	13.333 GRM
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)	-25 °C ... 75 °C

General

Housing material	PA
Inflammability class according to UL 94	V0
Color	black
Standards for air and creepage distances	EN 60664-1
	IEC 60664-1
	IEC 61643-1
	EN 61643-11
Type	Installation module

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Technical data

General

Mounting type	Screw mounting
Number of positions	2
Direction of action	L(N)-PE

Protective circuit

IEC test classification	III
	T3
EN type	T3
Nominal voltage U_N	240 V AC
Arrester rated voltage U_C (L-N)	275 V AC
Arrester rated voltage U_C (L-PE)	440 V AC (4-conductor IT system)
Nominal frequency f_N	50 Hz
	60 Hz
Nominal current I_N	16 A (30 °C)
Residual current I_{PE}	$\leq 1 \mu A$
Nominal discharge current I_n (8/20) μs	3 kA
Nominal discharge current I_n (8/20) μs (L-N)	3 kA
Nominal discharge current I_n (8/20) μs (L-PE)	3 kA
Nominal discharge current I_n (8/20) μs (N-PE)	3 kA
Max. discharge current I_{max} (8/20) μs	8 kA (> 100x 1 kA)
Max. discharge current I_{max} (8/20) μs maximum (L-N)	8 kA (> 100x 1 kA)
Combined surge U_{OC}	6 kV
Energy absorption symmetrical	200 J (L-N (L))
Energy absorption, asymmetrical	230 J (L(N)-PE)
Voltage protection level U_p (L-N)	≤ 1.3 kV
	≤ 1 kV (at 1 kA (8/20 μs))
Response time t_A (L-N)	≤ 25 ns (L-N)
Response time t_A (L-PE)	≤ 100 ns (L, N-PE)
Max. required back-up fuse	16 A (gL/C/B)
Short-circuit resistance I_P with max. backup fuse (effective)	3 kA
Surge protection fault message	Acoustic

Non-heating apparatus connection, power supply

Connection method	Spring-cage connection
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section solid min.	0.2 mm ²

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Non-heating apparatus connection, power supply

Conductor cross section solid max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14

Standards and Regulations

Standards/specifications	EN 61643-11/A11 2007
	IEC 61643-1 2005

Classifications

eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130806
eCl@ss 7.0	27130806
eCl@ss 8.0	27130806

ETIM

ETIM 2.0	EC000942
ETIM 3.0	EC000942
ETIM 4.0	EC000942
ETIM 5.0	EC000942

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

Approvals

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KEMA-KEUR / VDE Zeichengenehmigung / ÖVE / GOST / CCA / IECCEB Scheme

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Approvals


Ex Approvals

Approvals submitted

Approval details

KEMA-KEUR 

VDE Zeichengenehmigung 

ÖVE 

GOST 

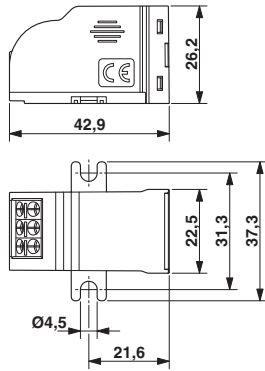
CCA

IECEE CB Scheme 

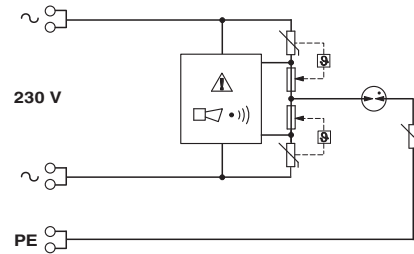
Drawings

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Dimensioned drawing



Circuit diagram



Application drawing

