

Type 3 surge protection device - PLT-SEC-T3-230-FM - 2905229

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Pluggable device protection, according to type 3/class III, for 1-phase power supply networks with separate N and PE (3-conductor system: L1, N, PE), with integrated surge-proof fuse and remote indication contact. Also suitable for DC applications.

Your advantages

- ✓ Varistor-based device protection
- ✓ Can be used without separate backup fuse thanks to integrated overcurrent protection
- ✓ For 1-phase power supply units (AC/DC)
- ✓ Pluggable
- ✓ Optical status indicator via LED
- ✓ With floating remote indication contact
- ✓ Plugs can be checked with CHECKMASTER 2



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 939881
GTIN	4046356939881
Weight per Piece (excluding packing)	73.330 g
Custom tariff number	85363030
Country of origin	Germany

Technical data

Dimensions

Height	90 mm
Width	17.7 mm
Depth	74.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	1 Div.

Ambient conditions

Degree of protection	IP20
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Technical data

Ambient conditions

Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m (amsl (above mean sea level))
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	30g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	5g (10 ... 150 Hz/20 cycles/axis/X, Y, Z)

General

EN type	T3
IEC power supply system	TT
	TN-S
Number of ports	One
Mode of protection	L-N
	L-PE
	N-PE
	(L+) - (L-)
	(L+/L-) - PE
Mounting type	DIN rail: 35 mm
Color	light grey RAL 7035
	traffic grey A RAL 7042
Housing material	PA 6.6-FR 20 % GF
	PA 6.6-FR
Degree of pollution	2
Flammability rating according to UL 94	V-0
Type	DIN rail module, two-section, divisible
Number of positions	2
Surge protection fault message	Optical, remote indicator contact

Protective circuit

Nominal voltage U_N	230 V AC (TN-S)
	230 V AC (TT - only in use with RCD)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_C	264 V AC
	230 V DC
Rated load current I_L	26 A (30 °C)
Residual current I_{PE}	≤ 5 μA
Nominal discharge current I_n (8/20) μs	3 kA
Standby power consumption P_C	≤ 275 mVA (at U_{REF})
	≤ 300 mVA (at U_C)
Reference test voltage U_{REF}	255 V AC
Combination wave U_{OC}	6 kV

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Protective circuit

Voltage protection level U_p (L-N)	≤ 1.35 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)	440 V AC (5 s / withstand mode)
	440 V AC (120 min / withstand 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
Response time t_A (N-PE)	≤ 100 ns
Short-circuit current rating I_{SCCR}	1.5 kA AC
	0.25 kA DC
Max. backup fuse with branch wiring	not required
Maximum backup fuse for through wiring	25 A (gG / B / C)

Indicator/remote signaling

Switching function	N/C contact
Operating voltage	250 V AC
	125 V DC (200 mA DC)
Operating current	3 A AC
	1 A DC (30 V DC)
Connection method	Screw connection
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section solid	0.2 mm ² ... 4 mm ²
Conductor cross section AWG	24 ... 12
Screw thread	M3
Tightening torque	0.8 Nm
Stripping length	8 mm

Connection data

Connection method	Screw connection
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
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Conductor cross section AWG	24 ... 12
Screw thread	M3
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UL specifications

SPD Type	4CA
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UL specifications

Maximum continuous operating voltage MCOV	255 V AC
	230 V DC
Nominal voltage	230 V DC
Rated load current I _L	25 A
Mode of protection	L-N
	L-G
	N-G
	(L+) - (L-)
	(L+) - G
	(L-) - G
Power distribution system	Single phase
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (L-N)	1290 V
Measured limiting voltage MLV (L-G)	1310 V
Measured limiting voltage MLV (N-G)	1310 V
Measured limiting voltage MLV (L+) - (L-)	1290 V
Measured limiting voltage MLV (L+) - G	1310 V
Measured limiting voltage MLV (L-) - G	1310 V
Nominal discharge current I _n	3 kA

UL indicator/remote signaling

Tightening torque	5 lb _f -in. ... 7 lb _f -in.
Conductor cross section AWG	14 ... 12

UL connection data

Conductor cross section AWG	14 ... 12
Tightening torque	5 lb _f -in. ... 7 lb _f -in.

Standards and Regulations

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

Environmental Product Compliance

	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

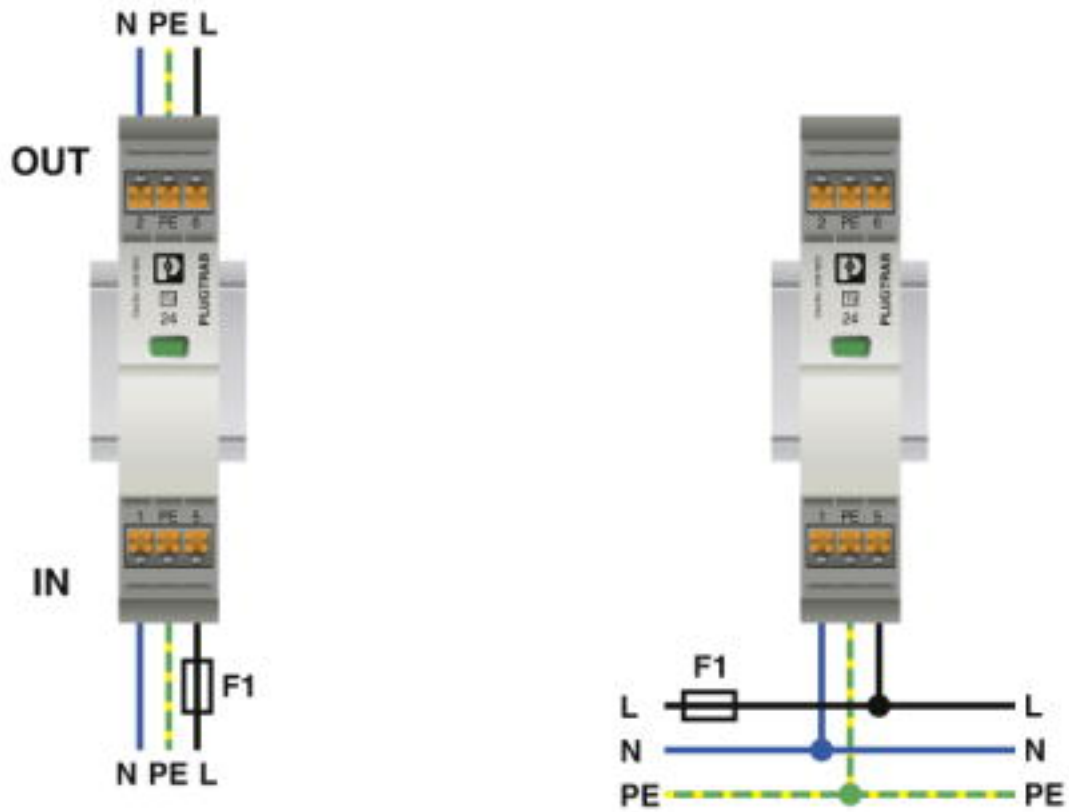
Type 3 surge protection device - PLT-SEC-T3-230-FM - 2905229

Product drawing

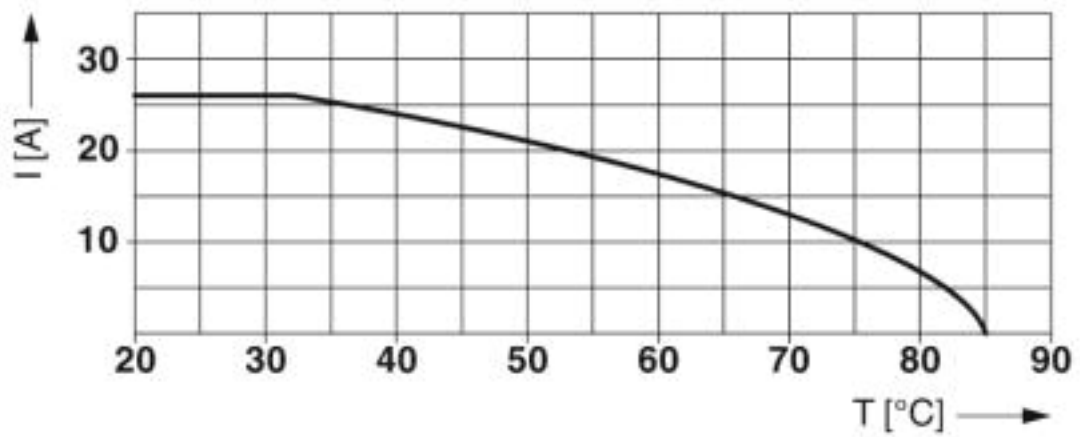


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Application drawing



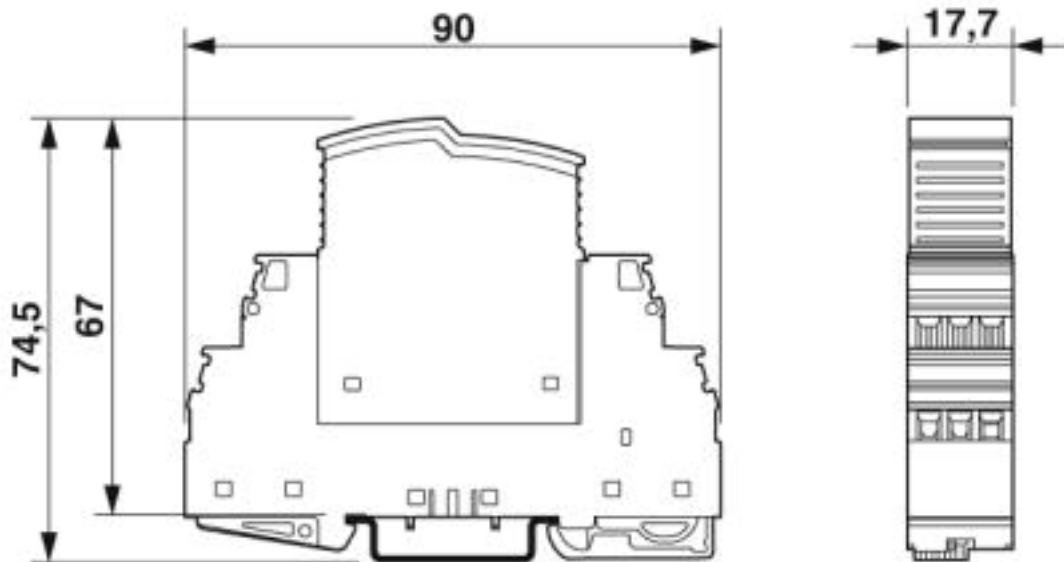
Diagram



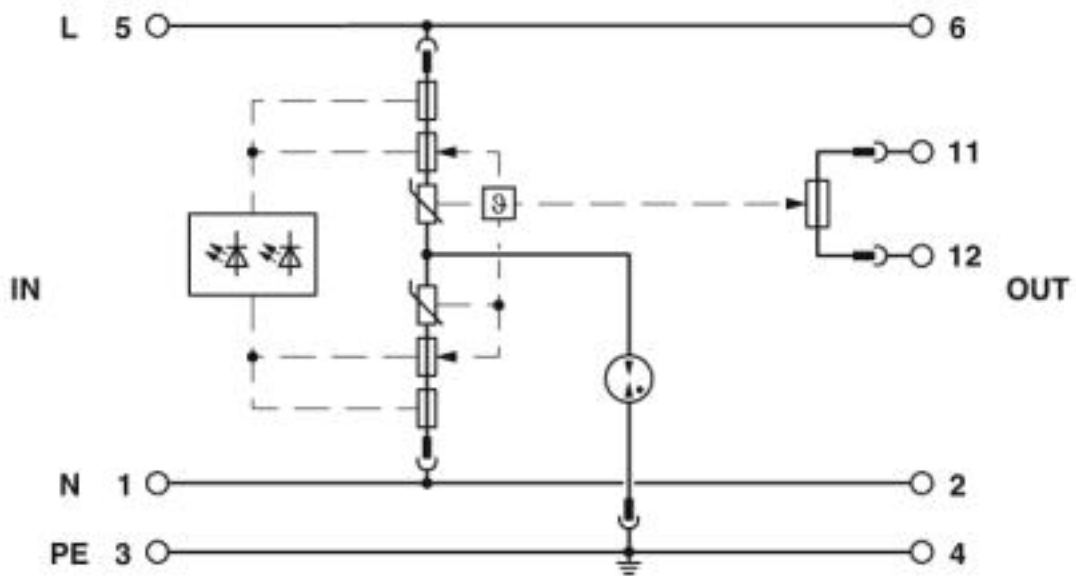
Nominal current depending on ambient temperature

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Dimensional drawing



Circuit diagram



Classifications

eCl@ss

eCl@ss 5.1	27130800
eCl@ss 6.0	27130800
eCl@ss 7.0	27130806
eCl@ss 8.0	27130806
eCl@ss 9.0	27130806

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Classifications

ETIM

ETIM 5.0	EC000942
ETIM 6.0	EC000942
ETIM 7.0	EC000942

UNSPSC

UNSPSC 13.2	39121620
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Approvals

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CSA / GL / CCA / KEMA-KEUR / IECEE CB Scheme / EAC / UL Recognized

Ex Approvals

cULus Recognized


Approval details


CSA		http://www.csagroup.org/services-industries/product-listing/	70056020
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GL		https://approvalfinder.dnvgl.com/	14588-15 HH
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CCA			NTR-NL 7399
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KEMA-KEUR		http://www.dekra-certification.com	2173868.01
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IECEE CB Scheme		http://www.iecee.org/	NL-35777
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EAC			RU C- DE.A*30.B01561
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Approvals

UL Recognized



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

FILE E 330181

Accessories

Accessories

Device marking

Label - EML (20XE)R - 0803452



Label, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK ROLL X1, THERMOMARK ROLL 2.0, THERMOMARK ROLL, mounting type: adhesive, lettering field size: continuous x 20 mm

Label - EML (20XE)R YE - 0803453



Label, Roll, yellow, unlabeled, can be labeled with: THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK ROLL X1, THERMOMARK ROLL 2.0, THERMOMARK ROLL, mounting type: adhesive, lettering field size: continuous x 20 mm

End block

End clamp - CLIPFIX 35 - 3022218



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray

Marker pen

Marker pen - X-PEN 0,35 - 0811228



Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

Spare parts

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Accessories

Type 3 surge protection plug - PLT-SEC-T3-230-P - 2905235



Replacement plug for type 3 device protection from the PLUGTRAB SEC T3 product range. 230 V nominal voltage.