

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.

Product Features

- 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
Weight per Piece (excluding packing)	100.0 g
Custom tariff number	85363030
Country of origin	Germany

Technical data

Dimensions

Height	90 mm
Width	17.7 mm
Depth	74.5 mm
Horizontal pitch	1 Div.

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C

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Ambient conditions

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 sinus / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	5g (10 ... 150 Hz/20 cycles/axis/X, Y, Z)

General

Standards/specifications	IEC 61643-11 2011
	EN 61643-11 2012
IEC test classification	III
	T3
EN type	T3
IEC power supply system	TT
	TN-S
Number of ports	One
SPD design	Combination type
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
Pollution degree	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

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Protective circuit

Rated load current I_L	26 A (30 °C)
Residual current I_{PE}	$\leq 5 \mu\text{A}$
Nominal discharge current I_n (8/20) μs	3 kA
Standby power consumption P_C	$\leq 275 \text{ mVA}$ (at U_{REF})
	$\leq 300 \text{ mVA}$ (at U_C)
Reference test voltage U_{REF}	255 V AC
Combination wave U_{OC}	6 kV
Voltage protection level U_p (L-N)	$\leq 1.35 \text{ kV}$
Voltage protection level U_p (L-PE)	$\leq 1.5 \text{ kV}$
Voltage protection level U_p (N-PE)	$\leq 1.5 \text{ kV}$
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)	$\leq 25 \text{ ns}$
Response time t_A (L-PE)	$\leq 100 \text{ ns}$
Response time t_A (N-PE)	$\leq 100 \text{ ns}$
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

Connection name	Remote fault indicator contact
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
Screw thread	M3
Tightening torque	0.8 Nm
Stripping length	8 mm
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²

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Indicator/remote signaling

Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
AWG conductor cross section	24 ... 12

Connection data

Connection method	Screw connection
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
AWG conductor cross section	24 ... 12 (IEC)
	24 ... 12 (UL)
Screw thread	M3
Tightening torque	0.8 Nm
Stripping length	8 mm

UL specifications

UL class	SPD type 4CA
Maximum continuous operating voltage MCOV	255 V AC
	230 V DC
Nominal voltage	230 V DC
Mode of protection	L-N
	L-G
	N-G
	(L+) - (L-)
	(L+) - G
	(L-) - G
Power distribution system	1
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (L-N)	1270 V
Measured limiting voltage MLV (L-G)	1280 V
Measured limiting voltage MLV (N-G)	1208 V
Measured limiting voltage MLV (L+) - (L-)	1270 V
Measured limiting voltage MLV (L+) - G	1280 V
Measured limiting voltage MLV (L-) - G	1280 V
Nominal discharge current I _n	3 kA

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Classifications

eCl@ss

eCl@ss 5.1	27130801
eCl@ss 6.0	27130806
eCl@ss 8.0	27130803

ETIM

ETIM 5.0	EC000942
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Approvals

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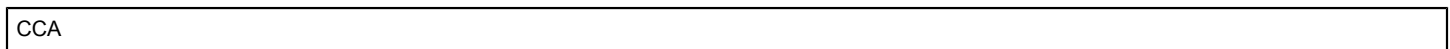
KEMA-KEUR / CCA / IECCE CB Scheme / UL Recognized / cUL Recognized / EAC / GL / cULus Recognized

Ex Approvals

UL Recognized / cUL Recognized / cULus Recognized

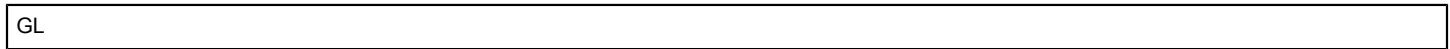
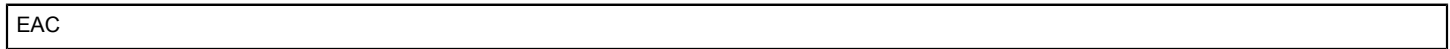
Approvals submitted

Approval details



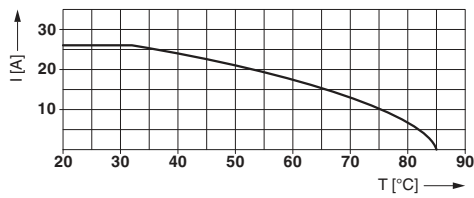
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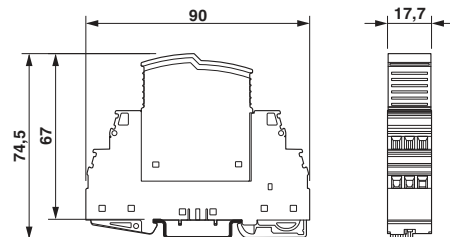
Drawings

Diagram

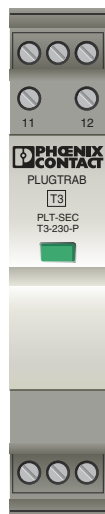


Nominal current depending on ambient temperature

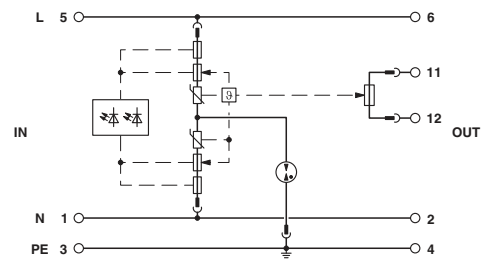
Dimensional drawing



Product drawing



Circuit diagram



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Application drawing

