

Type 3 surge protection device - PLT-SEC-T3-24-FM-UT - 2907916

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Type 3 surge protection, consisting of protective plug and base element, with integrated status indicator and remote signaling for single-phase power supply networks. Nominal voltage 24 V AC/DC.

Your advantages

- ✓ Increased service life and availability of the system, thanks to optimal protection of your industrial power supply
- ✓ 5-year warranty on your QUINT 4 power supply when installed together with PLT-SEC, see document in the download area
- ✓ Easy maintenance and testing of protective devices, thanks to pluggable connections



Key Commercial Data

Packing unit	5 pc
GTIN	
GTIN	4055626257419

Technical data

Dimensions

Height	93.4 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
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m (operating voltage remote contact ≤ 250 V)
	≤ 6000 m (operating voltage remote contact ≤ 150 V)
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	30g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z)

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Technical data

Ambient conditions

Vibration (operation)	5g (5 ... 500 Hz / 2.5 h / X, Y, Z)
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General

EN type	T3
IEC power supply system	TN-S
Number of ports	One
Mode of protection	L-N
	L-PE
	N-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	24 V AC (TN-S)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_C	34 V AC
Rated load current I_L	26 A (at 30 °C)
Residual current I_{PE}	$\leq 5 \mu A$
Nominal discharge current I_n (8/20) μs	1 kA
Standby power consumption P_C	$\leq 2.7 mVA$ (at U_{REF})
	$\leq 4.8 mVA$ (at U_C)
Reference test voltage U_{REF}	27 V AC
Combination wave U_{OC}	2 kV
Voltage protection level U_p (L-N)	$\leq 0.2 kV$
Voltage protection level U_p (L-PE)	$\leq 0.6 kV$
Voltage protection level U_p (N-PE)	$\leq 0.6 kV$
TOV behavior at U_T (L-N)	50 V AC (120 min / withstand mode)
TOV behavior at U_T (L-PE)	50 V AC (120 min / withstand mode)
Response time t_A (L-N)	$\leq 25 ns$
Response time t_A (L-PE)	$\leq 100 ns$
Response time t_A (N-PE)	$\leq 100 ns$
Short-circuit current rating I_{SCCR}	10 kA AC
Max. backup fuse with branch wiring	32 A (gG / B / C)

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Technical data

Protective circuit

Maximum backup fuse for through wiring	25 A (gG / B / C)
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Additional technical data

Short-circuit current rating I_{SCCR}	0.25 kA DC (Without additional backup fuse in the DC branch wiring)
	5 kA DC (for 20 A gG / B backup fuse)
Maximum discharge current I_{max} (8/20) μ s	4 kA
Nominal discharge current I_n (8/20) μ s	3 kA
Maximum continuous voltage U_C	44 V DC
Residual voltage U_{res} (L-N)	≤ 0.16 kV (at 0.5 kA)
	≤ 0.2 kV (at 1 kA)
Residual voltage U_{res} (L-PE)	≤ 0.35 kV (at 0.5 kA)
	≤ 0.4 kV (at 1 kA)
Residual voltage U_{res} (N-PE)	≤ 0.35 kV (at 0.5 kA)
	≤ 0.4 kV (at 1 kA)
Voltage protection level U_p (L-N)	0.25 kV (at 3 kA)
Voltage protection level U_p (L-PE)	0.6 kV (at 3 kA)
Voltage protection level U_p (N-PE)	0.6 kV (at 3 kA)
Mode of protection	(DC+) - (DC-)
	(DC+/DC-) - PE

Indicator/remote signaling

Switching function	PDT contact
Operating voltage	250 V AC
	125 V DC (200 mA DC)
Operating current	0.5 A AC
	0.5 A DC (75 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 ... 2.5 mm ²
Conductor cross section AWG	30 ... 12
Screw thread	M3
Tightening torque	0.5 Nm
Stripping length	10 mm

Connection data

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	0.5 Nm
Stripping length	10 mm

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Technical data

UL specifications

SPD Type	4CA
Maximum continuous operating voltage MCOV	34 V AC
	34 V DC
Nominal voltage	34 V DC
Rated load current I_L	20 A
Mode of protection	L-N
	L-G
	N-G
	(DC+) - (DC-)
	(DC+) - G
	(DC-) - G
Power distribution system	Single phase
	DC
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (L-N)	200 V
Measured limiting voltage MLV (L-G)	510 V
Measured limiting voltage MLV (N-G)	510 V
Nominal discharge current I_n	1 kA

UL indicator/remote signaling

Operating voltage	250 V AC (0.5 A)
	12 V DC (4 A)
	24 V DC (2 A)
	48 V DC (1 A)
Tightening torque	5 lb _f -in. ... 7 lb _f -in.
Conductor cross section AWG	30 ... 12

UL connection data

Conductor cross section AWG	16 ... 12
Tightening torque	4.4 lb _f -in.

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 = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

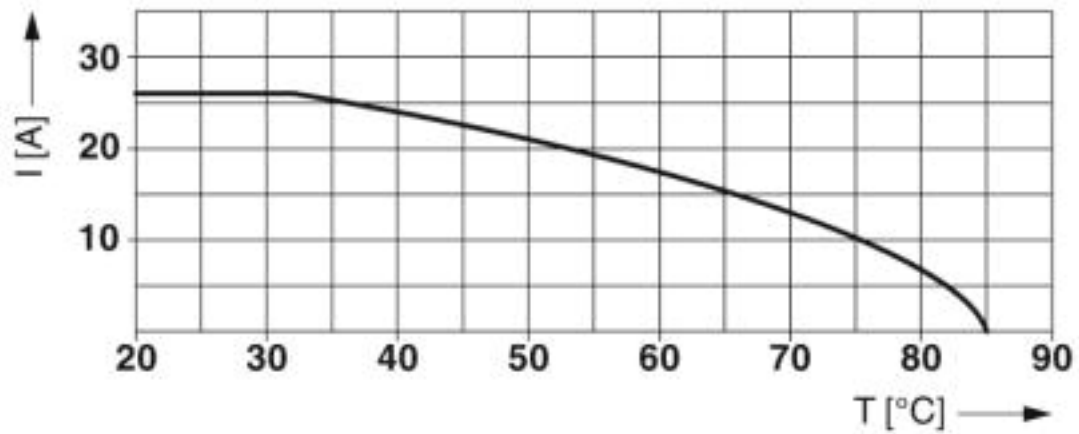
Type 3 surge protection device - PLT-SEC-T3-24-FM-UT - 2907916

Product drawing



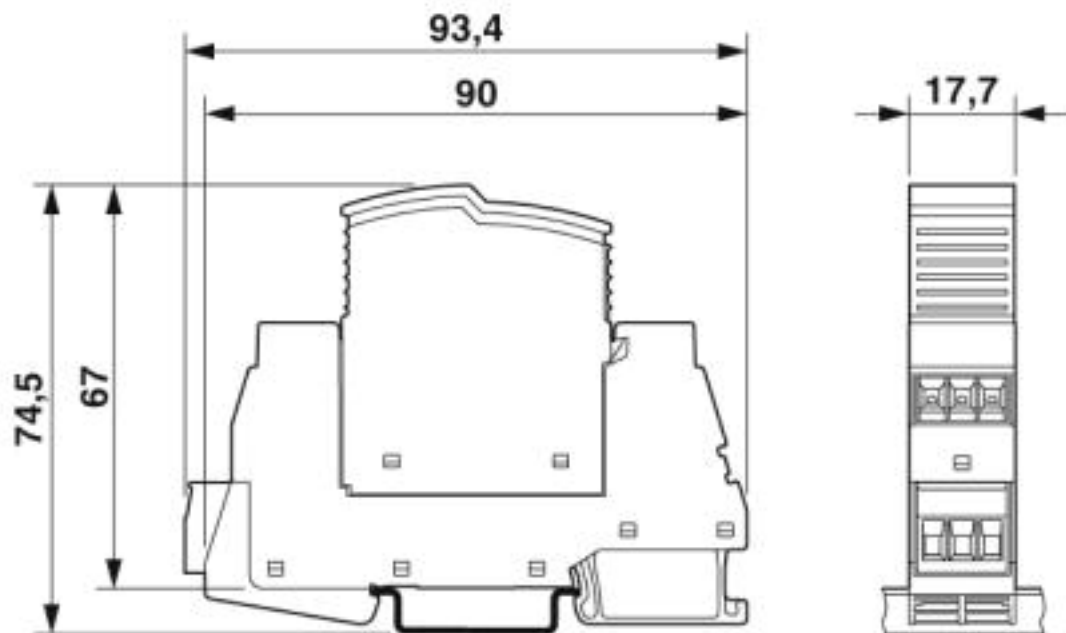
Type 3 surge protection device - PLT-SEC-T3-24-FM-UT - 2907916

Diagram



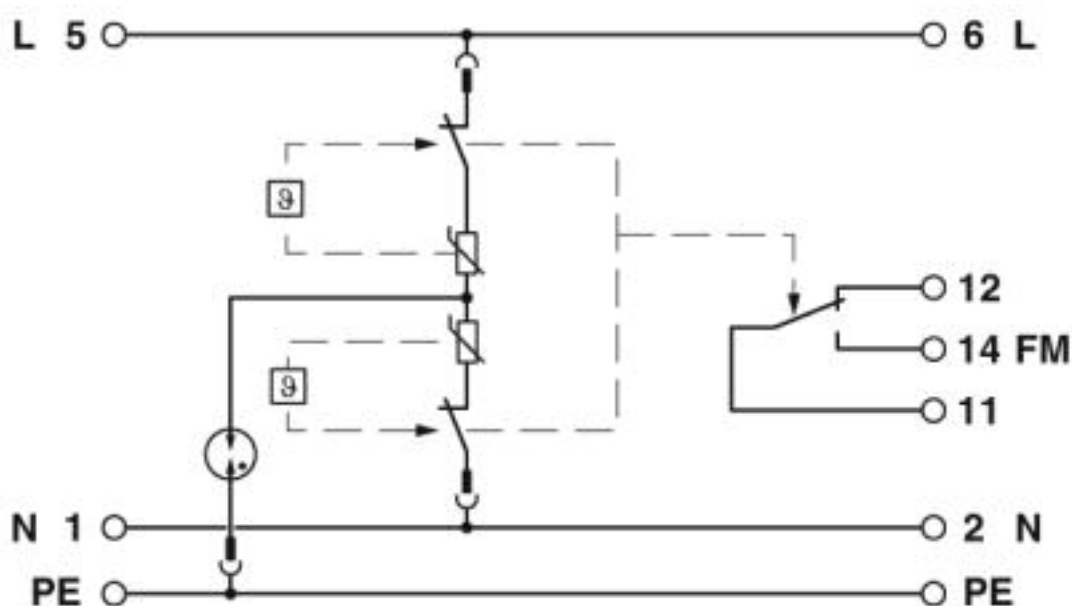
Nominal current depending on ambient temperature

Dimensional drawing



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Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27130806
eCl@ss 6.0	27130800
eCl@ss 7.0	27130806
eCl@ss 8.0	27130806
eCl@ss 9.0	27130806

ETIM

ETIM 5.0	EC000942
ETIM 6.0	EC000942
ETIM 7.0	EC000942

Approvals

Approvals

Approvals

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

Ex Approvals

UL Recognized / cUL Recognized / cULus Recognized

Approval details

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Approvals

DNV GL		https://approvalfinder.dnvgl.com/	TAE00002U7
CCA			NTR-NL 7676
UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 330181
KEMA-KEUR		http://www.dekra-certification.com	71-103027
cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 330181
IECEE CB Scheme		http://www.iecee.org/	NL-51083
EAC			RU C- DE.A*30.B01561
cULus Recognized			

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

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Accessories

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

Type 3 surge protection plug - PLT-SEC-T3-24-P-UT/PT - 2907920



Replacement plug for type 3 surge protection from the PLT-SEC-...-UT/PT product series. Nominal voltage 24 V.

Type 3 surge protection base element - PLT-SEC-T3-BE-FM-UT - 2907924



Base element for protective plugs from the PLT-SEC-...-UT/PT product series with remote indication contact.

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