

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

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




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	 4 055626 257419
GTIN	4055626257419
Weight per Piece (excluding packing)	81.160 g
Custom tariff number	85363030
Country of origin	Germany

## 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)

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

## Technical data

### Ambient conditions

	≤ 6000 m (operating voltage remote contact ≤ 150 V)
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	30g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	5g (5 ... 500 Hz / 2.5 h / X, Y, Z)

### 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 $I_{PE}$	≤ 5 μA
Nominal discharge current $I_n$ (8/20) μs	1 kA
Standby power consumption $P_C$	≤ 2.7 mVA (at $U_{REF}$ )
	≤ 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)	≤ 0.2 kV
Voltage protection level $U_p$ (L-PE)	≤ 0.6 kV
Voltage protection level $U_p$ (N-PE)	≤ 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)	≤ 25 ns
Response time $t_A$ (L-PE)	≤ 100 ns

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

## Technical data

### Protective circuit

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

### Additional technical data

Short-circuit current rating $I_{SCCR}$	0.25 kA DC (without additional backup fuse)
	5 kA DC (for 20 A gG / B backup fuse)
Maximum discharge current $I_{max}$ (8/20) $\mu$ s	4 kA
Nominal discharge current $I_n$ (8/20) $\mu$ s	3 kA
Maximum continuous voltage $U_C$	44 V DC
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 <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section solid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
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 <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section solid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section AWG	24 ... 12
Screw thread	M3
Tightening torque	0.5 Nm
Stripping length	10 mm

### 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

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

## Technical data

### UL specifications

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 <sub>F</sub> -in. ... 7 lb <sub>F</sub> -in.
Conductor cross section AWG	30 ... 12

### UL connection data

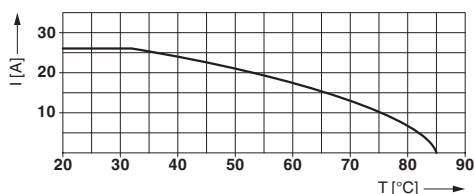
Conductor cross section AWG	16 ... 12
Tightening torque	4.4 lb <sub>F</sub> -in.

### Standards and Regulations

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

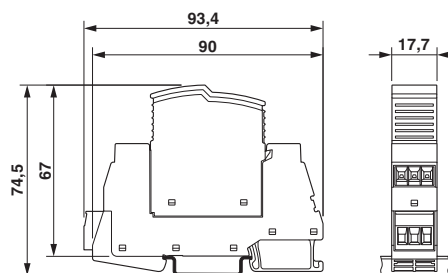
## Drawings

Diagram



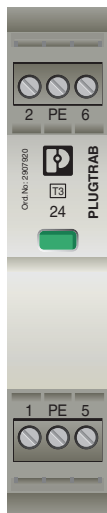
Nominal current depending on ambient temperature

Dimensional drawing

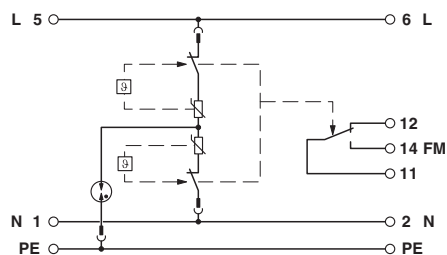


# Type 3 surge protection device - PLT-SEC-T3-24-FM-UT - 2907916

Product drawing



Circuit diagram



## Classifications

### eCl@ss

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

## Approvals

### Approvals

#### Approvals

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

#### Ex Approvals

### Approval details

DNV GL		<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	TAE00002U7
--------	--	---	------------

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

## Approvals

CCA			NTR-NL 7676
-----	--	--	-------------

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 330181
---------------	--	---	---------------

KEMA-KEUR		<a href="http://www.dekra-certification.com">http://www.dekra-certification.com</a>	71-103027
-----------	--	---	-----------

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 330181
----------------	--	---	---------------

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	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

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

### 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.

