

## Type 3 surge protection device - PLT-SEC-T3-120-FM-UT - 2907918

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 2/3 surge protection, consisting of protective plug and base element, with integrated status indicator and remote signaling for single-phase power supply networks. Nominal voltage 120 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 0 5 5 6 2 6 2 5 7 4 4 0
GTIN	4055626257440

### 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)

# Type 3 surge protection device - PLT-SEC-T3-120-FM-UT - 2907918

## Technical data

### Ambient conditions

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

### General

EN type	T2 / T3
IEC power supply system	TT
	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 $U_N$	120 V AC (TN-S)
	120 V AC (TT)
Nominal frequency $f_N$	50 Hz (60 Hz)
Maximum continuous voltage $U_C$	150 V AC
Rated load current $I_L$	26 A (at 30 °C)
Residual current $I_{PE}$	$\leq 5 \mu\text{A}$
Nominal discharge current $I_n$ (8/20) $\mu\text{s}$	5 kA
Standby power consumption $P_C$	$\leq 10.6 \text{ mVA}$ (at $U_{REF}$ )
	$\leq 13.5 \text{ mVA}$ (at $U_C$ )
Reference test voltage $U_{REF}$	132 V AC
Max. discharge current $I_{max}$ (8/20) $\mu\text{s}$	10 kA
Combination wave $U_{OC}$	6 kV
Voltage protection level $U_p$ (L-N)	$\leq 0.75 \text{ kV}$ (at $U_{OC}$ )
	$\leq 0.95 \text{ kV}$ (at $I_n$ )
Voltage protection level $U_p$ (L-PE)	$\leq 0.85 \text{ kV}$
Voltage protection level $U_p$ (N-PE)	$\leq 0.85 \text{ kV}$
TOV behavior at $U_T$ (L-N)	240 V AC (5 s / withstand mode)
	240 V AC (120 min / withstand mode)
TOV behavior at $U_T$ (L-PE)	240 V AC (5 s / withstand mode)

# Type 3 surge protection device - PLT-SEC-T3-120-FM-UT - 2907918

## Technical data

### Protective circuit

	240 V AC (120 min / withstand mode)
	1332 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)	$\leq 25$ 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)
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 continuous voltage $U_C$	150 V DC
Mode of protection	(DC+) - (DC-)
	(DC+/DC-) - PE
IEC test classification (in accordance with IEC 61643-21)	D1
Impulse durability (line-line)	D1 - 500 A
Impulse durability (line-earth)	D1 - 500 A
Pulse discharge current $I_{imp}$ (10/350) $\mu$ s (line-line)	0.5 kA
Pulse discharge current $I_{imp}$ (10/350) $\mu$ s (line-earth)	0.5 kA

### 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

# Type 3 surge protection device - PLT-SEC-T3-120-FM-UT - 2907918

## Technical data

### Connection data

Tightening torque	0.5 Nm
Stripping length	10 mm

### UL specifications

SPD Type	2 (Open-Type SPD)
Maximum continuous operating voltage MCOV	150 V AC
	150 V DC
Nominal voltage	150 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
Voltage protection rating VPR (L-N)	700 V
Voltage protection rating VPR (L-G)	900 V
Voltage protection rating VPR (N-G)	900 V
Nominal discharge current $I_n$	5 kA
Short-circuit current rating (SCCR)	10 kA AC
	5 kA DC

### 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

### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
------------	--

# Type 3 surge protection device - PLT-SEC-T3-120-FM-UT - 2907918

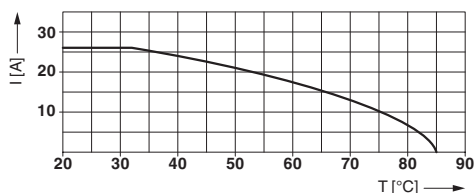
## Technical data

### Environmental Product Compliance

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

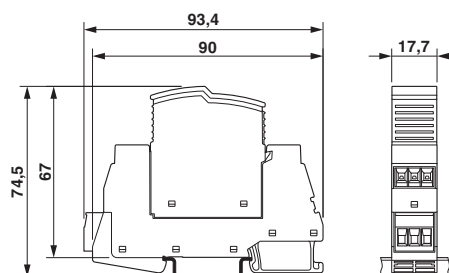
## Drawings

Diagram

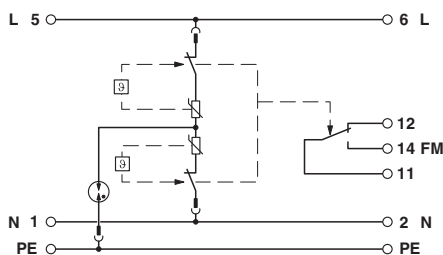


Nominal current depending on ambient temperature

Dimensional drawing



Circuit diagram



## Approvals

### Approvals

#### Approvals

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

#### Ex Approvals

UL Recognized / cUL Recognized / cULus Recognized

### Approval details

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

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

# Type 3 surge protection device - PLT-SEC-T3-120-FM-UT - 2907918

## Approvals

UL Listed		<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
-----------	--	---	-----------

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	NL-51083
-----------------	--	---	----------

cUL Listed		<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
------------	--	---	---------------

EAC			RU C- DE.A*30.B01561
-----	--	--	-------------------------

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	70194378
-----	--	---	----------

cULus Listed			
--------------	--	--	--

Phoenix Contact 2019 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>