

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



2907918

<https://www.phoenixcontact.com/us/products/2907918>

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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

- Surge protection family for universal use with optimum energy coordination from the lightning current arrester to the device protection
- Easy to maintain due to consistently pluggable protection modules
- Excellent level of information provided by mechanical/visual status indicator and remote indication contact
- Your preferred connection technology can be selected as both screw connection and Push-in connection are available
- Optimal additional protection of the industrial power supply for a longer service life and increased availability of the system
- 5-year warranty on your QUINT 4 power supply when installed together with PLT-SEC, see document in the download area

Commercial data

Item number	2907918
Packing unit	1 pc
Minimum order quantity	5 pc
Sales key	CL19
Product key	CL14A2
Catalog page	Page 83 (C-4-2019)
GTIN	4055626257440
Weight per piece (including packing)	96.91 g
Weight per piece (excluding packing)	81.16 g
Customs tariff number	85363030
Country of origin	DE

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Technical data

Product properties

IEC power supply system	TN-S
	TT
Type	DIN rail module, two-section, divisible
Product type	Device protection
Product family	SEC Family
Number of positions	2
Surge protection fault message	Optical, remote indicator contact

Insulation characteristics

Overvoltage category	III
Pollution degree	2
IEC test classification	II / III
	T2 / T3
EN type	T2 / T3
Number of ports	One

Electrical properties

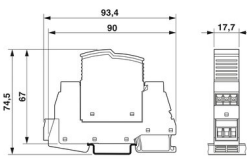
Indicator/remote signaling

Connection name	Remote fault indicator contact
Switching function	Changeover 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 data

Connection method	Screw connection
Screw thread	M3
Tightening torque	0.5 Nm
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section rigid	0.2 mm ² ... 4 mm ²
Conductor cross section AWG	24 ... 12

Dimensions

Dimensional drawing	
Width	17.7 mm

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Height	93.4 mm
Depth	74.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	1 Div.

Material specifications

Flammability rating according to UL 94	V-0
CTI value of material	600
Insulating material	PA 6.6-FR 20 % GF PA 6.6-FR
Housing material	PA 6.6-FR 20 % GF PA 6.6-FR

Protective circuit

Mode of protection	L-N
	L-PE
	N-PE
Direction of action	1L-N & N-PE
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}	$\leq 5 \mu A$
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
Nominal discharge current I_n (8/20) μs	5 kA
Maximum discharge current I_{max} (8/20) μs	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)
	240 V AC (5 s / withstand mode)
TOV behavior at U_T (L-PE)	240 V AC (5 s / withstand mode)
	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)	$\leq 25 \text{ ns}$
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}	10 kA AC
Max. backup fuse with branch wiring	32 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)
Residual voltage U_{res} (L-N)	≤ 0.68 kV (at 2 kA)
	≤ 0.75 kV (at 3 kA)
	≤ 0.64 kV (at $U_{OC} = 4$ kV)
Residual voltage U_{res} (L-PE)	≤ 0.58 kV (at 2 kA)
	≤ 0.65 kV (at 3 kA)
	≤ 0.75 kV (at $U_{OC} = 4$ kV)
Residual voltage U_{res} (N-PE)	≤ 0.58 kV (at 2 kA)
	≤ 0.65 kV (at 3 kA)
	≤ 0.75 kV (at $U_{OC} = 4$ kV)
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 (wire-wire)	D1 - 500 A
Impulse durability (line-earth)	D1 - 500 A
Pulse discharge current I_{imp} (10/350) μ s (line-line)	0.5 kA
Pulse discharge current I_{imp} (10/350) μ s (line-earth)	0.5 kA

Environmental and real-life conditions

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

Approvals

UL specifications

Maximum continuous operating voltage MCOV	150 V AC
	150 V DC
Short-circuit current rating (SCCR)	10 kA AC
	5 kA DC
Voltage protection rating VPR (L-N)	700 V
Voltage protection rating VPR (L-G)	700 V
Voltage protection rating VPR (N-G)	900 V
Voltage protection rating VPR (DC+) - (DC-)	700 V

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Voltage protection rating VPR (DC+) - G	900 V
Voltage protection rating VPR (DC-) - G	900 V
Nominal discharge current I_n	5 kA
Mode of protection	L-N
	L-G
	N-G
	(DC+) - (DC-)
	(DC+) - G
	(DC-) - G
Nominal voltage	150 V DC
Rated load current I_L	20 A
Power distribution system	Single phase
	DC
Nominal frequency	50/60 Hz
SPD Type	2 (Open-Type SPD)

UL indicator/remote signaling

Operating voltage	250 V AC (0.5 A)
DC operating voltage	12 V DC (4 A)
	24 V DC (2 A)
	48 V DC (1 A)

UL connection data

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

Standards and regulations

Standards/specifications	IEC 61643-11
Note	2011

EN 61643-11

Standards/specifications	EN 61643-11
Note	2012

Mounting

Mounting type	DIN rail: 35 mm
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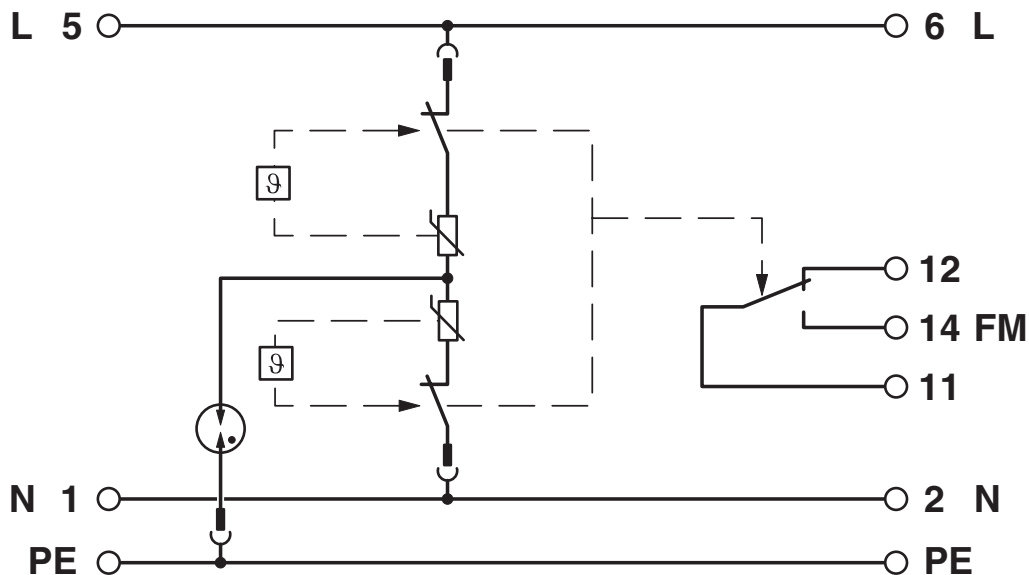


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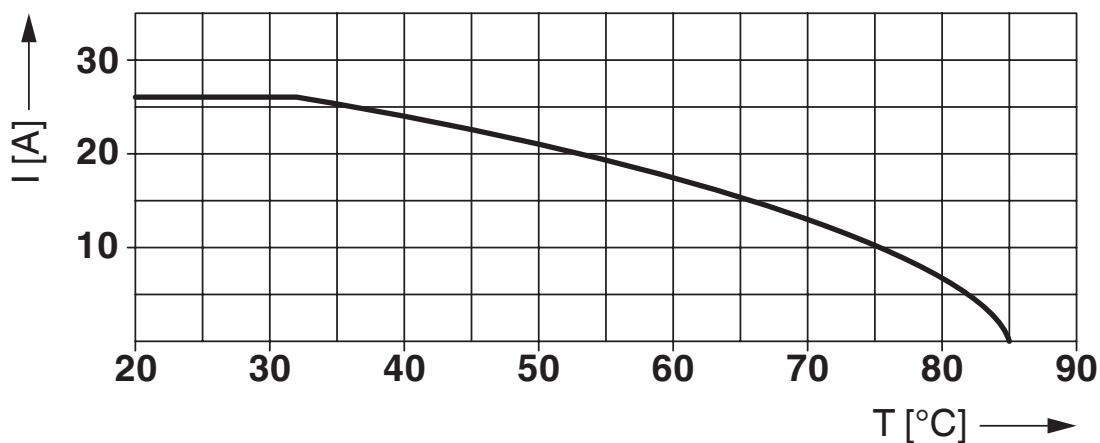
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Drawings

Circuit diagram



Diagram



Nominal current depending on ambient temperature

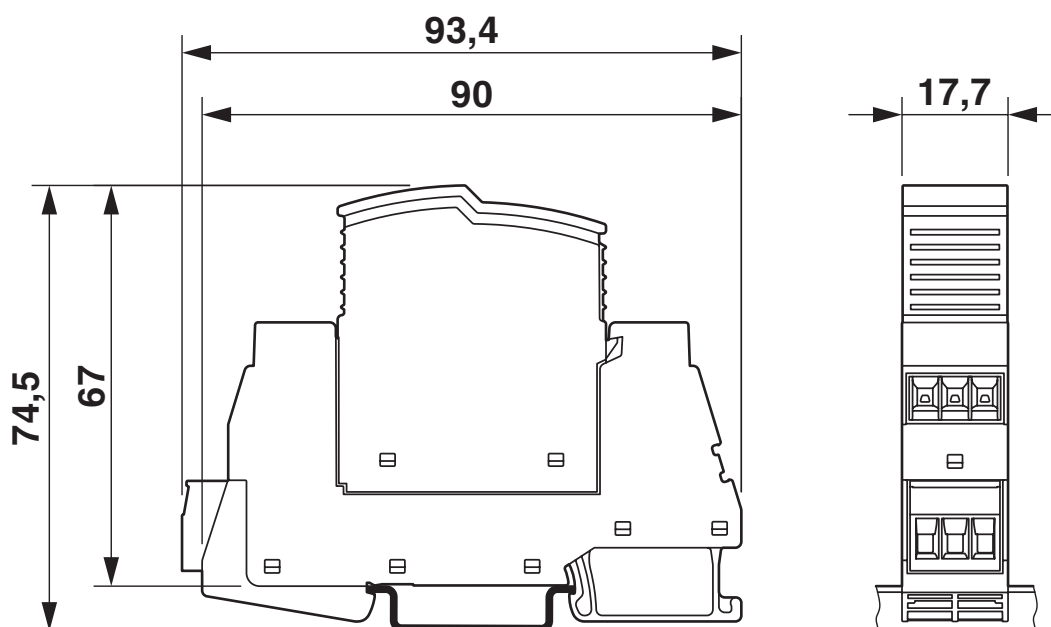
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Dimensional drawing



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2907918>



IECEE CB Scheme

Approval ID: NL-51083



EAC

Approval ID: RU C-DE.*09.B.00169

CCA

Approval ID: NTR-NL 7676



KEMA-KEUR

Approval ID: 71-103027



UL Listed

Approval ID: FILE E 330181



CSA

Approval ID: 13631



cUL Listed

Approval ID: FILE E 330181

UAE-RoHS

Approval ID: 22-09-50640

DNV

Approval ID: TAE00002U7



cUL Recognized

Approval ID: FILE E 340736



UL Recognized

Approval ID: FILE E 340736

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cULus Listed

cULus Recognized

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Classifications

ECLASS

ECLASS-11.0	27130806
ECLASS-13.0	27171203

ETIM

ETIM 8.0	EC000942
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UNSPSC

UNSPSC 21.0	39121600
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Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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Accessories

CLIPFIX 35 - End clamp

3022218

<https://www.phoenixcontact.com/us/products/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

EML (20XE)R - Label

0803452

<https://www.phoenixcontact.com/us/products/0803452>



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

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EML (20XE)R YE - Label

0803453

<https://www.phoenixcontact.com/us/products/0803453>



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

X-PEN 0,35 - Marker pen

0811228

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

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SZS 0,6X3,5 VDE - Screwdriver

1212602

<https://www.phoenixcontact.com/us/products/1212602>



Screwdriver, slot-headed, VDE insulated, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

PLT-SEC-T3-120-P-UT/PT - Type 3 surge protection plug

2907922

<https://www.phoenixcontact.com/us/products/2907922>



Replacement plug for type 2/3 surge protection from the PLT-SEC-...-UT/PT product series. Nominal voltage 120 V.

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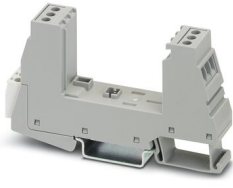
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PLT-SEC-T3-BE-FM-UT - Type 3 surge protection base element

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<https://www.phoenixcontact.com/us/products/2907924>

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



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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com