

Type 3 surge protection device - PLT-SEC-T3-230-FM-UT - 2907919

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Type 2/3 surge protection, consisting of protective plug and base element with screw connection. For single-phase power supply network with integrated status indicator and remote signaling. Nominal voltage 230 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	4055626257457

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	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	240 V AC (TN-S)
	240 V AC (TT)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_C	264 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	5 kA
Standby power consumption P_C	$\leq 26.4 \text{ mVA}$ (at U_{REF})
	$\leq 26.4 \text{ mVA}$ (at U_C)
Reference test voltage U_{REF}	264 V AC
Max. discharge current I_{max} (8/20) μs	10 kA
Combination wave U_{OC}	6 kV
Voltage protection level U_p (L-N)	$\leq 1.25 \text{ kV}$ (at U_{OC})
	$\leq 1.4 \text{ kV}$ (at I_n)
Voltage protection level U_p (L-PE)	$\leq 1.4 \text{ kV}$
Voltage protection level U_p (N-PE)	$\leq 1.4 \text{ kV}$
TOV behavior at U_T (L-N)	400 V AC (5 s / withstand mode)
	457 V AC (120 min / safe failure mode)
TOV behavior at U_T (L-PE)	457 V AC (5 s / withstand mode)

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Technical data

Protective circuit

	457 V AC (120 min / withstand mode)
	1464 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)	≤ 25 ns
Response time t_A (L-PE)	≤ 100 ns
Response time t_A (N-PE)	≤ 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 in the DC branch wiring)
	5 kA DC (for 20 A gG / B backup fuse)
Maximum continuous voltage U_C	275 V AC
	240 V DC
Residual voltage U_{res} (L-N)	≤ 1.15 kV (at 2 kA)
	≤ 1.25 kV (at 3 kA)
	≤ 1.1 kV (at $U_{OC} = 4$ kV)
Residual voltage U_{res} (L-PE)	≤ 1.1 kV (at 2 kA)
	≤ 1.1 kV (at 3 kA)
	≤ 1.2 kV (at $U_{OC} = 4$ kV)
Residual voltage U_{res} (N-PE)	≤ 1.1 kV (at 2 kA)
	≤ 1.1 kV (at 3 kA)
	≤ 1.2 kV (at $U_{OC} = 4$ kV)
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) μ s (line-line)	0.5 kA
Pulse discharge current I_{imp} (10/350) μ 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 ² ... 2.5 mm ²
Conductor cross section solid	0.2 mm ² ... 2.5 mm ²

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Technical data

Indicator/remote signaling

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

UL specifications

SPD Type	4CA
Maximum continuous operating voltage MCOV	264 V AC
	240 V DC
Nominal voltage	240 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)	1150 V
Measured limiting voltage MLV (L-G)	1180 V
Measured limiting voltage MLV (N-G)	1180 V
Nominal discharge current I _n	5 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

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Technical data

UL connection data

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

Standards and Regulations

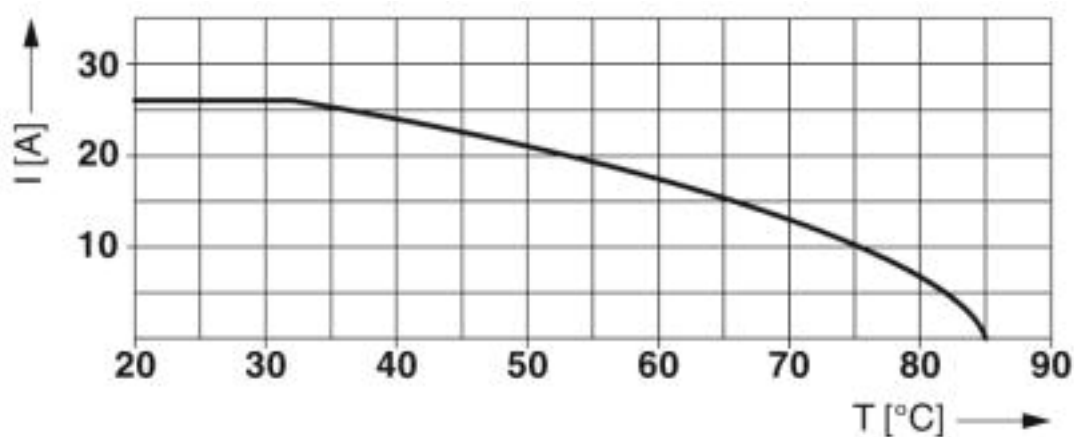
Standards/specifications	IEC 61643-11 2011
	EN 61643-11 2012

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

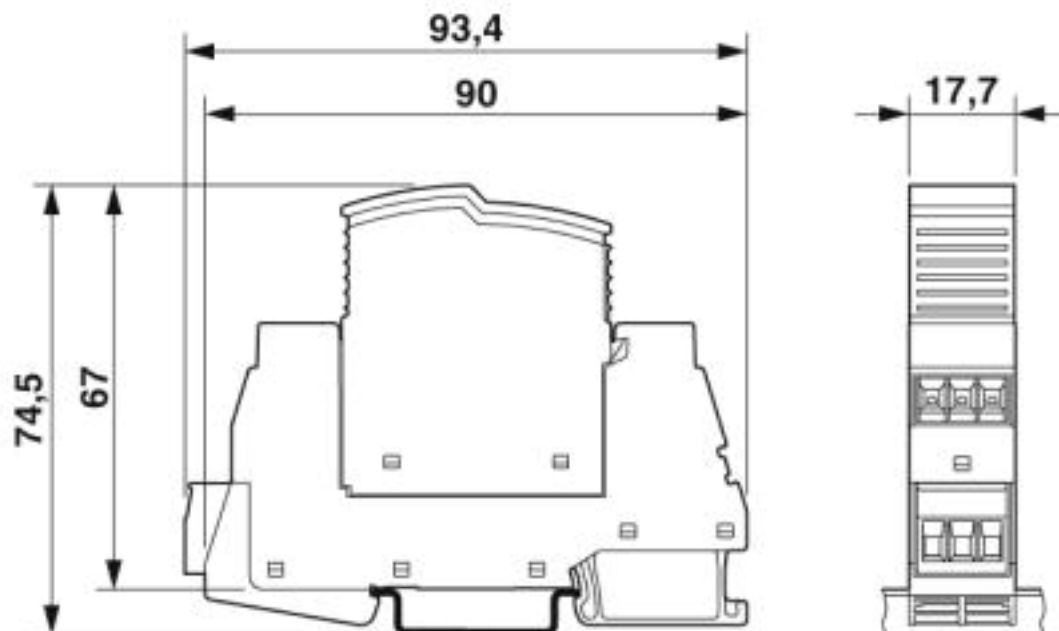
Diagram



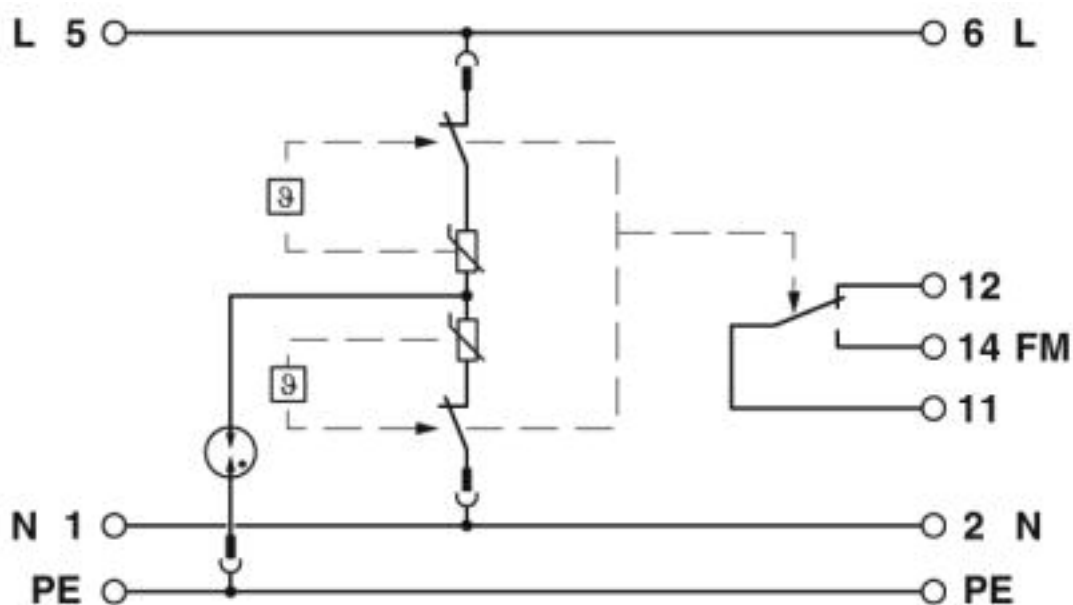
Nominal current depending on ambient temperature

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Dimensional drawing



Circuit diagram



Classifications

eCl@ss

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

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Classifications

eCl@ss

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 / IECCEB Scheme / EAC / CSA / cULus Recognized

Ex Approvals

UL Recognized / cUL Recognized / cULus Recognized

Approval details

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

EAC		RU C- DE.A*30.B01561
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CSA		http://www.csagroup.org/services-industries/product-listing/	70194378
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cULus Recognized		
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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

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

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Accessories

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-T3-230-P-UT/PT - 2907923



Replacement plug for type 2/3 surge protection from the PLT-SEC-...-UT/PT product series. Nominal voltage 230 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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