

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



2907916

<https://www.phoenixcontact.com/de/produkte/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

- 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

Commercial Data

Item number	2907916
Packing unit	5 pc
Minimum order quantity	1 pc
Sales Key	K1 - Überspannungsschutz
Product Key	CL14A2
Catalog Page	Page 82 (C-4-2019)
GTIN	4055626257419
Weight per Piece (including packing)	94,49 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
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	III
	T3
EN type	T3
Number of ports	One

Electrical properties

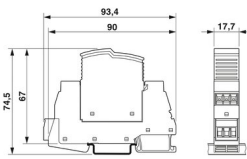
Indicator/remote signaling

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 solid	0.2 mm ² ... 4 mm ²
Conductor cross section AWG	24 ... 12

Dimensions

Dimensional drawing	
Width	17.7 mm
Height	93.4 mm

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

Material specifications

Color	light grey RAL 7035
	traffic grey A RAL 7042
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	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}	$\leq 5 \mu A$
Standby power consumption P_C	$\leq 2.7 \text{ mVA}$ (at U_{REF})
	$\leq 4.8 \text{ mVA}$ (at U_C)
Reference test voltage U_{REF}	27 V AC
Nominal discharge current I_n (8/20) μs	1 kA
Combination wave U_{OC}	2 kV
Voltage protection level U_p (L-N)	$\leq 0.2 \text{ kV}$
Voltage protection level U_p (L-PE)	$\leq 0.6 \text{ kV}$
Voltage protection level U_p (N-PE)	$\leq 0.6 \text{ kV}$
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)	$\leq 25 \text{ ns}$
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)

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) μs	4 kA
Nominal discharge current I_n (8/20) μs	3 kA

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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)
Maximum continuous voltage U_C	44 V DC
Mode of protection	(DC+) - (DC-)
	(DC+/DC-) - PE

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)

Approval data

UL specifications

Maximum continuous operating voltage MCOV	34 V AC
	34 V DC
Nominal discharge current I_n	1 kA
Mode of protection	L-N
	L-G
	N-G
	(DC+) - (DC-)
	(DC+) - G
	(DC-) - G
Nominal voltage	34 V DC
Rated load current I_L	20 A
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
SPD Type	4CA

UL indicator/remote signaling

AC operating voltage	250 V AC (0.5 A)
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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
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EN 61643-11

Standards/specifications	EN 61643-11
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Mounting

Mounting type	DIN rail: 35 mm
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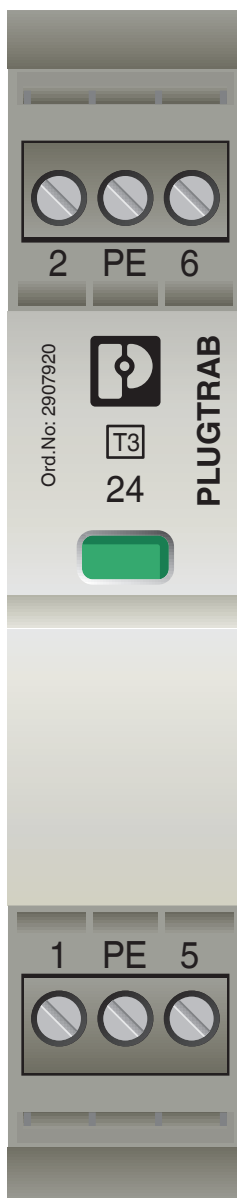


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Drawings

Product drawing

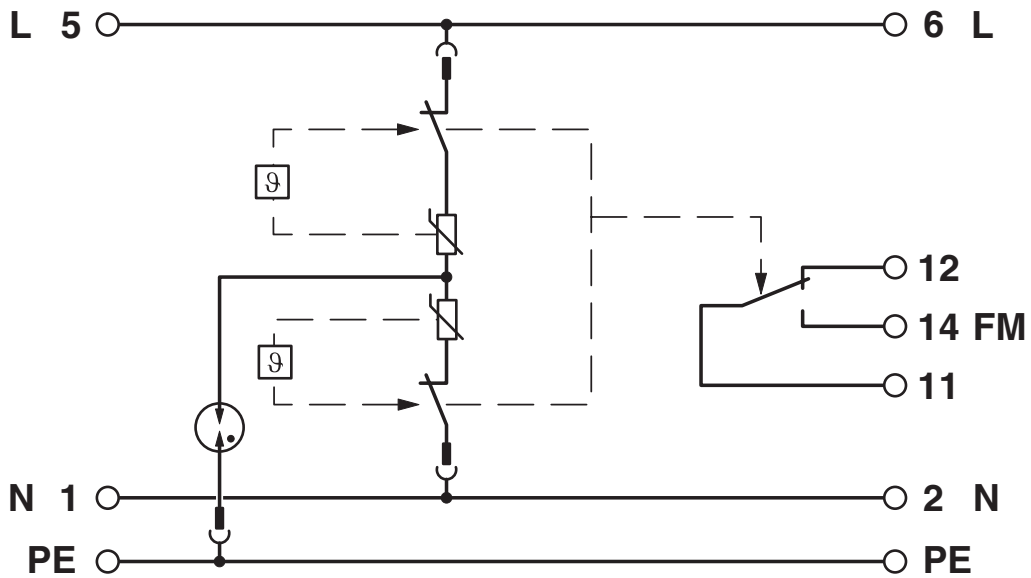


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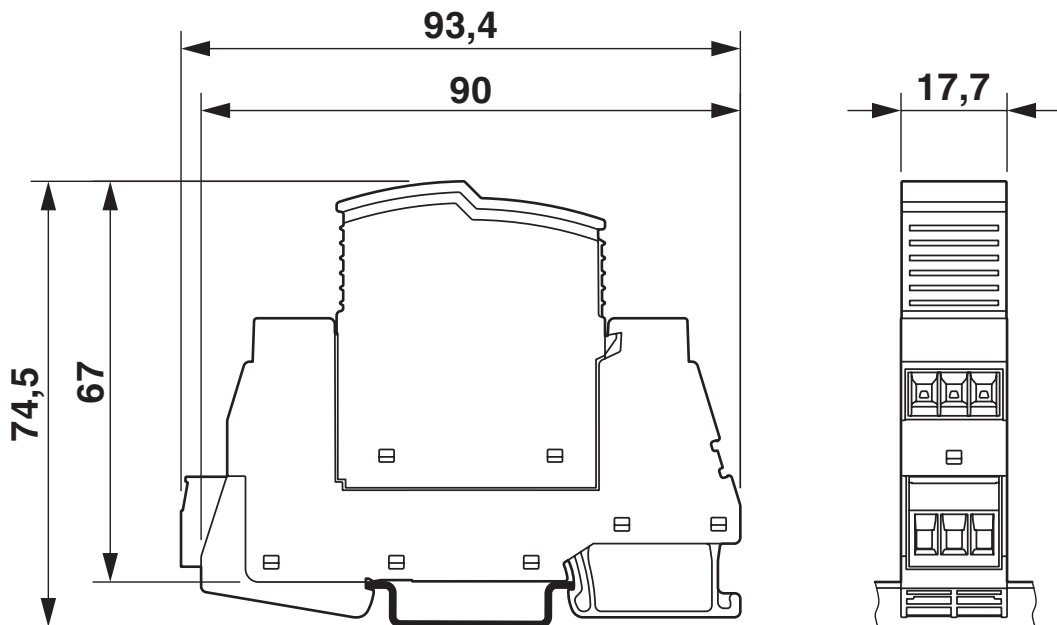
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Circuit diagram



Dimensional drawing



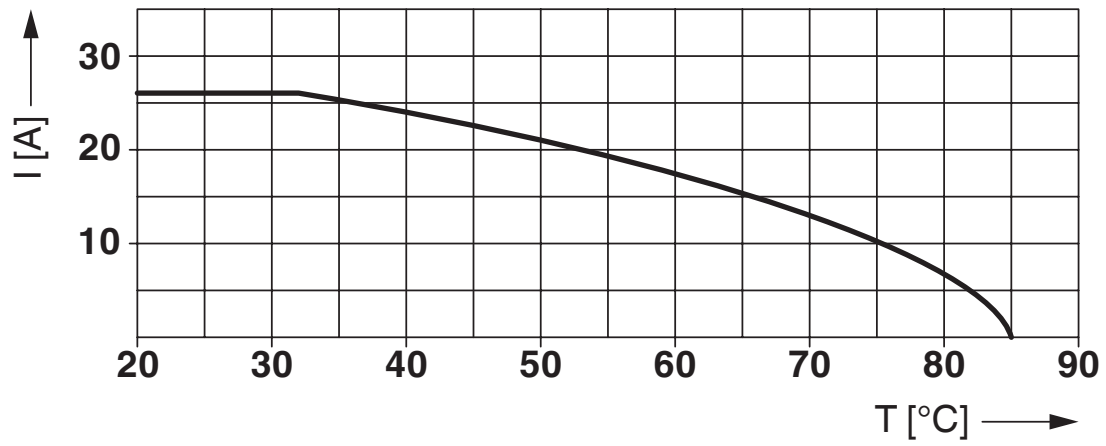
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Diagram



Nominal current depending on ambient temperature


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Approvals

 **cUL Recognized**
Approval ID: FILE E 330181


 **UL Recognized**
Approval ID: FILE E 330181


 **IECEE CB Scheme**
Approval ID: NL-51083

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

CCA
Approval ID: NTR-NL 7676

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
			-	-

 **KEMA-KEUR**
Approval ID: 71-103027

 **DNV GL**
Approval ID: TAE00002U7

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
			-	-

 **cUL Recognized**
Approval ID: FILE E 340736

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
			-	-

 **UL Recognized**
Approval ID: FILE E 340736

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
			-	-

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Classifications

ECLASS

ECLASS-9.0	27130806
ECLASS-10.0.1	27130806
ECLASS-11.0	27130806

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 = 50 years For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"
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