

# Type 3 surge protection device - PLT-T3-24-FM - 2906486

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Pluggable device protection, according to type 3/Class III, for 1-phase power supply networks with separate N and PE (3-conductor system: L1, N, PE) with remote indication contact.

## Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4055626082097
Weight per Piece (excluding packing)	66.200 g
Custom tariff number	85363010
Country of origin	Germany
Note	Made to Order (non-returnable)

## Technical data

### Dimensions

Height	90 mm
Width	17.7 mm
Depth	65.5 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 (amsl (above mean sea level))
Permissible humidity (operation)	5 % ... 95 %

### General

EN type	T3
IEC power supply system	TT

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## Technical data

### General

Number of ports	One
Mode of protection	L-N
	L-PE
	N-PE
	(L+) - (L-)
	(L+/L-) - PE
Mounting type	DIN rail: 35 mm
Color	jet black RAL 9005
Housing material	PA 6.6
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

### Additional descriptions

Note	PLT-T3-24-FM must not be used in DC applications with grounded positive pole.
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### 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
	44 V DC
Rated load current $I_L$	16 A AC (at 63 °C)
	10 A DC
Residual current $I_{PE}$	$\leq 5 \mu A$
Nominal discharge current $I_n$ (8/20) $\mu s$	1 kA
Standby power consumption $P_C$	$\leq 60$ mVA
Reference test voltage $U_{REF}$	27 V AC
Combination wave $U_{OC}$	2 kV
Voltage protection level $U_p$ (L-N)	$\leq 0.18$ kV
Voltage protection level $U_p$ (L-PE)	$\leq 0.55$ kV
Voltage protection level $U_p$ (N-PE)	$\leq 0.55$ kV
TOV behavior at $U_T$ (L-N)	36 V AC (5 s / withstand mode)
TOV behavior at $U_T$ (L-PE)	42 V AC (5 s / withstand 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 $I_{SCCR}$	1.5 kA AC
	1 kA DC

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## Technical data

### Protective circuit

Max. backup fuse with branch wiring	16 A AC (B)
	10 A DC (gG)
	10 A DC (B)
Maximum backup fuse for through wiring	16 A AC (B)
	10 A DC (gG)
	10 A DC (B)

### Indicator/remote signaling

Switching function	N/C contact
Operating voltage	250 V AC
	125 V DC (200 mA DC)
Operating current	3 A AC
	1 A DC (30 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> ... 4 mm <sup>2</sup>
Conductor cross section AWG	24 ... 12
Screw thread	M3
Tightening torque	0.8 Nm
Stripping length	8 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	0.8 Nm
Stripping length	8 mm

### UL specifications

SPD Type	4CA
Maximum continuous operating voltage MCOV	34 V AC
	34 V DC
Nominal voltage	24 V DC
Rated load current I <sub>L</sub>	20 A
Mode of protection	L-N
	L-G
	N-G
	(L+) - (L-)
	(L+) - G
	(L-) - G

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## Technical data

### UL specifications

Power distribution system	Single phase
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (L-N)	330 V
Measured limiting voltage MLV (L-G)	600 V
Measured limiting voltage MLV (N-G)	600 V
Measured limiting voltage MLV (L+) - (L-)	330 V
Measured limiting voltage MLV (L+) - G	600 V
Measured limiting voltage MLV (L-) - G	600 V
Nominal discharge current $I_n$	1 kA

### UL indicator/remote signaling

Tightening torque	5 lb <sub>f</sub> -in. ... 7 lb <sub>f</sub> -in.
Conductor cross section AWG	14 ... 12

### UL connection data

Conductor cross section AWG	14 ... 12
Tightening torque	5 lb <sub>f</sub> -in. ... 7 lb <sub>f</sub> -in.

### Standards and Regulations

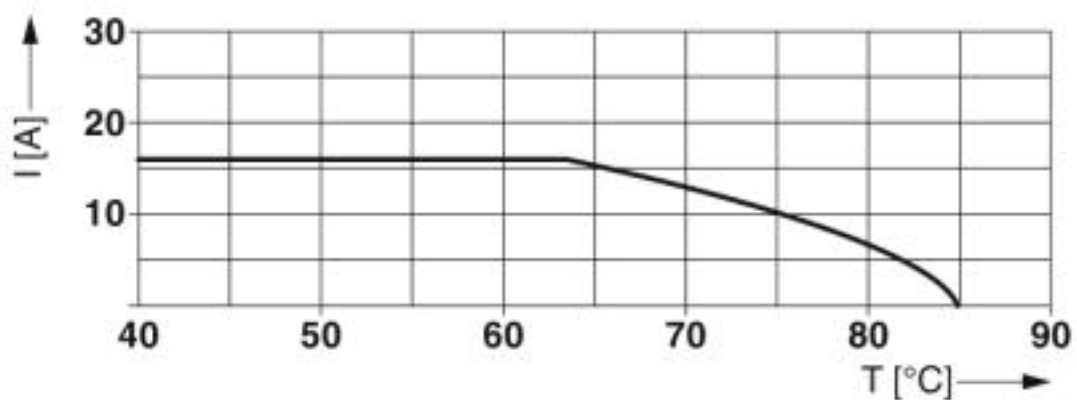
Standards/specifications	EN 61643-11 2012
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### Environmental Product Compliance

	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

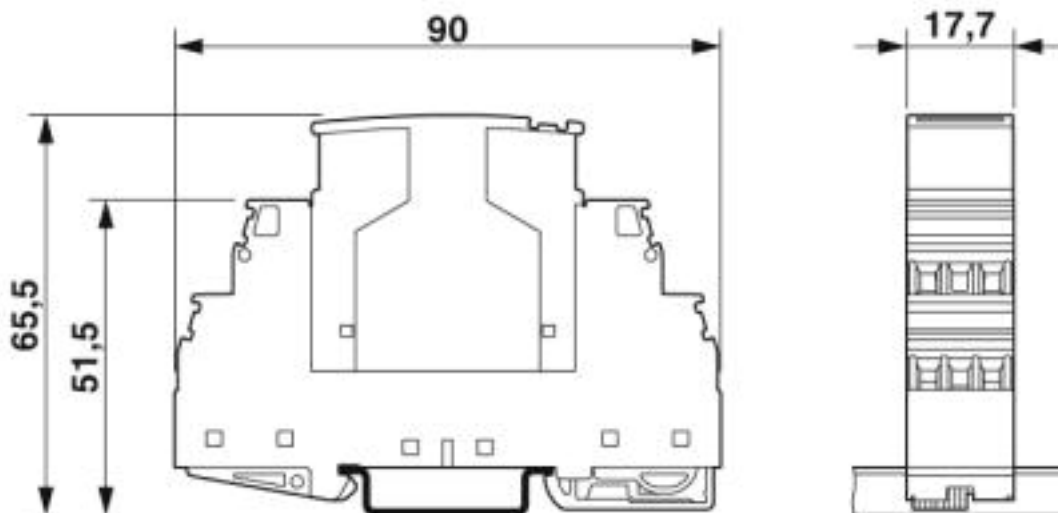
## Drawings

Diagram

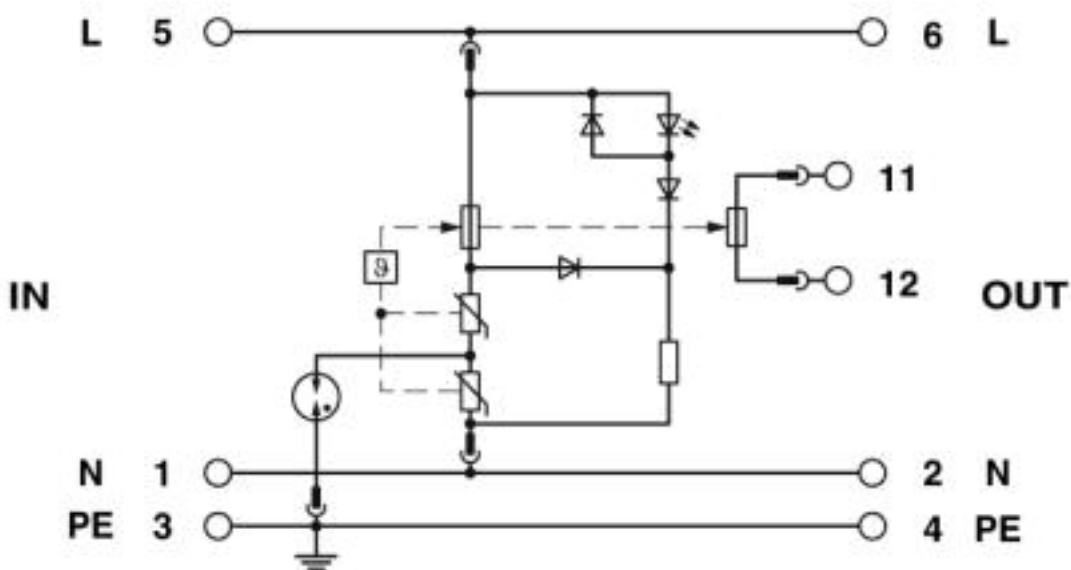


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Dimensional drawing



Circuit diagram



## Classifications

eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130800
eCl@ss 7.0	27130805
eCl@ss 8.0	27130806

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## Classifications

eCl@ss

eCl@ss 9.0	27130806
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## ETIM

ETIM 2.0	EC000942
ETIM 3.0	EC000942
ETIM 4.0	EC000942
ETIM 5.0	EC000942
ETIM 6.0	EC000941
ETIM 7.0	EC000941

## UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620
UNSPSC 19.0	39121620

## Accessories

### Accessories

#### Device marking

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

#### Labeled terminal marker

Zack Marker strip, flat - ZBF 5,LGS:FORTL.ZAHLEN - 0808671



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

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### Accessories

Zack Marker strip, flat - ZBF 5,LGS:GERADE ZAHLEN - 0810821



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 2 ... 20, 22 ... 40, etc. up to 82 ... 100, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

Zack Marker strip, flat - ZBF 5,LGS:UNGERADE ZAHLEN - 0810863



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: Odd numbers 1 - 19, 21 - 39, etc. up to 81 - 99, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

Zack Marker strip, flat - ZBF 5,QR:FORTL.ZAHLEN - 0808697



Zack Marker strip, flat, Strip, white, labeled, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

### 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

### Terminal marking

Zack Marker strip, flat - ZBF 5:UNBEDRUCKT - 0808642



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.1 x 5.2 mm, Number of individual labels: 10

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### Accessories

Zack Marker strip, flat - ZBF 5/WH-100:UNBEDRUCKT - 0808668



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

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### Additional products

Shield connection - SSA 3-6 - 2839295



Shield fast connection for 3 ... 6 mm cable diameter. Potential connecting cable: 200 mm, 1 mm<sup>2</sup>, color: black

Shield connection - SSA 5-10 - 2839512



Shield fast connection for 5 ... 10 mm cable diameter. Potential connecting cable: 200 mm, 1 mm<sup>2</sup>, color: black

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### Spare parts

Type 3 surge protection plug - PLT-T3-24-P - 2906492



Replacement plug for type 3 device protection from the PLUGTRAB T3 product range. 24 V nominal voltage.