

Type 3 surge protection device - PLT-SEC-T3-24-FM - 2905223

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>)



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 integrated surge-proof fuse and remote indication contact. Also suitable for DC applications.

The illustration shows version PLT-SEC-T3-230-FM

Why buy this product

- ✓ Varistor-based device protection
- ✓ Can be used without separate backup fuse thanks to integrated overcurrent protection
- ✓ For 1-phase power supply units (AC/DC)
- ✓ Pluggable
- ✓ Optical status indicator via LED
- ✓ With floating remote indication contact
- ✓ Plugs can be checked with CHECKMASTER 2



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	73.33 GRM
Custom tariff number	85363030
Country of origin	Germany

Technical data

Dimensions

Height	90 mm
Width	17.7 mm
Depth	74.5 mm
Horizontal pitch	1 Div.

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C

Type 3 surge protection device - PLT-SEC-T3-24-FM - 2905223

Technical data

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m (amsl (above mean sea level))
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	30g (half sinus / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	5g (10 ... 150 Hz/20 cycles/axis/X, Y, Z)

General

Standards/specifications	IEC 61643-11 2011
	EN 61643-11 2012
IEC test classification	III
	T3
EN type	T3
Number of ports	One
SPD design	Combination type
Mode of protection	L-N
	L-PE
	N-PE
	(L+) - (L-)
	(L+/L-) - 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
Pollution degree	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	24 V AC (TN-S)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_C	34 V AC
	34 V DC
Rated load current I_L	26 A (30 °C)
Residual current I_{PE}	≤ 5 μA
Nominal discharge current I_n (8/20) μs	1 kA
Standby power consumption P_C	≤ 30 mVA (at U_{REF})
	≤ 50 mVA (at U_C)
Reference test voltage U_{REF}	27 V AC

Type 3 surge protection device - PLT-SEC-T3-24-FM - 2905223

Technical data

Protective circuit

Combination wave U_{oc}	2 kV
Voltage protection level U_p (L-N)	≤ 0.25 kV
Voltage protection level U_p (L-PE)	≤ 0.65 kV
Voltage protection level U_p (N-PE)	≤ 0.65 kV
TOV behavior at U_T (L-N)	50 V AC (5 s / withstand mode)
	50 V AC (120 min / withstand mode)
TOV behavior at U_T (L-PE)	50 V AC (5 s / withstand mode)
	50 V AC (120 min / withstand 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}	1.5 kA AC
	1 kA DC
Max. backup fuse with branch wiring	Not required
Maximum backup fuse for through wiring	25 A (gG / B / C)

Indicator/remote signaling

Connection name	Remote fault indicator contact
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
Screw thread	M3
Tightening torque	0.8 Nm
Stripping length	8 mm
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
AWG conductor cross section	24 ... 12

Connection data

Connection method	Screw connection
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
AWG conductor cross section	24 ... 12 (IEC)
	24 ... 12 (UL)

Type 3 surge protection device - PLT-SEC-T3-24-FM - 2905223

Technical data

Connection data

Screw thread	M3
Tightening torque	0.8 Nm
Stripping length	8 mm

UL specifications

UL class	SPD type 4CA
Maximum continuous operating voltage MCOV	34 V AC
	34 V DC
Nominal voltage	24 V DC
Mode of protection	L-N
	L-G
	N-G
	(L+) - (L-)
	(L+) - G
	(L-) - G
Power distribution system	1
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (L-N)	290 V
Measured limiting voltage MLV (L-G)	500 V
Measured limiting voltage MLV (N-G)	500 V
Measured limiting voltage MLV (L+) - (L-)	290 V
Measured limiting voltage MLV (L+) - G	500 V
Measured limiting voltage MLV (L-) - G	500 V
Nominal discharge current I _n	1 kA

Classifications

eCl@ss

eCl@ss 5.1	27130801
eCl@ss 6.0	27130806
eCl@ss 8.0	27130803

ETIM

ETIM 5.0	EC000942
----------	----------

Approvals

Approvals

Approvals

KEMA-KEUR / CCA / IEC60384-14 CB Scheme / UL Recognized / cUL Recognized / EAC / GL / cULus Recognized

Type 3 surge protection device - PLT-SEC-T3-24-FM - 2905223

Approvals

Ex Approvals


UL Recognized / cUL Recognized / cULus Recognized


Approvals submitted


Approval details

KEMA-KEUR 

CCA


IECEE CB Scheme 

UL Recognized 

cUL Recognized 

EAC

GL

cULus Recognized 

Accessories

Accessories

Device marking

Type 3 surge protection device - PLT-SEC-T3-24-FM - 2905223

Accessories

Label - EML (20XE)R - 0803452



Label, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK X, THERMOMARK S1.1, Mounting type: Adhesive, Lettering field: continuous x 20 mm

Label - EML (20XE)R YE - 0803453



Label, Roll, yellow, unlabeled, can be labeled with: THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK X, THERMOMARK S1.1, Mounting type: Adhesive, Lettering field: 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

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-T3-24-P - 2905232

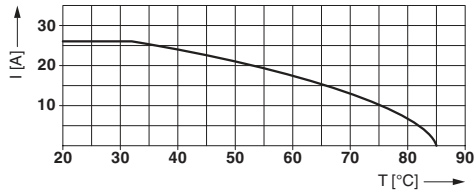


Replacement plug for type 3 device protection from the PLUGTRAB SEC T3 product range. 24 V nominal voltage.

Drawings

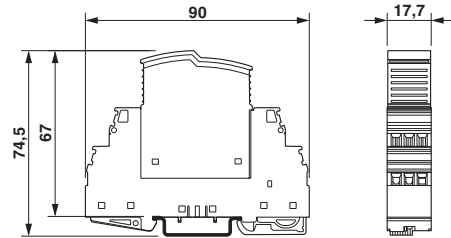
Type 3 surge protection device - PLT-SEC-T3-24-FM - 2905223

Diagram



Nominal current depending on ambient temperature

Dimensional drawing



Product drawing



Circuit diagram

