

VAL-SEC-T2-120DC-P - Type 2 surge protection plug



2907878

<https://www.phoenixcontact.com/us/products/2907878>

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 documentation. Our general terms of use for downloads are valid.



Replacement plug for surge protective devices from the VALVETRAB SEC product range for DC power sources.

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
- Extremely narrow design, just 12 mm per position
- Varistor arrester with a low leakage current

Commercial data

Item number	2907878
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	CL01
Product key	CL1353
Catalog page	Page 58 (C-4-2019)
GTIN	4055626245034
Weight per piece (including packing)	53.2 g
Weight per piece (excluding packing)	53.2 g
Customs tariff number	85363090
Country of origin	DE

VAL-SEC-T2-120DC-P - Type 2 surge protection plug



2907878

<https://www.phoenixcontact.com/us/products/2907878>

Technical data

Product properties

Product type	Replacement plug
Product family	SEC Family
IEC test classification	II
	T2
EN type	T2
IEC power supply system	DC
Type	Male
Number of positions	1
Surge protection fault message	optical

Data management status

Article revision	05
------------------	----

Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

Nominal voltage U_N	100 V DC ... 120 V DC
-----------------------	-----------------------

Connection data

Connection method	pluggable
-------------------	-----------

Dimensions

Dimensional drawing	
Width	11.7 mm
Height	46.4 mm
Depth	59.4 mm
Horizontal pitch	0.6 Div.

Material specifications

Color	light grey (RAL 7035)
Flammability rating according to UL 94	V-0
CTI value of material	600
Insulating material	PA6.6-FR 20% GF
	PBT-FR
Material group	I

VAL-SEC-T2-120DC-P - Type 2 surge protection plug



2907878

<https://www.phoenixcontact.com/us/products/2907878>

Housing material	PA 6.6-FR 20 % GF
	PBT-FR

Protective circuit

Mode of protection	(DC+) - (DC-)
	(DC+/DC-) - PE
Direction of action	(DC+/DC-) - PE
Nominal voltage U_N	100 V DC ... 120 V DC
Maximum continuous voltage U_C	150 V DC
Residual current I_{PE}	$\leq 5 \mu A$ DC
Nominal discharge current I_n (8/20) μs	20 kA
Maximum discharge current I_{max} (8/20) μs	40 kA
Impulse discharge current (10/350) μs , charge	0.5 As
Impulse discharge current (10/350) μs , specific energy	0.25 kJ/ Ω
Impulse discharge current (10/350) μs , peak value I_{imp}	1 kA
	0.2 kA (without backup fuse)
Short-circuit current rating I_{SCCR}	6 kA (for 20 A gG/B backup fuse)
Voltage protection level U_p	≤ 0.85 kV
Residual voltage U_{res}	≤ 0.85 kV (at I_n)
	≤ 0.75 kV (at 10 kA)
	≤ 0.65 kV (at 5 kA)
	≤ 0.63 kV (at 4 kA)
	≤ 0.57 kV (at 2 kA)
TOV behavior at U_T	174 V DC (5 s / withstand mode)
Response time t_A	≤ 25 ns
Max. backup fuse with V-type through wiring	20 A (gG / B at $I_{SCCR} > 200$ A)
Max. backup fuse with branch wiring	20 A (gG / B at $I_{SCCR} > 200$ A)

Additional technical data

Maximum continuous voltage U_C	135 V AC (for operation in safety lighting systems)
----------------------------------	---

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	≤ 6000 m (amsl)
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	30g (Half-sine / 11 ms / 3x $\pm X$, $\pm Y$, $\pm Z$)
Vibration (operation)	5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

Approvals

UL specifications

Maximum continuous operating voltage MCOV	150 V DC
---	----------

VAL-SEC-T2-120DC-P - Type 2 surge protection plug



2907878

<https://www.phoenixcontact.com/us/products/2907878>

Short-circuit current rating (SCCR)	50 kA
Voltage protection rating VPR	700 V
Nominal discharge current I_n	20 kA
Mode of protection	(DC+) - G
	(DC-) - G
Nominal voltage	120 V DC
Power distribution system	DC
SPD Type	1CA

Standards and regulations

Standards/specifications	IEC 61643-11
Note	2011

EN 61643-11

Standards/specifications	EN 61643-11
Note	2012

Mounting

Mounting type	on base element
---------------	-----------------

VAL-SEC-T2-120DC-P - Type 2 surge protection plug

2907878

<https://www.phoenixcontact.com/us/products/2907878>

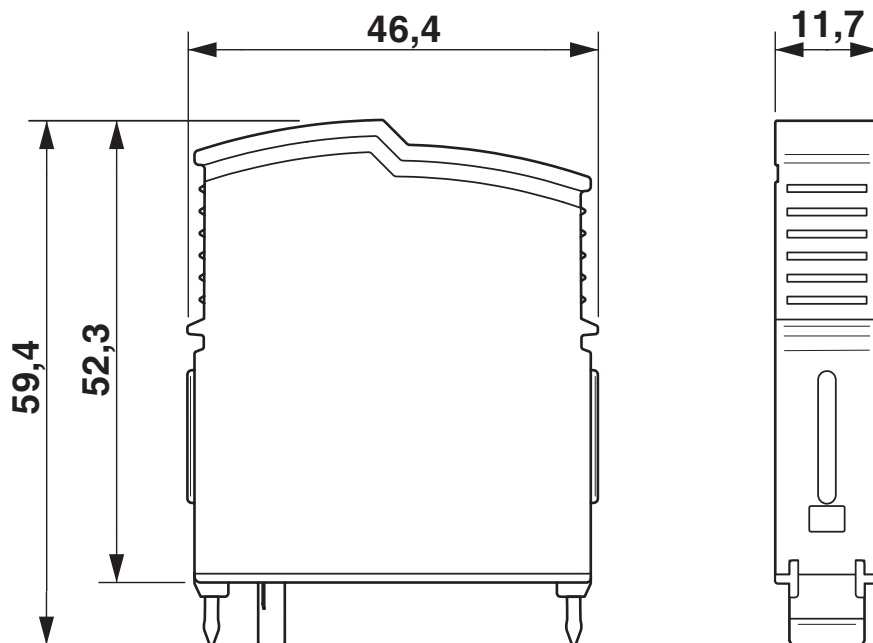


Drawings

Circuit diagram



Dimensional drawing



VAL-SEC-T2-120DC-P - Type 2 surge protection plug



2907878

<https://www.phoenixcontact.com/us/products/2907878>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2907878>

	cUL Recognized Approval ID: FILE E 330181
	UL Recognized Approval ID: FILE E 330181
	EAC Approval ID: RU C-DE.*09.B.00169
	UAE-RoHS Approval ID: 23-10-88707
	cULus Recognized

VAL-SEC-T2-120DC-P - Type 2 surge protection plug



2907878

<https://www.phoenixcontact.com/us/products/2907878>

Classifications

ECLASS

ECLASS-11.0	27130890
ECLASS-13.0	27171292

ETIM

ETIM 9.0	EC002496
----------	----------

UNSPSC

UNSPSC 21.0	39121600
-------------	----------

VAL-SEC-T2-120DC-P - Type 2 surge protection plug



2907878

<https://www.phoenixcontact.com/us/products/2907878>

Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

2907878

<https://www.phoenixcontact.com/us/products/2907878>

Accessories

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, Number of individual labels: 1

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, Number of individual labels: 1

VAL-SEC-T2-120DC-P - Type 2 surge protection plug



2907878

<https://www.phoenixcontact.com/us/products/2907878>

B-STIFT - Marker pen

1051993

<https://www.phoenixcontact.com/us/products/1051993>



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

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