



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## Surge protection device - PT 2X1-VF-120AC - 2859327

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>)



Rail-mountable surge arrester for higher signal voltages. Protective circuit free of leakage current for two floating signals.  
Nominal voltage: 120 V AC

### Product Features

- ✓ Plugs can be checked with CHECKMASTER
- ✓ Maximum ease of maintenance thanks to the two-piece design
- ✓ Base element remains an integral part of the installation
- ✓ Protective devices for use in telecommunications and signaling networks according to IEC 61643-21
- ✓ Consistent plug-in signal circuit protection
- ✓ Impedance-neutral disconnection of plug for test and maintenance purposes



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	70.0 GRM
Custom tariff number	85363010
Country of origin	Germany

### Technical data

#### Dimensions

Height	90 mm
Width	17.7 mm
Depth	65.5 mm
Horizontal pitch	1 Div.
Complete module height	90 mm
Complete module width	17.7 mm
Complete module depth	65.5 mm

# Surge protection device - PT 2X1-VF-120AC - 2859327

## Technical data

### Ambient conditions

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

### General

Housing material	PA 6.6
Inflammability class according to UL 94	V0
Color	black
Standards for air and creepage distances	IEC 60664-1
	DIN VDE 0110-1
Surge voltage category	III
Pollution degree	2
Mounting type	DIN rail: 35 mm
Type	DIN rail module, two-section, divisible
Number of positions	2
Direction of action	Line-Line & Line-Earth Ground
Arrester can be tested with CHECKMASTER from software version:	SW Version 2.13 or later

### Protective circuit

IEC test classification	C1
	C2
	C3
Nominal voltage $U_N$	120 V AC
Maximum continuous operating voltage $U_C$	175 V AC
Nominal current $I_N$	6 A
Operating effective current $I_C$ at $U_C$	$\leq 2 \mu A$
Residual current $I_{PE}$	$\leq 4 \mu A$
Nominal discharge current $I_n$ (8/20) $\mu s$	3 kA
Nominal discharge current $I_n$ (8/20) $\mu s$ (Core-Earth)	3 kA
Total surge current (8/20) $\mu s$	8 kA
Max. discharge current $I_{max}$ (8/20) $\mu s$	8 kA
Nominal pulse current $I_{an}$ (10/1000) $\mu s$ (Core-Earth)	40 A
Impulse discharge current (10/350) $\mu s$ , peak value $I_{imp}$	300 A
Output voltage limitation at 1 kV/ $\mu s$ (Core-Earth) static	$\leq 800 V$
Residual voltage at $I_n$ , (conductor-ground)	$\leq 600 V$
Residual voltage with $I_{an}$ (10/1000) $\mu s$ (conductor-ground)	$\leq 360 V$
Energy absorption	85 J
Voltage protection level $U_p$	$\leq 1 kV$ (C2 - 2 kA)
Voltage protection level $U_p$ (Core-Earth)	$\leq 900 V$ (C1 - 500 A)

## Surge protection device - PT 2X1-VF-120AC - 2859327

### Technical data

#### Protective circuit

	≤ 950 V (C2 - 1 kA)
	≤ 1 kV (C3 - 25 A)
	≤ 1.1 kV ( $I_{imp}$ -300 A)
Response time $t_A$	≤ 100 ns
Capacity	typ. 3 pF
Resistance in series	0 Ω
Surge protection fault message	None
Max. required back-up fuse	6 A (e.g. D01 gL/gG)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C1 (1 kV / 500 A)
	C2 (4 kV / 2 kA)
	C3 (25 A)

#### Connection data

Connection method	Screw connection
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Screw thread	M3
Tightening torque	0.8 Nm
Stripping length	8 mm
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12

#### Connection, equipotential bonding

Connection method	Screw connection
Tightening torque, min	0.8 Nm

#### Standards and Regulations

Standards/regulations	EN 61643-21
	IEC 61643-21

### Classifications

eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801

## Surge protection device - PT 2X1-VF-120AC - 2859327

### Classifications

#### eCl@ss

eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130807
eCl@ss 7.0	27130807
eCl@ss 8.0	27130807

#### ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943
ETIM 5.0	EC000943

#### UNSPSC

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

### Approvals

#### Approvals

---

Approvals

GOST

---

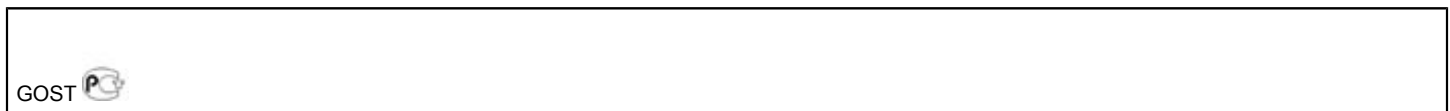
Ex Approvals

---

Approvals submitted

---

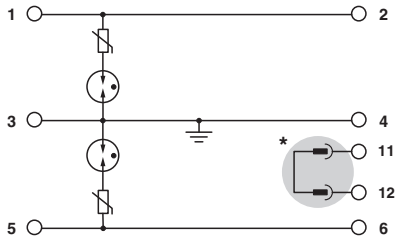
Approval details



# Surge protection device - PT 2X1-VF-120AC - 2859327

## Drawings

Circuit diagram



\* Circuit only closed when plug is inserted.

Dimensioned drawing

