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 set - PV-SET 1000 DC/AC - 2804458

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)

Surge protection in IP65 housing for the AC and DC sides of an inverter for single string photovoltaic systems up to 1000 V DC.

Product Features

- Plugs can be checked with CHECKMASTER
- Pre-assembled protection solutions
- Mechanical coding of all slots
- Optical, mechanical status indication for the individual arresters
- Type 2 consistent plug-in surge arresters

Key commercial data

Packing unit	1 pc
Custom tariff number	85363030
Country of origin	Germany

Technical data

Dimensions

Height	180 mm
Width	254 mm
Depth	110 mm

Ambient conditions

Degree of protection	IP65
Ambient conditions	A, B
Ambient temperature (operation)	-25 °C ... 40 °C
Altitude	max. 2000 m

Surge protection device set - PV-SET 1000 DC/AC - 2804458

Technical data

General

Housing material	PBT / PA
Inflammability class according to UL 94	V0
Color	light grey RAL 7035
Standards for air and creepage distances	IEC 61643-1
	IEC 60664-1
	EN 61643-11
Mounting type	Surface/Wall mounting
Type	Installation housing
Number of positions	2
Surge protection fault message	Optical
Direction of action	DC: (L+)-PE & (L-)-PE & (L+)-(L-) / AC: L-N & N-PE

PV protective circuit AC side

Rated voltage U_n	230 V AC
Rated operating voltage U_e	230 V AC
Rated surge voltage resistance U_{imp}	6 kV
Rated insulation voltage U_i	250 V
Rated current I_n	80 A
Rated frequency f_n	50 Hz (60 Hz)

PV protective circuit DC side

Maximum continuous operating voltage U_{CPV}	1000 V DC
Rated surge voltage resistance U_{imp}	6 kV
Rated insulation voltage U_i	1000 V DC
Short-circuit current rating I_{SCPV}	80 A

Protective circuit

IEC test classification	II
	T2
EN type	T2
Nominal voltage U_N	230 V AC (U_N)
Maximum continuous operating voltage U_C	1000 V DC
Maximum continuous operating voltage U_C (L-N)	335 V AC
Maximum continuous operating voltage U_C (N-PE)	260 V AC
U_T (TOV-proof)	415 V AC (5 s)
U_T (TOV-safe)	1200 V AC (200 ms / N-PE)
Nominal frequency f_N	50 Hz (60 Hz)
Rated load current I_L	≤ 80 A DC

Surge protection device set - PV-SET 1000 DC/AC - 2804458

Technical data

Protective circuit

Residual current I_{PE}	≤ 1 µA (AC)
	≤ 20 µA (DC)
Standby power consumption P_C	≤ 20 mW (DC)
Max. discharge current I_{max} (8/20) µs	30 kA (DC)
	40 kA (AC)
Nominal discharge current I_n (8/20) µs	15 kA (DC)
	20 kA (AC)
Impulse discharge current (10/350)#µs, peak value I_{imp}	12 kA (N-PE)
Front of wave sparkover voltage at 6 kV (1.2/50) µs (N-PE)	≤ 1.5 kV
Voltage protection level U_p	≤ 5 kV
Voltage protection level U_p (L-N)	≤ 1.5 kV
Voltage protection level U_p (L-PE)	≤ 2 kV
Voltage protection level U_p (N-PE)	≤ 1.5 kV
Voltage protection level U_p (L+) - (L-)	≤ 5 kV
Voltage protection level U_p (L+/L-) - PE	≤ 5 kV
Residual voltage (L-N)	≤ 1.2 kV (at 5 kA)
Residual voltage (L-PE)	≤ 1.2 kV (at 5 kA)
Residual voltage (N-PE)	≤ 0.15 kV (at 5 kA)
Residual voltage (L+) - (L-)	≤ 5 kV (at 15 kA)
	≤ 4.5 kV (at 10 kA)
	≤ 4 kV (at 5 kA)
Residual voltage (L+/L-) - PE	≤ 5 kV (at 15 kA)
	≤ 4.5 kV (at 10 kA)
	≤ 4 kV (at 5 kA)
Response time	≤ 25 ns
Response time (N-PE)	≤ 100 ns
Max. backup fuse with branch wiring	≤ 125 A (gL/gG (AC side))
Max. backup fuse with V-type through wiring	≤ 80 A (gL/gG (AC side) with 16 mm²)
Short-circuit resistance I_P with max. backup fuse (effective)	25 kA (AC side)
Follow current quenching capacity If (N-PE)	100 A

Connection, protective circuit

Connection method	Screw terminal blocks
Connection type IN	Biconnect screw terminal block
Connection type OUT	Biconnect screw terminal block
Connection method	Biconnect terminal block
Screw thread	M5

Surge protection device set - PV-SET 1000 DC/AC - 2804458

Technical data

Connection, protective circuit

Tightening torque	4.5 Nm
Stripping length	16 mm
Conductor cross section stranded min.	1.5 mm²
Conductor cross section stranded max.	25 mm²
Conductor cross section solid min.	1.5 mm²
Conductor cross section solid max.	35 mm²
Conductor cross section AWG/kcmil min.	15
Conductor cross section AWG/kcmil max	2

Standards and Regulations

Standards/regulations	IEC 61643-1 2005
	EN 61643-11/A11 2007

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	27130805
eCl@ss 7.0	27130805
eCl@ss 8.0	27130805

ETIM

ETIM 2.0	EC000941
ETIM 3.0	EC000941
ETIM 4.0	EC000941
ETIM 5.0	EC000941

UNSPSC

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

Surge protection device set - PV-SET 1000 DC/AC - 2804458

Approvals

Approvals

Approvals

GOST

Ex Approvals

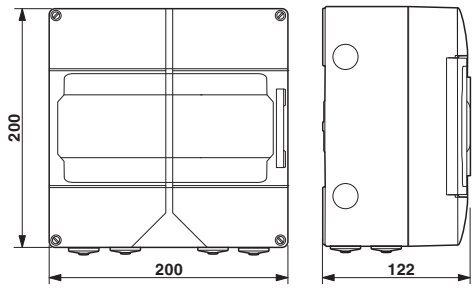
Approvals submitted

Approval details

GOST

Drawings

Dimensioned drawing



Circuit diagram