

Lightning arrester type 1 - SYS-SET/3+1/T1/690 - 2800142

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 combination type 1 for 690 V AC in a TN-S system



Key commercial data

Packing unit	1
GTIN	 4 046356 496254
Custom tariff number	85363030

Technical data

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 85 °C

General

IEC power supply system	IT
Housing material	PA
Inflammability class according to UL 94	V0
Color	black
Standards for air and creepage distances	EN 60664-1
Mounting type	DIN rail: 35 mm
Type	DIN rail mounting
Number of positions	4
Surge protection fault message	None
Direction of action	3L-PE

Protective circuit

IEC test classification	T1
EN type	T1
Nominal voltage U_N	690 V AC (3/PE-IT)
Maximum continuous operating voltage U_c	750 V AC

Lightning arrester type 1 - SYS-SET/3+1/T1/690 - 2800142

Technical data

Protective circuit

Maximum continuous operating voltage U_C (L-PE)	750 V AC
Nominal frequency f_N	50 Hz (60 Hz)
Residual current I_{PE}	≤ 0.1 mA
Nominal discharge current I_n (8/20) μ s	50 kA
Nominal discharge current I_n (8/20) μ s (L-PE)	50 kA
Impulse discharge current (10/350) μ s charge	25 As
Impulse discharge current (10/350) μ s, specific energy	625 kJ/ Ω
Impulse discharge current (10/350) μ s, peak value I_{imp}	50 kA (1-pos.)
Front of wave sparkover voltage at 6 kV (1.2/50) μ s	≤ 5 kV
Front of wave sparkover voltage at 6 kV (1.2/50) μ s (L-PE)	≤ 5 kV
Voltage protection level U_p	≤ 5 kV
Voltage protection level U_p (L-PE)	≤ 5 kV
Response time	≤ 100 ns
Response time (L-PE)	≤ 100 ns
Max. backup fuse with branch wiring	500 A (NH-gL)
Short-circuit resistance I_p with max. backup fuse (effective)	25 kA
Follow current quenching capacity I_f	25 kA

Connection, protective circuit

Connection method	Screw terminal block
Connection type IN	Biconnect screw terminal block
Connection type OUT	Biconnect screw terminal block
Connection method	Biconnect terminal block
Screw thread	M6
Tightening torque	8 Nm
Stripping length	19 mm
Conductor cross section stranded min.	16 mm ²
Conductor cross section stranded max.	35 mm ²
Conductor cross section solid min.	10 mm ²
Conductor cross section solid max.	50 mm ²
Conductor cross section AWG/kcmil min.	6
Conductor cross section AWG/kcmil max	1

Standards and Regulations

Standards/regulations	IEC 61643-1 2005
	DIN EN 61643-11 2002
	DIN EN 61643-11/A11 2007

Lightning arrester type 1 - SYS-SET/3+1/T1/690 - 2800142

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	27130802
eCl@ss 7.0	27130802
eCl@ss 8.0	27130802

ETIM

ETIM 2.0	EC000941
ETIM 3.0	EC000941
ETIM 4.0	EC000381
ETIM 5.0	EC000381

UNSPSC

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

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approvals submitted

Approval details

EAC

Accessories

Accessories

Lightning arrester type 1 - SYS-SET/3+1/T1/690 - 2800142

Accessories

Device marking

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 18 mm, Lettering field: 18 x 5 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

Labeled device marker

Marker for terminal blocks - ZBN 18,LGS:ERDE - 2749589



Marker for terminal blocks, Strip, white, labeled, Horizontal: Grounding symbol, Mounting type: Snap into tall marker groove, for terminal block width: 18 mm, Lettering field: 18 x 5 mm

Marker for terminal blocks - ZBN 18,LGS:L1-N,ERDE - 2749576



Marker for terminal blocks, Strip, white, labeled, Horizontal: L1, L2, L3, N, GND, Mounting type: Snap into tall marker groove, for terminal block width: 18 mm, Lettering field: 18 x 5 mm

Marker pen

Marker pen - B-STIFT - 1051993



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

Lightning arrester type 1 - SYS-SET/3+1/T1/690 - 2800142

Drawings

Circuit diagram

