


# SYS-SET/3/T2/690

Order No.: 2880341




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Surge voltage protection combination type 2 for 690 V AC in a TN-C system

Commercial data	
GTIN (EAN)	 4 046356 048811
sales group	J002
Pack	1 pcs.
Customs tariff	85363030
Catalog page information	Page 45 (TT-2009)

**Product notes**

WEEE/RoHS-compliant since:  
06/02/2006



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Technical data	
<b>Standards</b>	
Housing material	PA
Inflammability class acc. to UL 94	V0
Color	black
Standards for air and creepage distances	IEC 60664-1: 1992-10
	DIN VDE 0110-1

Surge voltage category	III
Pollution degree	2
Total surge current (8/20) $\mu$ s	45 kA
Degree of protection	IP20
Mounting type	DIN rail: 35 mm
Ambient temperature (operation)	-40 °C ... 80 °C
Message: Surge protection fault	Optical, remote indicator contact
Direction of action	3L-PEN
Width	53.00 mm
Height	65.50 mm
Length	102.80 mm
Pitch unit	3 Div.

**Protective circuit**

IEC category	II
	T2
EN type	T2
Nominal voltage $U_N$	400 V AC (690 V AC)
	500 V AC (3/PE-IT)
Arrester rated voltage $U_C$	600 V AC
Arrester rated voltage $U_C$ (L-PEN)	600 V AC
$U_T$ (TOV-proof)	750 V (5 s)
Nominal frequency $f_N$	50 Hz (60 Hz)
Ground conductor current $I_{PE}$	$\leq 0.25$ mA
Standby power consumption $P_C$	$\leq 600$ mVA
Max. discharge surge current $I_{max}$ (8/20) $\mu$ s maximum (L-PEN)	30 kA
Nominal discharge surge current $I_n$ (8/20) $\mu$ s (L-PEN)	15 kA
	45 kA (all channels)
Protection level $U_p$ (L-PEN)	$\leq 2.7$ kV
Residual voltage (L-PEN)	$\leq 2.8$ kV
	$\leq 2.3$ kV (at 5 kA)
Clamping voltage SVR (L-PEN)	$\leq 2$ kV (6 kV/500 A)
Response time (L-N)	$\leq 25$ ns
Max. required backup fuse with branch wiring	125 A (gL/gG)

Short-circuit resistance $I_p$ with max. backup fuse (effective)	25 kA
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**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	M5
Tightening torque	4.5 Nm
Stripping length	14.5 mm
Conductor cross section stranded min.	0.5 mm <sup>2</sup>
Conductor cross section stranded max.	25 mm <sup>2</sup>
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	35 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	20
Conductor cross section AWG/kcmil max	2

**Remote indicator contact**

Connection name	Remote fault indicator contact
Switching function	PDT contact
Connection method	Screw connection
Screw thread	M2
Tightening torque	0.25 Nm
Stripping length	7 mm
Conductor cross section stranded min.	1.5 mm <sup>2</sup>
Conductor cross section stranded max.	0.14 mm <sup>2</sup>
Conductor cross section solid min.	1.5 mm <sup>2</sup>
Conductor cross section solid max.	0.14 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	28
Conductor cross section AWG/kcmil max	16
Maximum operating voltage $U_{max}$ AC	250 V AC
Maximum operating voltage $U_{max}$ DC	125 V DC
Max. operating current $I_{max}$	1 A AC (inductive)
	1 A AC (ohmic)
	30 mA DC (inductive)
	200 mA DC (ohmic)

### Standards

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

### Certificates / Approvals

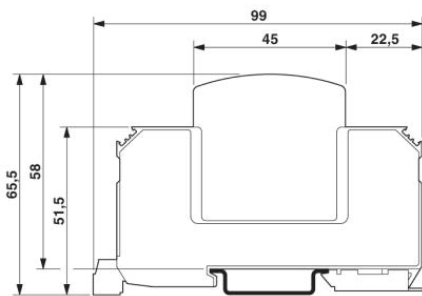


Certification

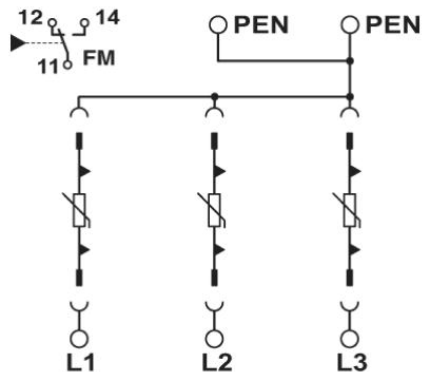
CUL, GOST, UL

### Diagrams/Drawings

Dimensioned drawing



Circuit diagram



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