

# S-PT1-2PE-24DC

Order No.: 2818122



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Screw on module for conduit systems, with two conductor protection for a 2-core floating signal circuit. Design: 24 V DC

Commercial data	
GTIN (EAN)	4017918148355
Note	Made-to-order
sales group	J330
Pack	1 pcs.
Customs tariff	85363010
Weight/Piece	0.3308 KG
Catalog page information	Page 55 (TT-2002)

### Product notes

WEEE/RoHS-compliant since: 06/29/2006



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## Technical data

General	
Color	silver
Standards for air and creepage distances	VDE 0110-1 IEC 60664-1
Total surge current (8/20) $\mu$ s	20 kA
Ambient temperature (operation)	-40 °C ... 80 °C

Mounting type	Connection-specific intermediate plugging
Design	Screw-in module
Number of positions	3
Degree of protection	IP40
Direction of action	Line-Line & Line-Earth Ground
Width	33.00 mm
Height	120.00 mm
Length	33.00 mm
<b>Protective circuit</b>	
IEC category	C1
	C2
	C3
	D1
Nominal voltage $U_N$	24 V DC
Max. operating voltage $U_{max}$	28 V DC
Arrester rated voltage $U_C$	28 V DC
	20 V AC
Arrester rated voltage $U_C$ (Core-Core)	28 V DC
	20 V AC
Nominal current $I_N$	250 mA (25°C)
Operating effective current $I_C$ at $U_C$	$\leq 5 \mu A$
Discharge current to PE at $U_C$	$\leq 2 \mu A$
Nominal discharge surge current $I_n$ (8/20) $\mu s$ (Core-Core)	10 kA
Nominal discharge surge current $I_n$ (8/20) $\mu s$ (Core-Earth)	10 kA
Total surge current (8/20) $\mu s$	20 kA
Max. discharge surge current $I_{max}$ (8/20) $\mu s$ maximum (Core-Core)	10 kA
Max. discharge surge current $I_{max}$ (8/20) $\mu s$ maximum (Core-Earth)	10 kA
Nominal pulse current $I_{an}$ (10/1000) $\mu s$ (Core-Core)	180 A
Nominal pulse current $I_{an}$ (10/1000) $\mu s$ (Core-Earth)	180 A
Output voltage limitation at 1 kV/ $\mu s$ (Core-Core) spike	$\leq 60 V$

Output voltage limitation at 1 kV/ $\mu$ s (Core-Earth) spike	$\leq 450$ V
Output voltage limitation at 1 kV/ $\mu$ s (Core-Core) static	$\leq 60$ V
Residual voltage at $I_n$ , (conductor-conductor)	$\leq 40$ V
Residual voltage at $I_n$ , (conductor-ground)	$\leq 60$ V
Residual voltage with $I_{an}$ (10/1000) $\mu$ s (conductor-conductor)	$\leq 25$ V
Residual voltage with $I_{an}$ (10/1000) $\mu$ s (conductor-ground)	$\leq 20$ V
Protection level $U_p$ (Core-Core)	$\leq 55$ V
Protection level $U_p$ (Core-Earth)	$\leq 550$ V
Response time $t_A$ (Core-Core)	$\leq 1$ ns
Response time $t_A$ (Core-Earth)	$\leq 100$ ns
Input attenuation aE, sym.	$\leq 1.6$ dB (up to 500 kHz, 50 $\Omega$ system)
	$\leq 0.6$ dB (up to 200 kHz, 150 $\Omega$ system)
	$\leq 0.2$ dB (up to 50 kHz, 600 $\Omega$ system)
Cut-off frequency $f_g$ (3 dB), sym. in 50 Ohm system	Typ. 3.5 MHz
Cut-off frequency $f_g$ (3 dB), sym. in 150 Ohm system	Typ. 1.5 MHz
Cut-off frequency $f_g$ (3 dB), sym. in 600 Ohm system	Typ. 400 kHz
Capacity (Core-Core)	Typ. 1.5 nF
Resistance in series	10 $\Omega$ 5%
Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	C2 (10 kV/5 kA)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C2 (10 kV/5 kA)
	D1 (2.5 kA)
Alternating current carrying capacity in acc. with IEC 61643-21 (Core-Earth)	5 A - 1 s

#### Connection data

Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Conductor cross section stranded min.	0.14 mm <sup>2</sup>
Conductor cross section stranded max.	1.5 mm <sup>2</sup>
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>

Conductor cross section AWG/kcmil min.	26
Conductor cross section AWG/kcmil max	16

**Connection, protective circuit**

Standards/regulations	IEC 61643-21
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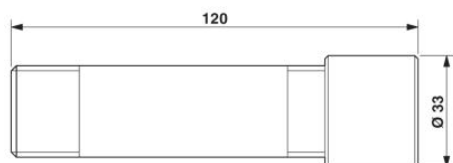
**Certificates / Approvals**



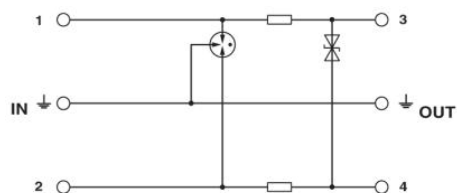
Certification GOST, UL  
Certification Ex: CUL-EX LIS, UL-EX LIS

**Diagrams/Drawings**

Dimensioned drawing



Circuit diagram



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