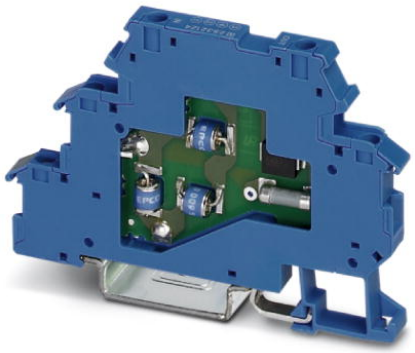
Extract from the online catalog

TT-EX(I)- 24DC

Order No.: 2832124



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Modular terminal block with three-stage surge protection for a floating Ex-i signal circuit, separate PE connection, nominal voltage: 24 V DC, for mounting on NS 35/7.5, terminal block width: 6.2 mm, terminal block height: 54.6 mm

Product notes

WEEE/RoHS-compliant since: 05/03/2006

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Commercial data

GTIN (EAN)	4 017918 172831
sales group	J305
Pack	10 pcs.
Customs tariff	85363010
Catalog page information	Page 107 (TT-2011)

Technical data

General

Housing material	PA 6.6
Inflammability class acc. to UL 94	V0
Color	blue

Standards for air and creepage distances	EN 60079-11
Ambient temperature (operation)	-40 °C ... 80 °C
Mounting type	DIN rail: 35 mm
Design	Double-level terminal block with PE foot – separate PE connection
Degree of protection	IP20
Direction of action	Line-Line & Line-Earth Ground
Width	6.20 mm
Height	54.60 mm
Length	79.60 mm

Protective circuit

IEC category	C1
	C2
	C3
	D1
VDE requirement class	C1
	C2
	C3
	D1
Nominal voltage U_N	24 V DC
Maximum continuous operating voltage U_C	30 V DC
Maximum continuous voltage UC (wire-wire)	30 V DC
Nominal current I_N	250 mA (40°C)
Operating effective current I_C at U_C	≤ 5 µA
Ground conductor current I_{PE}	≤ 1 µA
Nominal discharge surge current I_n (8/20) µs (Core-Core)	5 kA
Nominal discharge surge current I_n (8/20) µs (Core-Earth)	5 kA
Nominal pulse current Ian (10/1000) µs (Core-Core)	100 A
Nominal pulse current Ian (10/1000) µs (Core-Earth)	100 A
Lightning test current (10/350) µs, peak value I_{imp}	500 A
Output voltage limitation at 1 kV/µs (Core-Core) spike	≤ 50 V

Output voltage limitation at 1 kV/µs (Core-Earth) spike	≤ 1.7 kV
Protection level U_P (Core-Core)	≤ 75 V (C2 - 10 kV / 5 kA)
	≤ 55 V (C1 - 1 kV/500 A)
	≤ 50 V (C3 (10 A))
	≤ 50 V (C3 - 100 A)
Protection level U_P (Core-Earth)	≤ 2.2 kV (C2 - 10 kV / 5 kA)
	≤ 1.5 kV (C3 - 10 A)
	≤ 2 kV (C3 - 100 A)
	≤ 2 kV (D1 - 500 A)
Response time tA (Core-Core)	≤ 1 ns
Response time tA (Core-Earth)	≤ 100 ns
Input attenuation aE, sym.	Typ. 0.7 dB (≤ 400 kHz/50 Ω)
	Typ. 0.3 dB (≤ 200 kHz / 150 Ω)
Cut-off frequency fg (3 dB), sym. in 50 Ohm system	Typ. 6 MHz
Cut-off frequency fg (3 dB), sym. in 150 Ohm system	Typ. 2 MHz
Capacity (Core-Core)	≤ 2 nF
Resistance in series	4.7 Ω ±20 %
	4.7 Ω
Max. required back-up fuse	250 mA (T/IEC 60127-2/3)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	C2 (10 kV/5 kA)
	C1 (1 kV / 500 A)
	C3 (100 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C2 (10 kV/5 kA)
	C3 (100 A)
	D1 (500 A)
Alternating current carrying capacity in acc. with IEC 61643-21 (Core-Core)	0.5 A/1s

Connection data

Connection method	Screw terminal blocks
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Screw thread	M3

Tightening torque	0.6 Nm
Stripping length	8 mm
Conductor cross section stranded min.	0.2 mm²
Conductor cross section stranded max.	2.5 mm²
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	4 mm²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14

General

Maximum inner capacitance C_i	2 nF
Maximum inner inductance L_i	1 µH
Maximum inner time factor (R_i/L_i)	0.1 µs
Max. input current I_i	250 mA (T_A < 40 °C)
Max. input voltage U_i	30 V
Maximum input power Pi	0.75 W
Insulation voltage to ground	500 V +10 %

Conformity / approvals

ATEX	Ex II 1G Ex ia IIC T4...T6 Ga
	Ex II 1D Ex ia IIIC T135°C...T85°C Da
IECEx	Ex ia IIC T4...T6 Ga
	Ex ia IIIC T135°C...T85°C Da

Certificates / Approvals

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

Accessories

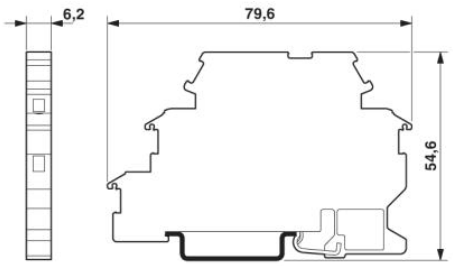
Item	Designation	Description
Assembly		
2838982	D-DEK 1,5 BU	Cover for setting the end of a TERMITRAB TT-EX(I)... row of terminal blocks, color: blue

Additional products

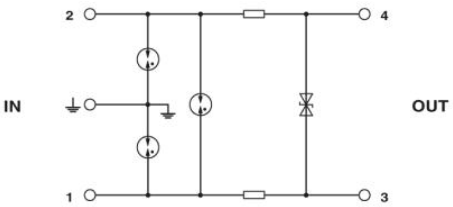
Item	Designation	Description
Assembly		
2838982	D-DEK 1,5 BU	Cover for setting the end of a TERMITRAB TT-EX(I)... row of terminal blocks, color: blue

Diagrams/Drawings

Dimensioned drawing



Circuit diagram



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