

Surge protection device - LIT 4-24 - 2804678

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Surge protection in one-piece 6.2 mm wide DIN rail module for four floating signal wires.

Why buy this product

- ✔ Complete normal mode voltage protection between all wires
- ✔ Cross-arrester bridging of the reference potential with ME 6,2 TBUS



Key commercial data

Packing unit	10 pc
GTIN	 4 046356 428293
Weight per Piece (excluding packing)	62.98 g
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	93 mm
Width	6.2 mm
Depth	102.5 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Degree of protection	IP20

General

Housing material	PBT
Inflammability class according to UL 94	V-0

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Technical data

General

Color	black
Standards for air and creepage distances	IEC 60664-1
	EN 60079-11
Mounting type	DIN rail: 35 mm
Type	Rail-mountable module, one-piece
Direction of action	Line-Line & Line-Earth Ground

Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage U_N	24 V DC
Maximum continuous operating voltage U_C	25 V AC
	36 V DC
Nominal current I_N	500 mA (40°C)
Operating effective current I_C at U_C	$\leq 2 \mu\text{A}$ (per path)
Residual current I_{PE}	$\leq 4 \mu\text{A}$
Nominal discharge current I_n (8/20) μs (Core-Core)	250 A
Nominal discharge current I_n (8/20) μs (Core-Earth)	5 kA
	20 kA (Total)
Total surge current (8/20) μs	20 kA
Total surge current (10/350) μs	2 kA
Max. discharge current I_{max} (8/20) μs maximum (Core-Core)	250 A
Max. discharge current I_{max} (8/20) μs maximum (Core-Earth)	10 kA
	20 kA (Total)
Nominal pulse current I_{an} (10/1000) μs (Core-Core)	50 A
Nominal pulse current I_{an} (10/1000) μs (Core-Earth)	50 A
	200 A (Total)
Impulse discharge current (10/350) μs , peak value I_{imp}	500 A
Output voltage limitation at 1 kV/ μs (Core-Core) spike	$\leq 60 \text{ V}$
Output voltage limitation at 1 kV/ μs (Core-Earth) spike	$\leq 650 \text{ V}$
Residual voltage at I_n , (conductor-conductor)	$\leq 60 \text{ V}$
Residual voltage with I_{an} (10/1000) μs (conductor-conductor)	$\leq 60 \text{ V}$
Voltage protection level U_p (core-core)	$\leq 60 \text{ V}$ (C1 - 500 V / 250 A)
	$\leq 60 \text{ V}$ (C3 - 10 A)
Voltage protection level U_p (core-ground)	$\leq 650 \text{ V}$ (C1 - 500 V / 250 A)
	$\leq 650 \text{ V}$ (C2 - 10 kV / 5 kA)
	$\leq 700 \text{ V}$ (D1 - 500 A)
Response time t_A (Core-Core)	$\leq 1 \text{ ns}$

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Technical data

Protective circuit

Response time tA (Core-Earth)	≤ 100 ns
Input attenuation aE, sym.	typ. 0.3 dB (2.4 MHz/50 Ω)
	typ. 0.3 dB (700 kHz/150 Ω)
Cut-off frequency fg (3 dB), sym. in 50 Ohm system	typ. 7.7 MHz
Cut-off frequency fg (3 dB), sym. in 150 Ohm system	typ. 2.5 MHz
Capacity	≤ 1.3 nF (per path)
Resistance in series	0 Ω
Max. required back-up fuse	500 mA
Impulse durability (conductor-conductor)	C1 - 500 V / 250 A
	C3 - 25 A
Impulse durability (conductor-ground)	C2 - 10 kV/5 kA
	C3 (25 A)
	D1 (500 A)
Alternating current carrying capacity (conductor-ground)	5 A - 1 s

Connection data

Connection method	Screw connection
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Screw thread	M3
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section solid min.	0.14 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	26
Conductor cross section AWG/kcmil max	12

Connection, equipotential bonding

Connection method	DIN rail NS35
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Standards and Regulations

Standards/regulations	IEC 61643-21
	DIN EN 61643-21

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	27130807

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Classifications

eCl@ss

eCl@ss 7.0	27130807
eCl@ss 8.0	27130807

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943
ETIM 5.0	EC000943

UNSPSC

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

Approvals

Approvals

Approvals

UL Listed / GL / EAC

Ex Approvals

IECEX / ATEX / INMETRO

Approvals submitted

Approval details

UL Listed 

GL

EAC

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Accessories

Accessories

PCB plug

Printed-circuit board connector - IMC 1,5/ 5-ST-3,81 - 1857919

Plug component, Nominal current: 8 A, Rated voltage (III/2): 160 V, Number of positions: 5, Pitch: 3.81 mm, Connection method: Screw connection, Color: green, Contact surface: Tin



Terminal marking

Marker for terminal blocks - UC-TM 6 - 0818085

Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 5.6 x 10.5 mm



Marker for terminal blocks - UC-TM 6 OG - 0818328

Marker for terminal blocks, Sheet, orange, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 5.6 x 10.5 mm



Marker for terminal blocks - UC-TM 6 YE - 0818331

Marker for terminal blocks, Sheet, yellow, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 5.6 x 10.5 mm



Marker for terminal blocks - UC-TM 6 BU - 0818344

Marker for terminal blocks, Sheet, blue, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 5.6 x 10.5 mm



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Accessories

Marker for terminal blocks - UC-TM 6 RD - 0818357



Marker for terminal blocks, Sheet, red, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 5.6 x 10.5 mm

Marker for terminal blocks - UC-TM 6 GN - 0818360



Marker for terminal blocks, Sheet, green, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 5.6 x 10.5 mm

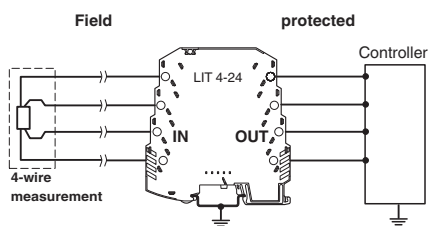
DIN rail connector - ME 6,2 TBUS-2 1,5/5-ST-3,81KMGY - 2969401



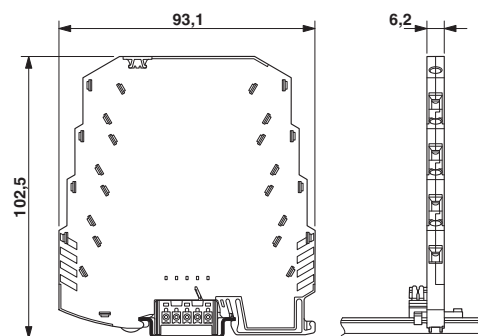
DIN rail bus connector for potential bridging of devices arranged next to one another across all modules.

Drawings

Application drawing

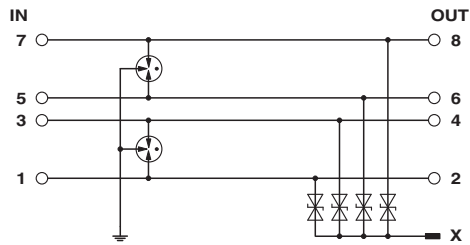


Dimensioned drawing



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Circuit diagram



Application drawing

