

Surge protection device - BXT-M/RS485-TTL - 2749987

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Surface-mounted housing with surge protection, for RS-485 interface with with TTL level, mains connection with slot for protective plug PRT-S... (without protective plug)



Key commercial data

Packing unit	1 pc
GTIN	 4 017918 139704
Weight per Piece (excluding packing)	312.0 GRM
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	50 mm
Width	100 mm
Depth	100 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 75 °C
Degree of protection	IP54

General

Color	gray
Standards for air and creepage distances	IEC 60664-1
	IEC 61643-1
Mounting type	Surface/Wall mounting
Type	Housing for surface mounting

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Technical data

General

Direction of action	Line-Line & Line-Signal Ground/Shield & Signal Ground/Shield-Earth Ground
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Protective circuit

IEC test classification	B2
	C1
	C2
	C3
	D1
Maximum continuous operating voltage U_C	6.2 V DC
Maximum continuous voltage U_C (wire-wire)	6.2 V DC
Maximum continuous voltage U_C (wire-ground)	6.2 V DC
Nominal current I_N	1.5 A (25 °C)
Operating effective current I_C at U_C	$\leq 1 \mu A$
Residual current I_{PE}	$\leq 5 \mu A$
Nominal discharge current I_n (8/20) μs (Core-Core)	350 A
Nominal discharge current I_n (8/20) μs (Core-Earth)	5 kA
Nominal discharge current I_n (8/20) μs (Core-GND)	350 A
Total surge current (8/20) μs	5 kA
Max. discharge current I_{max} (8/20) μs maximum (Core-Core)	350 A
Max. discharge current I_{max} (8/20) μs maximum (Core-Earth)	5 kA
Max. discharge current I_{max} (8/20) μs maximum (Core-GND)	350 A
Output voltage limitation at 1 kV/ μs (Core-Core) spike	$\leq 45 V$
Output voltage limitation at 1 kV/ μs (Core-Earth) spike	$\leq 450 V$
Output voltage limitation at 1 kV/ μs (Core-Core) static	$\leq 16 V$
Output voltage limitation at 1 kV/ μs (Core-Earth) static	$\leq 450 V$
Voltage protection level U_p (Core-Core)	$\leq 35 V$ (C1, 500 V/250 A)
	$\leq 50 V$ (C1, 700 V/350 A)
	$\leq 22 V$ (C3 - 100 A)
Voltage protection level U_p (Core-Earth)	$\leq 550 V$ (B2 - 4 kV/100 A)
	$\leq 550 V$ (C2, 4 kV/2 kA)
	$\leq 600 V$ (C2, 10 kV/5 kA)
	$\leq 700 V$ (C3 - 100 A)
Response time t_A (Core-Core)	$\leq 500 ns$
Response time t_A (Core-Earth)	$\leq 100 ns$
Input attenuation aE, sym.	typ. 0.1 dB ($\leq 10 MHz/50 \Omega$)
	typ. 0.1 dB ($\leq 4 MHz / 150 \Omega$)

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Protective circuit

	typ. 0.1 dB (≤ 1 MHz/600 Ω)
Cut-off frequency fg (3 dB), sym. in 50 Ohm system	typ. 100 MHz
Cut-off frequency fg (3 dB), sym. in 150 Ohm system	typ. 100 MHz
Cut-off frequency fg (3 dB), sym. in 600 Ohm system	typ. 10 MHz
Capacity (Core-Core)	typ. 20 pF
Capacity (Core-Earth)	typ. 10 pF
Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	B2 (4 kV / 100 A)
	C1 (350 A)
	C3 - 100 A
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	B2 (4 kV / 100 A)
	C2 - 10 kV / 5 kA
	C3 - 100 A
	D1 - 2,5 kA

Connection data

Connection method	Screw terminal blocks
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Conductor cross section stranded min.	0.14 mm ²
Conductor cross section stranded max.	1 mm ²
Conductor cross section solid min.	0.14 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section AWG/kcmil min.	26
Conductor cross section AWG/kcmil max	16

Standards and Regulations

Standards/regulations	IEC 61643-21
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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	27130810
eCl@ss 7.0	27130810
eCl@ss 8.0	27130810

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Classifications

ETIM

ETIM 2.0	EC001473
ETIM 3.0	EC001473
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

GOST

Ex Approvals

Approvals submitted

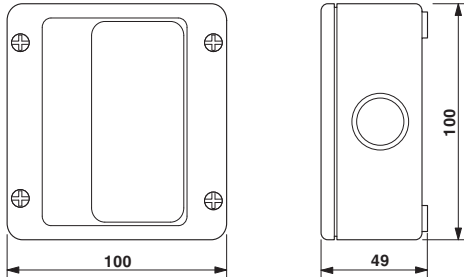
Approval details

GOST 
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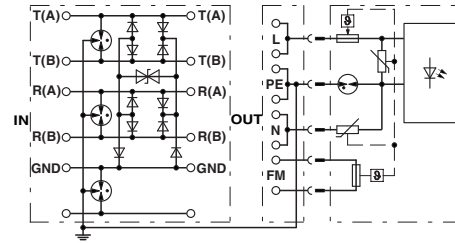
Drawings

Surge protection device - BXT-M/RS485-TTL - 2749987

Dimensioned drawing

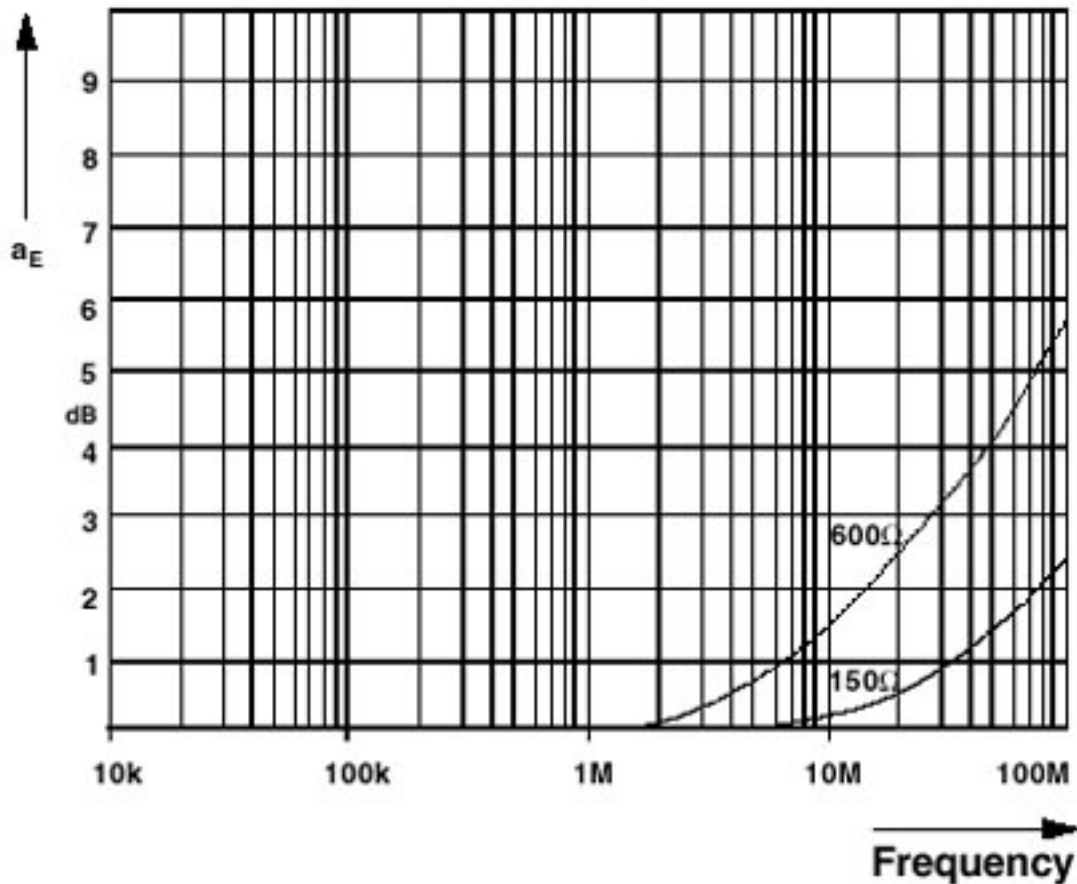


Circuit diagram



1 = signaling
2 = optional

Diagram



Characteristic attenuation curve

