

Surge protection device - TT-PI-EX-TB - 2858386


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Intrinsically safe basic terminal block with isolating connector, test connections and surge protection, for mounting on NS 35/7.5



Key Commercial Data

Packing unit	10 pc
GTIN	 4 017918 914011
Weight per Piece (excluding packing)	99.73 g
Custom tariff number	85363010
Country of origin	Germany
Note	Made to Order (non-returnable)

Technical data

Dimensions

Height	144.7 mm
Width	12.35 mm
Depth	84.5 mm

Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
Degree of protection	IP20

General

Housing material	PBT
Inflammability class according to UL 94	V2
Color	black
Standards for clearances and creepage distances	VDE 0110-1
	IEC 60664-1
Mounting type	DIN rail: 35 mm

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Technical data

General

Type	PI basic terminal block
Number of positions	2
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 voltage U_C	30 V DC
	21 V AC
Maximum continuous voltage U_C (wire-wire)	30 V DC
	21 V AC
Nominal current I_N	250 mA (40°C)
Operating effective current I_C at U_C	$\leq 5 \mu A$
Residual current I_{PE}	$\leq 4 \mu A$
Nominal discharge current I_n (8/20) μs (Core-Core)	5 kA
Nominal discharge current I_n (8/20) μs (Core-Earth)	5 kA
Total surge current (8/20) μs	10 kA
Max. discharge current I_{max} (8/20) μs maximum (Core-Core)	5 kA
Max. discharge current I_{max} (8/20) μs maximum (Core-Earth)	5 kA
Nominal pulse current I_{an} (10/1000) μs (Core-Core)	100 A
Nominal pulse current I_{an} (10/1000) μs (Core-Earth)	100 A
Impulse discharge current (10/350) μs , peak value I_{imp}	1 kA
Output voltage limitation at 1 kV/ μs (Core-Earth) spike	1.85 kV
Output voltage limitation at 1 kV/ μs (Core-Core) static	$\leq 45 V$
Residual voltage at I_n (conductor-conductor)	$\leq 45 V$
Residual voltage with I_{an} (10/1000) μs (conductor-conductor)	$\leq 45 V$
Voltage protection level U_p (core-core)	$\leq 90 V$ (C2 - 10 kV/5 kA)
Voltage protection level U_p (core-ground)	$\leq 1.85 kV$ (C2 - 10 kV/5 kA)
Response time t_A (Core-Core)	$\leq 1 ns$
Response time t_A (Core-Earth)	$\leq 100 ns$
Input attenuation a_E , sym.	0.8 dB ($\leq 1 MHz / 50 \Omega$)
	0.3 dB ($\leq 250 kHz / 150 \Omega$)
Cut-off frequency f_g (3 dB), sym. in 50 Ohm system	typ. 7 MHz
Cut-off frequency f_g (3 dB), sym. in 150 Ohm system	typ. 2 MHz
Resistance in series	4.7 $\Omega \pm 10 \%$
	4.7 Ω
Surge protection fault message	None

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Protective circuit

Impulse durability (conductor-conductor)	C2 - 10 kV/5 kA
	C3 - 100 A
Impulse durability (conductor-ground)	C2 - 10 kV/5 kA
	C3 - 100 A
	D1 - 1 kA

Connection data

Connection method	Screw connection
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14

Standards and Regulations

Standards/regulations	IEC 61643-21
	EN 50020

General

Maximum inner capacitance C_i	3 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
Max. input voltage U_i	30 V

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
eCl@ss 7.0	27130807
eCl@ss 8.0	27130807

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943

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Classifications

ETIM

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

ATEX

Approvals submitted

Approval details

GOST 
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Accessories

Accessories

Bridge

Continuous plug-in bridge - FBST 500-PLC RD - 2966786



Continuous plug-in bridge, Length: 500 mm, Color: red

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Accessories

Continuous plug-in bridge - FBST 500-PLC BU - 2966692



Continuous plug-in bridge, Length: 500 mm, Color: blue

Continuous plug-in bridge - FBST 500-PLC GY - 2966838



Continuous plug-in bridge, Length: 500 mm, Color: gray

Labeled terminal marker

Marker for terminal blocks - ZBFM 6/WH,LGS:1-100 - 0800284



Marker for terminal blocks, Sheet, white, labeled, Printed horizontally: Consecutive numbers from 1 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 6.2 mm, Lettering field: 5 x 5.5 mm

Flat zack marker sheet - ZBFM 6/WH,LGS:FORTL.ZAHLEN - 0803621



Flat zack marker sheet, Sheet, white, labeled, Printed horizontally: Consecutive numbers from 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 6.2 mm, Lettering field: 5 x 5.5 mm

Terminal marking

Flat zack marker sheet - ZBFM 6/WH:UNBEDRUCKT - 0803618



Flat zack marker sheet, Sheet, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 6.2 mm, Lettering field: 5 x 5.5 mm

Additional products

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Accessories

Continuous plug-in bridge - FBST 500-PLC RD - 2966786



Continuous plug-in bridge, Length: 500 mm, Color: red

Continuous plug-in bridge - FBST 500-PLC BU - 2966692



Continuous plug-in bridge, Length: 500 mm, Color: blue

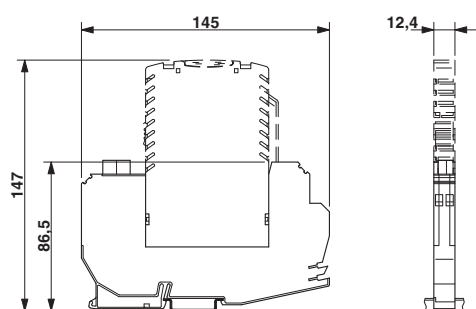
Continuous plug-in bridge - FBST 500-PLC GY - 2966838



Continuous plug-in bridge, Length: 500 mm, Color: gray

Drawings

Dimensional drawing



Circuit diagram

