PT 10 - Feed-through terminal block

3212120

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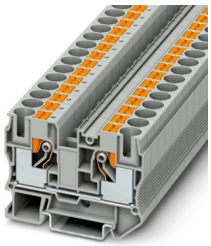


Feed-through terminal block, nom. voltage: 1000 V, nominal current: 57 A, number of connections: 2, connection method: Push-in connection, Rated cross section: 10 mm^2, cross section: 0.5 mm^2 - 16 mm^2, mounting type: NS 35/7,5, NS 35/15, color: gray

Your advantages

- The compact design and front connection enable wiring in a confined space
- In addition to the testing option in the double function shaft, all terminal blocks provide an additional test pick-off
- The Push-in connection terminal blocks are characterized by the system features of the CLIPLINE complete system and by easy and tool-free wiring of conductors with ferrules or solid conductors
- Tested for railway applications

Commercial data

Item number	3212120
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE2211
Product key	BE2211
GTIN	4046356494816
Weight per piece (including packing)	27.76 g
Weight per piece (excluding packing)	26.12 g
Customs tariff number	85369010
Country of origin	CN

Technical data

Product properties

Product type	Feed-through terminal block
Product family	PT
Area of application	Railway industry
	Machine building
	Plant engineering
Number of connections	2
Number of rows	1
Potentials	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	1.82 W

Connection data

Number of connections per level	2
Nominal cross section	10 mm²
Connection method	Push-in connection
Stripping length	18 mm ... 20 mm
Internal cylindrical gage	A6
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.5 mm² ... 16 mm²
Cross section AWG	20 ... 6 (converted acc. to IEC)
Conductor cross section flexible	0.5 mm² ... 16 mm²
Conductor cross section, flexible [AWG]	20 ... 6 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm² ... 10 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.5 mm² ... 10 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	1.5 mm² ... 4 mm²
Nominal current	57 A
Maximum load current	70 A (with a 16 mm² conductor cross section, rigid)
Nominal voltage	1000 V
Nominal cross section	10 mm²

Connection cross sections directly pluggable

Conductor cross section rigid	1 mm² ... 16 mm²
Conductor cross-section flexible (ferrule without plastic sleeve)	4 mm² ... 10 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	2.5 mm² ... 10 mm²

Ex data

Rated data (ATEX/IECEx)

Identification	Ⓔx II 2 GD Ex eb IIC Gb
Operating temperature range (1)	-60 °C ... 85 °C
Operating temperature range (2)	-40 °C ... 110 °C
Ex-certified accessories	3212057 D-PT 10
	1204517 SZF 1-0,6X3,5
	3022276 CLIPFIX 35-5
	3022218 CLIPFIX 35
List of bridges	Plug-in bridge / FBS 2-10 / 3005947
	Plug-in bridge / FBS 5-10 / 3005948
Bridge data	48 A (10 mm²)
Ex temperature increase	40 K (52.5 A / 10 mm²)
for bridging with bridge	550 V
Rated insulation voltage	500 V
output	(Permanent)

Ex level General

Rated voltage	550 V
Rated current	52.5 A
Maximum load current	61.5 A
Contact resistance	0.43 mΩ

Ex connection data General

Nominal cross section	10 mm²
Rated cross section AWG	8
Connection capacity rigid	0.5 mm² ... 16 mm²
Connection capacity AWG	20 ... 6
Connection capacity flexible	0.5 mm² ... 10 mm²
Connection capacity AWG	20 ... 8

Dimensions

Width	10.2 mm
End cover width	2.2 mm
Height	67.7 mm
Depth	49.5 mm
Depth on NS 35/7,5	50.5 mm
Depth on NS 35/15	58 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA

Static insulating material application in cold	-60 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3
Surface flammability NFPA 130 (ASTM E 162)	passed
Specific optical density of smoke NFPA 130 (ASTM E 662)	passed
Smoke gas toxicity NFPA 130 (SMP 800C)	passed

Electrical tests

Surge voltage test

Test voltage setpoint	9.8 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 10 mm²	1.2 kA
Short-time withstand current 16 mm²	1.92 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2.2 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	Yes

Mechanical tests

Mechanical strength

Result	Test passed

Attachment on the carrier

DIN rail/fixing support	NS 35
Test force setpoint	5 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.5 mm² / 0.3 kg
	10 mm² / 2 kg
	16 mm² / 2.9 kg

Result	Test passed

Environmental and real-life conditions

Service life

Insertion/withdrawal cycles	100

Aging

Temperature cycles	192
Result	Test passed

Needle-flame test

Time of exposure	30 s
Result	Test passed

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Spectrum	Long life test category 1, class B, body mounted
Frequency	f_1 = 5 Hz to f_2 = 150 Hz
ASD level	1.857 $(m/s^2)^2/Hz$
Acceleration	0.8g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Pulse shape	Half-sine
Acceleration	5g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

Ambient conditions

Ambient temperature (operation)	-60 °C ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

Standards and regulations

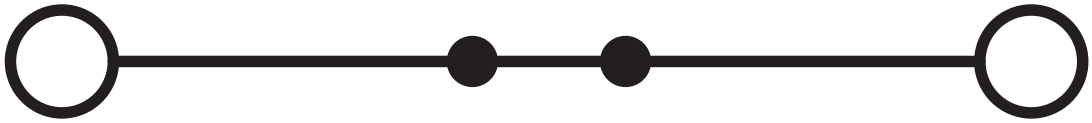
Connection in acc. with standard	IEC 60947-7-1

Mounting

Mounting type	NS 35/7,5
	NS 35/15

Drawings

Circuit diagram



Approvals

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CSA
Approval ID: 2030668

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	600 V	55 A	20 - 6	-
C				
	600 V	55 A	20 - 6	-

IECEE CB Scheme
Approval ID: DE1-62942

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	1000 V	57 A	-	-

EAC
Approval ID: RU C-DE.BL08.B.00644

LR
Approval ID: LR2371832TA

NK
Approval ID: 22ME0007

VDE Zeichengenehmigung
Approval ID: 40038590

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	1000 V	57 A	-	0.5 - 10

PRS
Approval ID: TE/2107/880590/21

ABS
Approval ID: 21-2192245-PDA

DNV
Approval ID: TAE000010T

cUL Recognized
Approval ID: E192998

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	550 V	60 A	20 - 6	-

EAC Ex
Approval ID: RU C-DE.AB72.B.02351

IECEx
Approval ID: IECEx SEV13.0005U

UL Recognized
Approval ID: E192998

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	550 V	60 A	20 - 6	-

ATEX
Approval ID: SEV13ATEX0159U

CCC
Approval ID: 2020322313000631

EAC Ex
Approval ID: KZ 7500525010101950

Classifications

ECLASS

ECLASS-13.0	27250101
ECLASS-15.0	27250101

ETIM

ETIM 9.0	EC000897

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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