

Feed-through terminal block - PT 2,5



3209510

<https://www.phoenixcontact.com/nl/producten/3209510>

Please be informed that the data shown in this PDF document is generated from our Online Catalog. Please find the complete data in the user documentation. Our General Terms of Use for Downloads are valid.



Feed-through terminal block, nom. voltage: 800 V, nominal current: 24 A, connection method: Push-in connection, 1 level, Rated cross section: 2.5 mm², cross section: 0.14 mm² - 4 mm², cross section: 0.14 mm² - 4 mm², mounting type: NS 35/7,5, NS 35/15, color: gray

Your advantages

- 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
- The compact design and front connection enable wiring in a confined space
- In addition to the testing facility in the double function shaft, all terminal blocks provide an additional test connection
- Tested for railway applications

Feed-through terminal block - PT 2,5



3209510

<https://www.phoenixcontact.com/nl/producten/3209510>

Technical Data

Product properties

Number of positions	1
Area of application	Railway industry
	Machine building
	Plant engineering
	Process industry
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	0.77 W

Connection data

Number of connections per level	2
Nominal cross section	2.5 mm ²

1 level

Stripping length	8 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid	0.14 mm ² ... 4 mm ²
Cross section AWG	26 ... 12
Conductor cross section flexible	0.14 mm ² ... 4 mm ²
Conductor cross section, flexible [AWG]	26 ... 14
Flexible conductor cross section flexible (ferrule, w/o plastic sleeve)	0.14 mm ² ... 2.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm ² ... 2.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ²
Nominal current	24 A (at 2.5 mm ²)
Maximum load current	28 A (with 4 mm ² conductor cross section, rigid)
Nominal voltage	800 V
Nominal cross section	2.5 mm ²

Standard specification

Connection in acc. with standard	IEC/EN 60079-7
Test certificate name	IECEx PTB 10.0021U

Feed-through terminal block - PT 2,5



3209510

<https://www.phoenixcontact.com/nl/producten/3209510>

Conductor cross section solid	0.14 mm² ... 4 mm²
Cross section AWG	26 ... 12
Conductor cross section flexible	0.14 mm² ... 2.5 mm²

1 level Connection cross sections directly pluggable

Conductor cross section solid	0.34 mm² ... 4 mm²
Flexible conductor cross section flexible (ferrule, w/o plastic sleeve)	0.34 mm² ... 2.5 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm² ... 2.5 mm²

Ex data

Rated data (ATEX/IECEx)

ATEX certificate	PTB 09 ATEX 1111 U
IEC Ex certificate	IECEx PTB 10.0021 U
Identification	Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C
Ex-certified accessories	3030417 D-ST 2,5
	3030721 ATP-ST 4
	1204517 SZF 1-0,6X3,5
	3022276 CLIPFIX 35-5
	3022218 CLIPFIX 35
	Plug-in bridge / FBS 2-5 / 3030161
	Plug-in bridge / FBS 3-5 / 3030174
	Plug-in bridge / FBS 4-5 / 3030187
	Plug-in bridge / FBS 5-5 / 3030190
	Plug-in bridge / FBS 10-5 / 3030213
	Plug-in bridge / FBS 20-5 / 3030226
	Plug-in bridge / FBS 50-5 / 3038930
Bridge data	19 A / 2.5 mm²
Ex temperature increase	40 K (19 A / 2.5 mm²)
Rated voltage	-
for bridging with bridge	550 V
- At bridging between non-adjacent terminal blocks	352 V
- At cut-to-length bridging	220 V
- At cut-to-length bridging with cover	275 V
- At cut-to-length bridging with partition plate	550 V
Rated insulation voltage	500 V

Ex level General

Rated current	19 A
Maximum load current	23 A
Contact resistance	0.93 mΩ

Ex connection data General

Nominal cross section	2.5 mm²
-----------------------	---------

Feed-through terminal block - PT 2,5



3209510

<https://www.phoenixcontact.com/nl/producten/3209510>

Rated cross section AWG	14
Connection capacity rigid	0.14 mm² ... 4 mm²
Connection capacity AWG	26 ... 12
Connection capacity flexible	0.14 mm² ... 2.5 mm²
Connection capacity AWG	26 ... 14

Dimensions

Width	5.2 mm
End cover width	2.2 mm
Height	35.3 mm
Height NS 35/15	44 mm
Height NS 35/7,5	36.5 mm
Height	1.437 "
Length	48.6 mm

Material specifications

Color	gray
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °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
Calorimetric heat release NFPA 130 (ASTM E 1354)	27,5 MJ/kg
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
	Test passed
Short-time withstand current 2.5 mm²	0.3 kA
Short-time withstand current 4 mm²	0.48 kA

Feed-through terminal block - PT 2,5



3209510

<https://www.phoenixcontact.com/nl/producten/3209510>

Result	Test passed
Power-frequency withstand voltage	
Test voltage setpoint	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 35/7.5
Test force setpoint	1 N
Result	Test passed

Test for conductor damage and slackening	
Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.14 mm ² / 0.2 kg
	2.5 mm ² / 0.7 kg
	4 mm ² / 0.9 kg
Result	Test passed

Environmental and real-life conditions

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):2018-05
Spectrum	Service life test category 2, bogie-mounted
Frequency	f ₁ = 5 Hz to f ₂ = 250 Hz
ASD level	6.12 (m/s ²) ² /Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Feed-through terminal block - PT 2,5



3209510

<https://www.phoenixcontact.com/nl/producten/3209510>

Shocks

Specification	DIN EN 50155 (VDE 0115-200):2018-05
Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 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 ... 105 °C (max. short-term operating temperature 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 (storage/transport)	30 % ... 70 %

Standards and regulations

Connection in acc. with standard	IEC 60947-7-1
	IEC/EN 60079-7

Mounting

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

Feed-through terminal block - PT 2,5

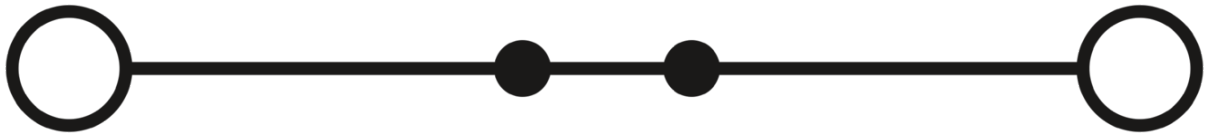


3209510

<https://www.phoenixcontact.com/nl/producten/3209510>

Drawings

Circuit diagram



Phoenix Contact 2021 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT B.V.
Hengelder 56 6902 PA Zevenaar
Postbus 246 6900 AE Zevenaar
(0316) 59 17 20
sales@phoenixcontact.nl