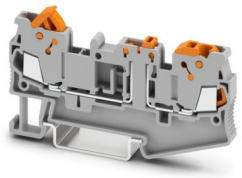
QTC 1,5-MT - Knife-disconnect terminal block

3205103

https://www.phoenixcontact.com/us/products/3205103

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Knife-disconnect terminal block, nom. voltage: 400 V, nominal current: 17.5 A, connection method: Quick connection, Rated cross section: 1.5 mm^2, cross section: 0.25 mm^2 - 1.5 mm^2, mounting: NS 35/7,5, NS 35/15, color: gray

Your advantages

- Fast conductor connection thanks to the elimination of conductor pretreatment
- Large-area, gas-tight contact thanks to the automated cutting of the wire insulation
- Convenient separation of circuits through the implementation of knife disconnection
- High contact quality and vibration resistance thanks to the use of high-quality spring contact material
- Secure wiring thanks to lockable swivel lever

Commercial data

Item number	3205103
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE03
Product key	BE3131
GTIN	4017918933098
Weight per piece (including packing)	11.03 g
Weight per piece (excluding packing)	9.768 g
Customs tariff number	85369010
Country of origin	CN

Technical data

Product properties

Product type	Disconnect terminal block
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	6 kV
Maximum power dissipation for nominal condition	0.56 W

Connection data

Number of connections per level	2
Frequency of connections with the same cross section	100
Nominal cross section	1.5 mm²
Connection method	Quick connection
Material wire insulation	PVC / PE
Internal cylindrical gage	A1
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.25 mm² ... 1.5 mm²
Cross section AWG	24 ... 16 (converted acc. to IEC)
Conductor cross-section flexible	0.25 mm² ... 1.5 mm²
Conductor cross-section, flexible [AWG]	24 ... 16 (converted acc. to IEC)
Nominal cross section	1.5 mm²
Nominal current	17.5 A
Maximum load current	17.5 A (with 1.5 mm² conductor cross-section)
Nominal voltage	400 V

Dimensions

Width	5.2 mm
End cover width	2.2 mm
Height	76.4 mm
Depth on NS 35/7,5	39.3 mm
Depth on NS 35/15	46.8 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

Cable/line

Wire diameter incl. insulation	3 mm

Electrical tests

Surge voltage test

Test voltage setpoint	7.3 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
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	1.89 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	1 N

Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 (+/- 2) rpm
Revolutions	135
Conductor cross-section/weight	0.2 mm² / 0.2 kg
	1.5 mm² / 0.4 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):2022-06
Spectrum	Long life test category 2, bogie-mounted
Frequency	f_1 = 5 Hz to f_2 = 250 Hz
ASD level	6.12 (m/s²)²/Hz
Acceleration	30.6 m/s²
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Pulse shape	Half-sine
Acceleration	300 m/s²
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 ... 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

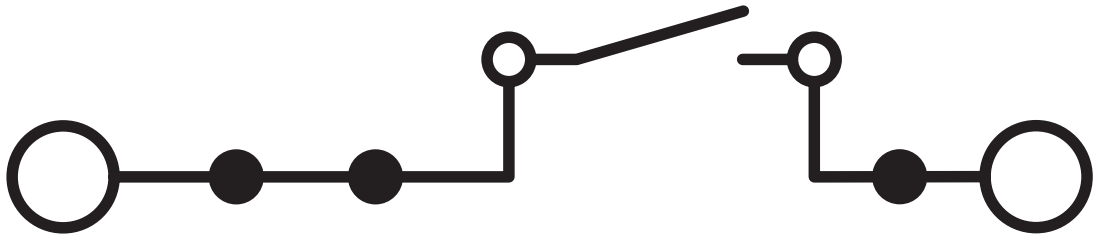
Connection in acc. with standard	IEC 60947-7-1

Mounting

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

Drawings

Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/3205103

CSA
Approval ID: 158887

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	300 V	10 A	24 - 16	-
C				
	300 V	10 A	24 - 16	-
D				
	600 V	5 A	24 - 16	-

EAC
Approval ID: RU C-DE.BL08.B.00539

cULus Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	300 V	10 A	24 - 16	-
C				
	300 V	10 A	24 - 16	-

NK
Approval ID: 09 ME 139

ABS
Approval ID: 22-2196825-PDA

DNV
Approval ID: TAE000014H

Classifications

ECLASS

ECLASS-13.0	27250108
ECLASS-15.0	27250108

ETIM

ETIM 10.0	EC000902

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%

EF3.1 Climate Change

CO2e kg	0.164 kg CO2e

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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com