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Knife-disconnect terminal block, nom. voltage: 400 V, nominal current: 17.5 A, 1 level, connection method: Quick connection, Rated cross section: 1.5 mm², cross section: 0.25 mm² - 1.5 mm², mounting: NS 35/7,5, NS 35/15, color: gray

Your advantages

- Tested for railway applications

Commercial data

Item number	3205103
Packing unit	50 pc
Minimum order quantity	1 pc
Sales key	017
Product key	BE3131
Catalog page	Page 259 (C-1-2019)
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

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



3205103

<https://www.phoenixcontact.com/za/products/3205103>

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	100.00
Nominal cross section	1.5 mm ²

1 level

Material wire insulation	PVC / PE
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.25 mm ² ... 1.5 mm ²
Cross section AWG	24 ... 16 (converted acc. to IEC)
Conductor cross section flexible	0.25 mm ² ... 1.5 mm ²
Conductor cross section, flexible [AWG]	24 ... 16 (converted acc. to IEC)
Nominal current	17.5 A
Maximum load current	17.5 A (with 1.5 mm ² conductor cross section)
Nominal voltage	400 V
Nominal cross section	1.5 mm ²

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
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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))	130 °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)	28 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

Cable/line

Wire diameter incl. insulation	3 mm
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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
Short-time withstand current 1.5 mm ²	0.18 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
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Mechanical tests

Mechanical strength

Result	Test passed
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Attachment on the carrier

DIN rail/fixing support	NS 35
Test force setpoint	1 N

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Result	Test passed
Test for conductor damage and slackening	
Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.2 mm ² / 0.2 kg
	1.5 mm ² / 0.4 kg
Result	Test passed

Environmental and real-life conditions

Needle-flame test

Time of exposure	30 s
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
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Mounting

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

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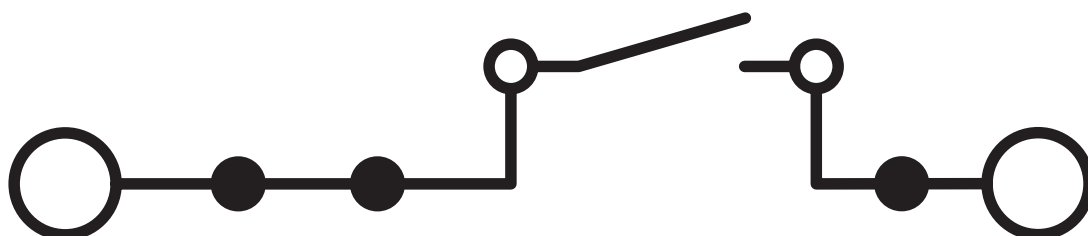
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Drawings

Circuit diagram



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



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Approvals

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

DNV

Approval ID: TAE000014H



CSA

Approval ID: 2030668

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



LR

Approval ID: LR2002130TA



NK

Approval ID: 09 ME 139



BV

Approval ID: 13637/D0 BV

ABS

Approval ID: 22-2196825-PDA

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Classifications

ECLASS

ECLASS-11.0	27141126
ECLASS-12.0	27141126
ECLASS-13.0	27250108

ETIM

ETIM 9.0	EC000902
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UNSPSC

UNSPSC 21.0	39121400
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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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