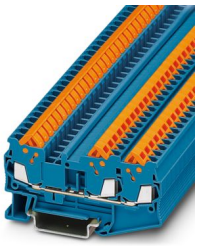
QTC 1,5-TWIN BU - Feed-through terminal block

3205051

https://www.phoenixcontact.com/us/products/3205051

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: 17.5 A, number of connections: 3, connection method: Quick connection, Rated cross section: 1.5 mm^2, 1 level, cross section: 0.25 mm^2 - 1.5 mm^2, mounting type: NS 35/7,5, NS 35/7,5, color: blue

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
- High contact quality and vibration resistance thanks to the use of high-quality spring contact material
- Secure wiring thanks to lockable swivel lever
- Full flexibility thanks to the standardized CLIPLINE complete bridging, marking, and testing accessories
- Compact wiring of three conductors in a single terminal block

Commercial data

Item number	3205051
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE03
Product key	BE3112
GTIN	4017918932459
Weight per piece (including packing)	11.46 g
Weight per piece (excluding packing)	11.26 g
Customs tariff number	85369010
Country of origin	CN

Technical data

Product properties

Product type	Multi-conductor terminal block
Product family	QTC
Area of application	Railway industry
	Machine building
	Plant engineering
	Process industry
Number of connections	3
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	0.56 W

Connection data

Number of connections per level	3
Frequency of connections with the same cross section	100
Nominal cross section	1.5 mm²

1 level

Connection method	Quick connection
Material wire insulation	PVC / PE
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)
Cross section, sensor conductors	0.25 mm² ... 0.34 mm²
Nominal cross section	1.5 mm²
Nominal current	17.5 A (with 1.5 mm² conductor cross-section)
Maximum load current	17.5 A (in case of a 1.5 mm² conductor cross-section, the maximum load current must not be exceeded by the total current of all connected conductors.)
Nominal voltage	800 V

Ex data

Rated data (ATEX/IECEx)

Identification	Ⓔx II 2 GD Ex eb IIC Gb
Operating temperature range	-45 °C ... 90 °C
Ex-certified accessories	3205190 D-QTC 1,5-TWIN
	3206212 ATP-QTC TWIN
	1204517 SZF 1-0,6X3,5
	3022276 CLIPFIX 35-5
	3022218 CLIPFIX 35
List of bridges	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
Bridge data	16.5 A (1.5 mm²)
Ex temperature increase	40 K (20.4 A / 1.5 mm²)
for bridging with bridge	550 V
- At bridging between non-adjacent terminal blocks	352 V
- At cut-to-length bridging with cover	220 V
- At cut-to-length bridging with partition plate	275 V
Rated insulation voltage	500 V
output	(Permanent)

Ex level General

Rated voltage	550 V
Rated current	18.5 A
Maximum load current	18.5 A
Contact resistance	1.1 mΩ

Ex connection data General

Nominal cross section	1.5 mm²
Rated cross section AWG	16
Connection capacity rigid	0.25 mm² ... 1.5 mm²
Connection capacity AWG	24 ... 16
Connection capacity flexible	0.25 mm² ... 1.5 mm²
Connection capacity AWG	24 ... 16
Frequency of connections with the same cross section	100

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	blue (RAL 5015)
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

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 1.5 mm²	0.18 kA
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

Test force setpoint	1 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross-section/weight	0.2 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

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 35/7,5

Drawings

Circuit diagram

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/3205051

CSA
Approval ID: 158887

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

NK
Approval ID: 09 ME 139

ABS
Approval ID: 22-2196825-PDA

DNV
Approval ID: TAE000014H

EAC Ex
Approval ID: KZ 7500525010101950

IECEx
Approval ID: IECExKIWA19.0011U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	550 V	18.5 A	-	0.25 - 1.5

ATEX
Approval ID: KIWA19ATEX0019U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Type examination certificate	550 V	18.5 A	-	0.25 - 1.5

CCC
Approval ID: 2020322313000625

UKCA-EX
Approval ID: CSAE 22UKEX1429U

Classifications

ECLASS

ECLASS-13.0	27250101
ECLASS-15.0	27250101

ETIM

ETIM 10.0	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%

EF3.1 Climate Change

CO2e kg	0.072 kg CO2e

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