

QTCU 1,5 BU - Feed-through terminal block



3050028

<https://www.phoenixcontact.com/sg/products/3050028>

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, connection method: Quick connection, Rated cross section: 1.5 mm², cross section: 0.25 mm² - 1.5 mm², connection method: Screw connection, Rated cross section: 1.5 mm², cross section: 0.14 mm² - 4 mm², mounting: NS 35/7,5, NS 35/15, color: blue

Your advantages

- The hybrid versions combine the advantages of the different connection technologies
- The time-saving QUICKON fast connection is used on the control cabinet side
- The screw connection is used on the connection side

Commercial data

Item number	3050028
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	0170*
Product key	BE3119
Catalog page	Page 260 (C-1-2019)
GTIN	4017918975739
Weight per piece (including packing)	9.332 g
Weight per piece (excluding packing)	9.09 g
Customs tariff number	85369010
Country of origin	CN

QTCU 1,5 BU - Feed-through terminal block



3050028

<https://www.phoenixcontact.com/sg/products/3050028>

Technical data

Product properties

Product type	Hybrid terminal block
Number of connections	2
Number of rows	1
Potentials	1

Data management status

Article revision	14
------------------	----

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	2
Frequency of connections with the same cross section	100
Nominal cross section	1.5 mm ²
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)
Cross section, sensor conductors	0.25 mm ² ... 0.34 mm ²
Nominal current	17.5 A
Maximum load current	17.5 A (with 1.5 mm ² conductor cross section)
Nominal voltage	800 V
Nominal cross section	1.5 mm ²
Screw thread	M3
Tightening torque	0.5 ... 0.6 Nm
Stripping length	9 mm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.14 mm ² ... 4 mm ²
Cross section AWG	26 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm ² ... 2.5 mm ²
Conductor cross-section flexible (ferrule without 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 same cross section, solid	0.14 mm ² ... 1.5 mm ²

QTCU 1,5 BU - Feed-through terminal block



3050028

<https://www.phoenixcontact.com/sg/products/3050028>

2 conductors with same cross section, flexible	0.14 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.14 mm ² ... 1.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 1.5 mm ²
Nominal current	17.5 A
Maximum load current	17.5 A (with 1.5 mm ² conductor cross section)
Nominal voltage	800 V
Nominal cross section	1.5 mm ²

Ex data

Rated data (ATEX/IECEx)

Identification	Ex II 2 GD Ex eb IIC Gb
Operating temperature range	-45 °C ... 90 °C
Ex-certified accessories	3206283 D-QTCU 1,5
	3206209 ATP-QTC
	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
Ex temperature increase	40 K (19.1 A/2.5 mm ²)
Rated voltage	550 V
for bridging with bridge	550 V
- At bridging between non-adjacent terminal blocks	275 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 current	17 A
Maximum load current	17 A
Contact resistance	1.08 mΩ

Ex connection data Fast connection

Nominal cross section	1.5 mm ²
Rated cross section AWG	16
Connection capacity rigid	0.25 mm ² ... 1.5 mm ²
Connection capacity AWG	24 ... 16
Connection capacity flexible	0.25 mm ² ... 1.5 mm ²

QTCU 1,5 BU - Feed-through terminal block



3050028

<https://www.phoenixcontact.com/sg/products/3050028>

Connection capacity AWG	24 ... 16
Frequency of connections with the same cross section	100

Ex connection data Screw connection

Stripping length	9 mm
Torque range	0.5 Nm ... 0.6 Nm
Nominal cross section	1.5 mm ²
Rated cross section AWG	16
Connection capacity rigid	0.14 mm ² ... 4 mm ²
Connection capacity AWG	26 ... 12
Connection capacity flexible	0.14 mm ² ... 2.5 mm ²
Connection capacity AWG	26 ... 14
2 conductors with same cross section, solid	0.14 mm ² ... 1.5 mm ²
2 conductors with the same cross-section AWG rigid	26 ... 16
2 conductors with same cross section, stranded	0.14 mm ² ... 1.5 mm ²
2 conductors with the same cross-section AWG flexible	26 ... 16

Dimensions

Width	5.2 mm
End cover width	2.2 mm
Height	58.8 mm
Depth on NS 35/7,5	42.8 mm
Depth on NS 35/15	50.3 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
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

QTCU 1,5 BU - Feed-through terminal block



3050028

<https://www.phoenixcontact.com/sg/products/3050028>

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 1.5 mm ²	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 mm ² / 0.2 kg
	1.5 mm ² / 0.4 kg
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
--------------------	-----

QTCU 1,5 BU - Feed-through terminal block



3050028

<https://www.phoenixcontact.com/sg/products/3050028>

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
	IEC 60947-7-1

Mounting

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

QTCU 1,5 BU - Feed-through terminal block

3050028

<https://www.phoenixcontact.com/sg/products/3050028>



Drawings

Circuit diagram



QTCU 1,5 BU - Feed-through terminal block

3050028

<https://www.phoenixcontact.com/sg/products/3050028>



Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/sg/products/3050028>

 CSA Approval ID: 2030668				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
Screw connection	600 V	10 A	26 - 12	-
Fast connection	600 V	10 A	24 - 16	-
Use group C				
Screw connection	600 V	10 A	26 - 12	-
Fast connection	600 V	10 A	24 - 16	-

 cULus Recognized Approval ID: E60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
Screw connection	600 V	0 A	26 - 12	-
Fast connection	600 V	10 A	24 - 16	-
Use group C				
Screw connection	600 V	0 A	26 - 12	-
Fast connection	600 V	10 A	24 - 16	-

 EAC Ex Approval ID: RU C-DE.HA91.B.00066				
--	--	--	--	--

 IECEx Approval ID: IECExKIWA19.0011U				
--	--	--	--	--

 ATEX Approval ID: KIWA19ATEX0019U				
---	--	--	--	--

 CCC Approval ID: 2020322313000625				
---	--	--	--	--

 UKCA-EX Approval ID: CSAFE 22UKEX1429U				
--	--	--	--	--

QTCU 1,5 BU - Feed-through terminal block

3050028

<https://www.phoenixcontact.com/sg/products/3050028>



Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250201

ETIM

ETIM 9.0	EC000897
----------	----------

UNSPSC

UNSPSC 21.0	39121400
-------------	----------

QTCU 1,5 BU - Feed-through terminal block



3050028
<https://www.phoenixcontact.com/sg/products/3050028>

Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	c9b90381-ad43-48ce-9b46-dbeee274371a

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT SEA Pte. Ltd.
105 Eunos Avenue 3, #04-00
Singapore 409836
+65 6228 4900
marketing@phoenixcontact.com.sg