

## Feed-through terminal block - QTCU 1,5-TWIN - 3050044

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Feed-through terminal block, connection method: Quick connection, Screw connection, cross section: 0.25 mm<sup>2</sup> - 1.5 mm<sup>2</sup>, AWG: 24 - 16, width: 5.2 mm, color: gray, mounting: NS 35/7,5, NS 35/15

### 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



### Key Commercial Data

Packing unit	50 pc
Minimum order quantity	50 pc
GTIN	 4 017918 975753
GTIN	4017918975753
Weight per Piece (excluding packing)	11.000 g
Custom tariff number	85369010
Country of origin	China

### Technical data

#### General

Number of levels	1
Number of connections	3
Nominal cross section	1.5 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III

# Feed-through terminal block - QTCU 1,5-TWIN - 3050044

## Technical data

### General

Insulating material group	I
Maximum power dissipation for nominal condition	0.56 W
Ambient temperature (operation)	-60 °C ... 85 °C
Ambient temperature (storage/transport)	-25 °C ... 55 °C (For a short time, not exceeding 24 h, -60 to +70 °C)
Humidity minimum	30 %
Humidity maximum	70 %
Additional text	For a short time, not exceeding 24 h, -60 to +70 °C
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Connection method	Quick connection
Connection in acc. with standard	IEC 60947-7-1
Maximum load current	17.5 A (with 1.5 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	17.5 A
Nominal voltage U <sub>N</sub>	800 V
Connection method	Screw connection
Connection in acc. with standard	IEC 60947-7-1
Maximum load current	17.5 A (with 1.5 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	17.5 A
Nominal voltage U <sub>N</sub>	800 V
Open side panel	Yes
Shock protection test specification	IEC 60529:2001-02
Back of the hand protection	guaranteed
Finger protection	guaranteed
Result of surge voltage test	Test passed
Surge voltage test setpoint	9.8 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	2 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of bending test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	0.2 mm <sup>2</sup> / 0.2 kg
	1.5 mm <sup>2</sup> / 0.4 kg
	4 mm <sup>2</sup> / 0.9 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.2 mm <sup>2</sup>
Tractive force setpoint	10 N
Conductor cross section tensile test	1.5 mm <sup>2</sup>
Tractive force setpoint	40 N
Conductor cross section tensile test	4 mm <sup>2</sup>

# Feed-through terminal block - QTCU 1,5-TWIN - 3050044

## Technical data

### General

Tractive force setpoint	60 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	1 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 3.2 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	1.5 mm <sup>2</sup>
Short-time current	0.18 kA
Result of aging test	Test passed
Ageing test for screwless modular terminal block temperature cycles	192
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Static insulating material application in cold	-60 °C
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
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

### Dimensions

Width	5.2 mm
Length	76.4 mm
Height NS 35/7,5	42.8 mm
Height NS 35/15	50.3 mm
End cover width	2.2 mm

### Connection data

Connection method	Quick connection
Connection in acc. with standard	IEC 60947-7-1
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm
Stripping length	9 mm
Max. wire diameter incl. insulation	3 mm
Conductor cross section solid min.	0.25 mm <sup>2</sup>

# Feed-through terminal block - QTCU 1,5-TWIN - 3050044

## Technical data

### Connection data

Conductor cross section solid max.	1.5 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	16
Conductor cross section flexible min.	0.25 mm <sup>2</sup>
Conductor cross section flexible max.	1.5 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	24
Max. AWG conductor cross section, flexible	16
Cross section sensor cables, min.	0.25 mm <sup>2</sup>
Cross section sensor cables, max.	0.34 mm <sup>2</sup>
Connection in acc. with standard	IEC/EN 60079-7
Test certificate name	KEMA 04ATEX2226 U
Conductor cross section AWG min.	24
Conductor cross section AWG max.	16
Material wire insulation	PVC / PE
Connection method	Screw connection
Connection in acc. with standard	IEC 60947-7-1
Screw thread	M3
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	26
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.14 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm <sup>2</sup>
2 conductors with same cross section, solid min.	0.14 mm <sup>2</sup>
2 conductors with same cross section, solid max.	1.5 mm <sup>2</sup>
2 conductors with same cross section, stranded min.	0.14 mm <sup>2</sup>
2 conductors with same cross section, stranded max.	1.5 mm <sup>2</sup>
Two conductors with the same cross section stranded, with ferrule and without plastic sleeve, minimum	0.14 mm <sup>2</sup>
Two conductors with the same cross section stranded, with ferrule and without plastic sleeve, maximum	1.5 mm <sup>2</sup>
Two conductors with the same cross section, flexible, with TWIN ferrules, with plastic sleeve, minimum	0.5 mm <sup>2</sup>
Two conductors with the same cross section, flexible, with TWIN ferrules, with plastic sleeve, maximum	1.5 mm <sup>2</sup>

### Standards and Regulations

Connection in acc. with standard	CSA
----------------------------------	-----

# Feed-through terminal block - QTCU 1,5-TWIN - 3050044

## Technical data

### Standards and Regulations

	IEC 60947-7-1
	IEC 60947-7-1
Flammability rating according to UL 94	V0

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Circuit diagram



## Classifications

### eCl@ss

eCl@ss 10.0.1	27141120
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141120
eCl@ss 8.0	27141120
eCl@ss 9.0	27141120

### ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	EC000897
ETIM 6.0	EC000897
ETIM 7.0	EC000897

### UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410

# Feed-through terminal block - QTCU 1,5-TWIN - 3050044

## Classifications

### UNSPSC

UNSPSC 12.01	39121410
UNSPSC 13.2	39121410
UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410
UNSPSC 21.0	39121410

## Approvals

### Approvals


#### Approvals


CSA / UL Recognized / cUL Recognized / EAC / DNV GL / EAC / cULus Recognized


#### Ex Approvals

IECEX / ATEX / EAC Ex

### Approval details

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	10 A	10 A	
mm <sup>2</sup> /AWG/kcmil	24-16	24-16	

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	10 A	10 A	
mm <sup>2</sup> /AWG/kcmil	24-16	24-16	

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	C	
Nominal voltage UN	600 V	600 V	

## Feed-through terminal block - QTCU 1,5-TWIN - 3050044

### Approvals

	B	C
Nominal current I <sub>N</sub>	10 A	10 A
mm <sup>2</sup> /AWG/kcmil	24-16	24-16

EAC		EAC-Zulassung
-----	--	---------------

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE00003J6
--------	--	---	------------

EAC		RU C- DE.A*30.B.01742
-----	--	--------------------------

cULus Recognized	
------------------	--