

# ST 4-QUATTRO BU - Feed-through terminal block



3031458

<https://www.phoenixcontact.com/us/products/3031458>

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: 32 A, number of connections: 4, connection method: Spring-cage connection, Rated cross section: 4 mm<sup>2</sup>, 1 level, cross section: 0.08 mm<sup>2</sup> - 6 mm<sup>2</sup>, mounting type: NS 35/7,5, NS 35/15, color: blue

## Your advantages

- Simple wiring of very small, flexible conductors
- Enables one-handed wiring
- No restriction on cross-sections when using conductors with ferrules
- Reliable vibration resistance thanks to spring-loaded contact elements
- Compact wiring of three conductors in a single terminal block
- Full flexibility thanks to the standardized CLIPLINE complete bridging, marking, and testing accessories

## Commercial data

Item number	3031458
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE02
Product key	BE2113
GTIN	4017918186906
Weight per piece (including packing)	14.412 g
Weight per piece (excluding packing)	13.394 g
Customs tariff number	85369010
Country of origin	DE

# ST 4-QUATTRO BU - Feed-through terminal block



3031458

<https://www.phoenixcontact.com/us/products/3031458>

## Technical data

### Product properties

Product type	Multi-conductor terminal block
Product family	ST
Area of application	Railway industry
	Machine building
	Plant engineering
	Process industry
Number of connections	4
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	1.02 W

### Connection data

Number of connections per level	4
Nominal cross section	4 mm <sup>2</sup>

#### 1 level

Connection method	Spring-cage connection
Stripping length	8 mm ... 10 mm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.08 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Cross section AWG	28 ... 10 (converted acc. to IEC)
Conductor cross-section flexible	0.08 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	28 ... 12 (converted acc. to IEC)
Conductor cross-section flexible ultrasound-compressed	0.34 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross-section, flexible [AWG] ultrasound-compressed	22 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.14 mm <sup>2</sup> ... 4 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup>
Nominal cross section	4 mm <sup>2</sup>
Nominal current	32 A (with 6 mm <sup>2</sup> conductor cross-section)
Maximum load current	40 A (In the case of a 6 mm <sup>2</sup> conductor cross-section, the maximum load current must not be exceeded by the total current of all connected conductors)
Nominal voltage	800 V

# ST 4-QUATTRO BU - Feed-through terminal block



3031458

<https://www.phoenixcontact.com/us/products/3031458>

## Ex data

### Rated data (ATEX/IECEX)

Identification	⊕ II 2 GD Ex eb IIC Gb
Operating temperature range	-60 °C ... 85 °C
Ex-certified accessories	3030527 D-ST 4-QUATTRO 3030815 ATP-ST QUATTRO 3036615 DS-ST 4 1204517 SZF 1-0,6X3,5 3022276 CLIPFIX 35-5 3022218 CLIPFIX 35
List of bridges	Plug-in bridge / FBS 2-6 / 3030336 Plug-in bridge / FBS 3-6 / 3030242 Plug-in bridge / FBS 4-6 / 3030255 Plug-in bridge / FBS 5-6 / 3030349 Plug-in bridge / FBS 10-6 / 3030271 Plug-in bridge / FBS 20-6 / 3030365
Bridge data	28 A (4 mm <sup>2</sup> )
Ex temperature increase	40 K (31.6 A / 4 mm <sup>2</sup> )
for bridging with bridge	550 V
- At bridging between non-adjacent terminal blocks	352 V
- At bridging between non-adjacent terminal blocks via PE terminal block	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	27.5 A
Maximum load current	34.5 A
Contact resistance	0.78 mΩ

### Ex connection data General

Nominal cross section	4 mm <sup>2</sup>
Rated cross section AWG	12
Connection capacity rigid	0.08 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Connection capacity AWG	28 ... 10
Connection capacity flexible	0.08 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Connection capacity AWG	28 ... 12

## Dimensions

Width	6.2 mm
End cover width	2.2 mm

# ST 4-QUATTRO BU - Feed-through terminal block



3031458

<https://www.phoenixcontact.com/us/products/3031458>

Height	87 mm
Depth on NS 35/7,5	36.5 mm
Depth on NS 35/15	44 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

## Electrical tests

### Surge voltage test

Test voltage setpoint	9.8 kV
Result	Test passed

### Temperature-rise test

Requirement temperature-rise test	Increase in temperature $\leq$ 45 K
Result	Test passed
Short-time withstand current 4 mm <sup>2</sup>	0.48 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
-------------------------	-------

# ST 4-QUATTRO BU - Feed-through terminal block



3031458

<https://www.phoenixcontact.com/us/products/3031458>

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	0.25 mm <sup>2</sup> / 0.2 kg
	4 mm <sup>2</sup> / 0.9 kg
	6 mm <sup>2</sup> / 1.4 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	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

### Shocks

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Pulse shape	Half-sine
Acceleration	5g
Shock duration	30 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

# ST 4-QUATTRO BU - Feed-through terminal block



3031458

<https://www.phoenixcontact.com/us/products/3031458>

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

# ST 4-QUATTRO BU - Feed-through terminal block



3031458

<https://www.phoenixcontact.com/us/products/3031458>

## Drawings

Circuit diagram



# ST 4-QUATTRO BU - Feed-through terminal block





3031458

<https://www.phoenixcontact.com/us/products/3031458>

## Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3031458>


 <b>CSA</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B	600 V	30 A	28 - 10	-
C	600 V	30 A	28 - 10	-

 <b>IECEE CB Scheme</b> Approval ID: DE1-63028_M1				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine	800 V	32 A	-	0.2 - 4

 <b>KR</b> Approval ID: HMB17372-EL002				
--	--	--	--	--

 <b>NK</b> Approval ID: 09 ME 140				
---	--	--	--	--

 <b>VDE Zeichengenehmigung</b> Approval ID: 40009034				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine	800 V	32 A	-	0.2 - 4

 <b>cULus Recognized</b> Approval ID: E60425				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B	600 V	30 A	28 - 10	-
C	600 V	30 A	28 - 10	-

 <b>ATEX</b> Approval ID: KEMA00ATEX2129U				
---	--	--	--	--

# ST 4-QUATTRO BU - Feed-through terminal block



3031458

<https://www.phoenixcontact.com/us/products/3031458>



**IECEx**

Approval ID: IECEx KEM 06.0050U



**CCC**

Approval ID: 2020322313000621



**UKCA-EX**

Approval ID: DEKRA 21UKEX0301U



**EAC Ex**

Approval ID: KZ 7500525010101950

# ST 4-QUATTRO BU - Feed-through terminal block



3031458

<https://www.phoenixcontact.com/us/products/3031458>

## Classifications

### ECLASS

ECLASS-13.0	27250101
ECLASS-15.0	27250101

### ETIM

ETIM 10.0	EC000897
-----------	----------

### UNSPSC

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

# ST 4-QUATTRO BU - Feed-through terminal block



3031458

<https://www.phoenixcontact.com/us/products/3031458>

## 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	0.075 kg CO2e
---------	---------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

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