

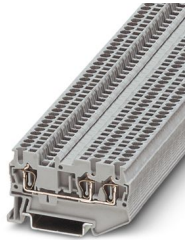
# ST 1,5-TWIN - Feed-through terminal block



3031128

<https://www.phoenixcontact.com/gb/products/3031128>

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: 500 V, nominal current: 17.5 A, number of connections: 3, connection method: Spring-cage connection, Rated cross section: 1.5 mm<sup>2</sup>, cross section: 0.08 mm<sup>2</sup> - 1.5 mm<sup>2</sup>, mounting type: NS 35/7,5, NS 35/15, color: gray

## Your advantages

- The consistent double function shaft offers every opportunity for time-saving potential distribution and accommodating test accessories
- User-friendly implementation of all potential branching tasks
- Tested for railway applications
- Space-saving and practical multi-conductor connection without additional bridges

## Commercial data

Item number	3031128
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE2112
Product key	BE2112
GTIN	4017918186647
Weight per piece (including packing)	6.36 g
Weight per piece (excluding packing)	5.86 g
Customs tariff number	85369010
Country of origin	DE

# ST 1,5-TWIN - Feed-through terminal block



3031128

<https://www.phoenixcontact.com/gb/products/3031128>

## Technical data

### Notes

#### General

Note	When establishing a connection on the open housing side of a feed-through modular terminal block of the same series and size, the block must be provided with a cover if the expected insulation voltage is >320 V.
	The max. load current must not be exceeded by the total current of all connected conductors.

### 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	3
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	3
Nominal cross section	1.5 mm <sup>2</sup>
Connection method	Spring-cage connection
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A1
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.08 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Cross section AWG	28 ... 16 (converted acc. to IEC)
Conductor cross-section flexible	0.08 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	28 ... 16 (converted acc. to IEC)
Conductor cross-section flexible ultrasound-compressed	0.34 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section, flexible [AWG] ultrasound-compressed	22 ... 16 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>

# ST 1,5-TWIN - Feed-through terminal block



3031128

<https://www.phoenixcontact.com/gb/products/3031128>

2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup>
Nominal current	17.5 A (with 1.5 mm <sup>2</sup> conductor cross-section)
Maximum load current	17.5 A (in case of a 1.5 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	500 V
Nominal cross section	1.5 mm <sup>2</sup>

## Ex data

### Rated data (ATEX/IECEx)

Identification	⊕ II 2 GD Ex eb IIC Gb
Operating temperature range	-60 °C ... 85 °C
Ex-certified accessories	3030488 D-ST 2,5-TWIN 3030789 ATP-ST-TWIN 3036602 DS-ST 2,5 1204504 SZF 0-0,4X2,5 3022276 CLIPFIX 35-5 3022218 CLIPFIX 35
List of bridges	Plug-in bridge / FBS 2-4 / 3030116 Plug-in bridge / FBS 3-4 / 3030129 Plug-in bridge / FBS 4-4 / 3030132 Plug-in bridge / FBS 5-4 / 3030145 Plug-in bridge / FBS 10-4 / 3030158 Plug-in bridge / FBS 20-4 / 3030352
Bridge data	16.5 A (1.5 mm <sup>2</sup> )
Ex temperature increase	40 K (19.4 A / 1.5 mm <sup>2</sup> )
for bridging with bridge	440 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	400 V
output	(Permanent)

### Ex level General

Rated voltage	440 V
Rated current	17.5 A
Maximum load current	17.5 A
Contact resistance	1.43 mΩ

### Ex connection data General

Nominal cross section	1.5 mm <sup>2</sup>
Rated cross section AWG	16
Connection capacity rigid	0.08 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Connection capacity AWG	28 ... 16

# ST 1,5-TWIN - Feed-through terminal block



3031128

<https://www.phoenixcontact.com/gb/products/3031128>

Connection capacity flexible	0.08 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Connection capacity AWG	28 ... 16

## Dimensions

Width	4.2 mm
End cover width	2.2 mm
Height	60.5 mm
Depth on NS 35/7,5	36.5 mm
Depth on NS 35/15	44 mm

## Material specifications

Color	gray (RAL 7042)
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	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 <sup>2</sup>	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
-----------------	-----

## Mechanical tests

# ST 1,5-TWIN - Feed-through terminal block



3031128

<https://www.phoenixcontact.com/gb/products/3031128>

## Mechanical strength

Result	Test passed
--------	-------------

## Attachment on the carrier

DIN rail/fixing support	NS 32/NS 35
Result	Test passed

## Test for conductor damage and slackening

Rotation speed	10 (+/- 2) rpm
Revolutions	135
Conductor cross-section/weight	0.14 mm <sup>2</sup> / 0.2 kg
	0.2 mm <sup>2</sup> / 0.2 kg
	1.5 mm <sup>2</sup> / 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

### Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2018-05
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
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.)
---------------------------------	--

# ST 1,5-TWIN - Feed-through terminal block



3031128

<https://www.phoenixcontact.com/gb/products/3031128>

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 35/15

# ST 1,5-TWIN - Feed-through terminal block



3031128

<https://www.phoenixcontact.com/gb/products/3031128>

## Drawings

### Circuit diagram



# ST 1,5-TWIN - Feed-through terminal block





3031128


<https://www.phoenixcontact.com/gb/products/3031128>


## Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/3031128>


 <b>CSA</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B	300 V	15 A	26 - 14	-
C	300 V	15 A	26 - 14	-

 <b>IECEE CB Scheme</b> Approval ID: DE1-63027_A1				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine	500 V	17.5 A	-	0.2 - 1.5

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

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

 <b>VDE Zeichengenehmigung</b> Approval ID: 40009031				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine	500 V	17.5 A	-	0.2 - 1.5

 <b>cULus Recognized</b> Approval ID: E60425				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B	300 V	15 A	26 - 14	-
C	300 V	15 A	26 - 14	-
D	600 V	5 A	26 - 14	-

# ST 1,5-TWIN - Feed-through terminal block



3031128

<https://www.phoenixcontact.com/gb/products/3031128>

## DNV

Approval ID: TAE00001CS



## ATEX

Approval ID: KEMA01ATEX2129U

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
Type examination certificate	440 V	17.5 A	-	0.08 - 1.5



## IECEx

Approval ID: IECEx KEM 06.0043U

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	440 V	17.5 A	-	0.08 - 1.5



## CCC

Approval ID: 2020322313000621



## UKCA-EX

Approval ID: DEKRA 21UKEX0302U



## EAC Ex

Approval ID: KZ 7500525010101950

# ST 1,5-TWIN - Feed-through terminal block



3031128

<https://www.phoenixcontact.com/gb/products/3031128>

## Classifications

### ECLASS

ECLASS-13.0	27250101
ECLASS-15.0	27250101

### ETIM

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

### UNSPSC

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

# ST 1,5-TWIN - Feed-through terminal block



3031128

<https://www.phoenixcontact.com/gb/products/3031128>

## 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%
-------------------------------------	----------------------------

### EF3.0 Climate Change

CO2e kg	0.049 kg CO2e
---------	---------------

Phoenix Contact 2025 © - all rights reserved  
<https://www.phoenixcontact.com>

PHOENIX CONTACT Ltd  
Halesfield 13, Telford  
Shropshire, TF7 4PG  
01952 681700  
[info@phoenixcontact.co.uk](mailto:info@phoenixcontact.co.uk)