

## Double-level spring-cage terminal block - STTB 4 - 3031429

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>)




Double-level spring-cage terminal block, connection method: Spring-cage connection, cross section: 0.08 mm<sup>2</sup> - 6 mm<sup>2</sup>, AWG: 28 - 10, width: 6.2 mm, color: gray, mounting type: NS 35/7,5, NS 35/15

### Your advantages

- Compact design for maximum space savings
- Tested for railway applications
- Connect the levels using FBS ...-PV bridges




### Key Commercial Data

Packing unit	50 pc
GTIN	 4 017918 186920
GTIN	4017918186920
Weight per Piece (excluding packing)	15.430 g
Custom tariff number	85369010
Country of origin	Germany

### Technical data

#### General

Number of levels	2
Number of connections	4
Nominal cross section	4 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry
	Machine building
	Plant engineering
	Process industry

## Double-level spring-cage terminal block - STTB 4 - 3031429

### Technical data

#### General

Rated surge voltage	6 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	1.02 W (the value is multiplied when connecting multiple levels)
Connection in acc. with standard	IEC 60947-7-1
Nominal current $I_N$	30 A (with 4 mm <sup>2</sup> conductor cross section)
Maximum load current	32 A (with 6 mm <sup>2</sup> conductor cross section)
Nominal voltage $U_N$	500 V
Open side panel	Yes
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Finger protection	guaranteed
Result of surge voltage test	Test passed
Surge voltage test setpoint	7.3 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	1.89 kV
Checking the 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	0.08 mm <sup>2</sup> / 0.1 kg
	4 mm <sup>2</sup> / 0.9 kg
	6 mm <sup>2</sup> / 1.4 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.08 mm <sup>2</sup>
Tractive force setpoint	5 N
Conductor cross section tensile test	4 mm <sup>2</sup>
Tractive force setpoint	60 N
Conductor cross section tensile test	6 mm <sup>2</sup>
Tractive force setpoint	80 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	4 mm <sup>2</sup>
Short-time current	0.48 kA

## Double-level spring-cage terminal block - STTB 4 - 3031429

### Technical data

#### General

Conductor cross section short circuit testing	6 mm <sup>2</sup>
Short-time current	0.72 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
Oscillation, broadband noise test result	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 2, bogie-mounted
Test 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	3.12 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec.; UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °C
Static insulating material application in cold	-60 °C
Behavior in fire for rail vehicles (DIN 5510-2)	Test passed
Flame test method (DIN EN 60695-11-10)	V0
Oxygen index (DIN EN ISO 4589-2)	>32 %
NF F16-101, NF F10-102 Class I	2
NF F16-101, NF F10-102 Class F	2
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)	27,5 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	6.2 mm
-------	--------

## Double-level spring-cage terminal block - STTB 4 - 3031429

### Technical data

#### Dimensions

Length	83.5 mm
Height NS 35/7,5	47.5 mm
Height NS 35/15	55 mm

#### Connection data

Connection method	Spring-cage connection
Conductor cross section solid min.	0.08 mm <sup>2</sup>
Conductor cross section solid max.	6 mm <sup>2</sup>
Conductor cross section flexible min.	0.08 mm <sup>2</sup>
Conductor cross section flexible max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	28
Conductor cross section AWG max.	10
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.	4 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.	4 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	1 mm <sup>2</sup>
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A4

#### Standards and Regulations

Connection in acc. with standard	CSA
	IEC 60947-7-1
Flammability rating according to UL 94	V0
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

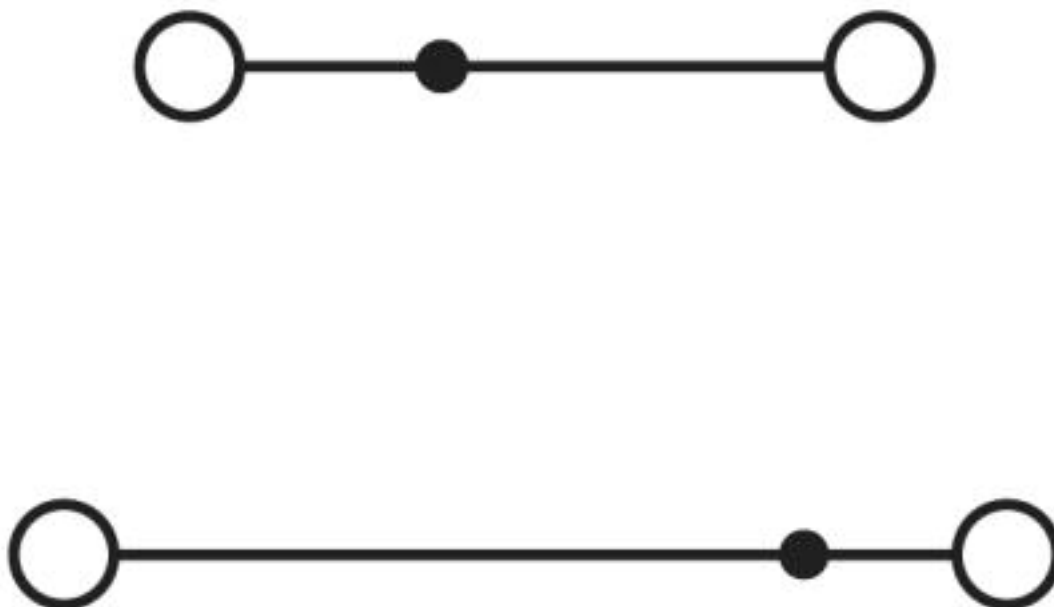
#### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

### Drawings

## Double-level spring-cage terminal block - STTB 4 - 3031429

Circuit diagram



### Classifications

#### eCl@ss

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
UNSPSC 12.01	39121410

## Double-level spring-cage terminal block - STTB 4 - 3031429

### Classifications

#### UNSPSC

UNSPSC 13.2	39121410
-------------	----------

### Approvals

#### Approvals

#### Approvals


DNV GL / CSA / BV / LR / KR / NK / UL Recognized / cUL Recognized / IECCEB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / EAC / RS / cULus Recognized

#### Ex Approvals


IECEX / ATEX / EAC Ex

### Approval details

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE00001CS
--------	---	---	------------

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		300 V	300 V
Nominal current IN		30 A	30 A
mm <sup>2</sup> /AWG/kcmil		28-10	28-10

BV		<a href="http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials">http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials</a>	13403/D0 BV
----	---	---	-------------


LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	04/20034
----	---	---	----------


KR		<a href="http://www.krs.co.kr/eng/main/main.aspx">http://www.krs.co.kr/eng/main/main.aspx</a>	HMB17372-EL002
----	---	---	----------------


## Double-level spring-cage terminal block - STTB 4 - 3031429


### Approvals


NK	<b>ClassNK</b>	<a href="http://www.classnk.or.jp/hp/en/">http://www.classnk.or.jp/hp/en/</a>	09 ME 140
----	----------------	---	-----------

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	D
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	30 A	30 A	5 A
mm <sup>2</sup> /AWG/kcmil	28-10	28-10	28-10

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	D
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	30 A	30 A	5 A
mm <sup>2</sup> /AWG/kcmil	28-10	28-10	28-10


IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-62192
Nominal voltage UN	500 V		
Nominal current IN	32 A		
mm <sup>2</sup> /AWG/kcmil	4		

VDE Gutachten mit Fertigungsüberwachung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40009034
Nominal voltage UN	500 V		
Nominal current IN	32 A		
mm <sup>2</sup> /AWG/kcmil	0.2-4		

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

## Double-level spring-cage terminal block - STTB 4 - 3031429

### Approvals

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

RS		<a href="http://www.rs-head.spb.ru/en/index.php">http://www.rs-head.spb.ru/en/index.php</a>	17.00013.272
----	---	---	--------------

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



# SCATTERGOOD & JOHNSON LTD

ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

Est.1899

At Scattergood & Johnson Ltd, we pride ourselves on being a technical distributor to specialist industries.

Working with a range of quality product suppliers across a number of specialist markets, we are not your average 'box shifter' - we are your technical and supply chain partner.

We fully support every product we sell - for free! Our internal team and external sales engineers can answer any product or application question, no matter the complexity.

Backing up this technical ability is a range of 50,000+ products available from stock for nationwide next day delivery (same day if required!), or you can collect what you need from any of our trade counters around the UK.

Select your specialist interest below to learn more about how we can help.



Online, In Branch and On the Road - Scattergood & Johnson Ltd, there when you need us.

# [www.scatts.co.uk](http://www.scatts.co.uk)