

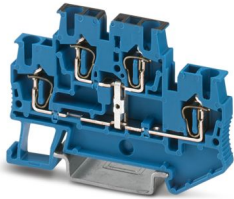
# STTB 2,5-PV BU - Double-level terminal block



3035108

<https://www.phoenixcontact.com/us/products/3035108>

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.



Double-level terminal block, with equipotential bonder, nom. voltage: 500 V, nominal current: 22 A, number of connections: 4, connection method: Spring-cage connection, Rated cross section: 2.5 mm<sup>2</sup>, 1st and 2nd level, cross section: 0.08 mm<sup>2</sup> - 4 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
- High space savings thanks to the compact integration of two separate circuits in a single terminal block
- Full flexibility thanks to the standardized CLIPLINE complete bridging, marking, and testing accessories

## Commercial data

Item number	3035108
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE02
Product key	BE2114
GTIN	4017918975258
Weight per piece (including packing)	10.87 g
Weight per piece (excluding packing)	10.3 g
Customs tariff number	85369010
Country of origin	DE

# STTB 2,5-PV BU - Double-level terminal block



3035108

<https://www.phoenixcontact.com/us/products/3035108>

## Technical data

### Product properties

Product type	Multi-level terminal block
Product family	ST
Number of connections	4
Number of rows	2
Potentials	1

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	0.77 W

### Connection data

Number of connections per level	2
Nominal cross section	2.5 mm <sup>2</sup>

### 1st and 2nd level

Connection method	Spring-cage connection
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.08 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Cross section AWG	28 ... 12 (converted acc. to IEC)
Conductor cross-section flexible	0.08 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	28 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup>
Nominal cross section	2.5 mm <sup>2</sup>
Nominal current	22 A (with 4 mm <sup>2</sup> conductor cross-section)
Maximum load current	26 A (in case of a 4 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

### Ex data

#### Rated data (ATEX/IECEx)

Identification	⊕ II 2 GD Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C

# STTB 2,5-PV BU - Double-level terminal block



3035108

<https://www.phoenixcontact.com/us/products/3035108>

Ex-certified accessories	3030459 D-STTB 2,5
	3030747 ATP-STTB 4
	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	
Bridge data	17 A (2.5 mm <sup>2</sup> )
Ex temperature increase	40 K (21.9 A / 2.5 mm <sup>2</sup> )
for bridging with bridge	440 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	220 V
Rated insulation voltage	400 V
output	(Permanent)

## Ex level General

Rated voltage	440 V
Rated current	19.5 A
Maximum load current	23.5 A

## Ex connection data General

Nominal cross section	2.5 mm <sup>2</sup>
Rated cross section AWG	14
Connection capacity rigid	0.08 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Connection capacity AWG	28 ... 12
Connection capacity flexible	0.08 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Connection capacity AWG	28 ... 14
output	(Permanent)

## Ex level Level 1

Contact resistance	1.04 mΩ
output	(Permanent)

## Ex level Level 2

Contact resistance	0.83 mΩ
output	(Permanent)

## Ex level PV connection

Contact resistance	1.04 mΩ
--------------------	---------

# STTB 2,5-PV BU - Double-level terminal block



3035108

<https://www.phoenixcontact.com/us/products/3035108>

## Dimensions

Width	5.2 mm
End cover width	2.2 mm
Height	67.5 mm
Depth on NS 35/7,5	47.5 mm
Depth on NS 35/15	55 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
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °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
Calorimetric heat release NFPA 130 (ASTM E 1354)	27,5 MJ/kg
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 $\leq$ 45 K
Result	Test passed
Short-time withstand current 2.5 mm <sup>2</sup>	0.3 kA
Short-time withstand current 4 mm <sup>2</sup>	0.48 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
-----------------	-----

# STTB 2,5-PV BU - Double-level terminal block



3035108

<https://www.phoenixcontact.com/us/products/3035108>

## 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	0.08 mm <sup>2</sup> / 0.1 kg
	2.5 mm <sup>2</sup> / 0.7 kg
	4 mm <sup>2</sup> / 0.9 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):2008-03
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	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

# STTB 2,5-PV BU - Double-level terminal block



3035108

<https://www.phoenixcontact.com/us/products/3035108>

## 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
----------------------------------	---------------

## Mounting

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

# STTB 2,5-PV BU - Double-level terminal block



3035108

<https://www.phoenixcontact.com/us/products/3035108>

## Drawings

Circuit diagram



# STTB 2,5-PV BU - Double-level terminal block





3035108


<https://www.phoenixcontact.com/us/products/3035108>


## Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3035108>

 <b>CSA</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B	300 V	20 A	28 - 12	-
C	300 V	20 A	28 - 12	-

 <b>IECEE CB Scheme</b> Approval ID: DE1-66179				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine	500 V	22 A	-	0.2 - 2.5

 <b>VDE Zeichengenehmigung</b> Approval ID: 40009033				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine	500 V	22 A	-	0.2 - 2.5

 <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	20 A	28 - 12	-
C	300 V	20 A	28 - 12	-
D	600 V	5 A	28 - 12	-


 <b>ATEX</b> Approval ID: KEMA00ATEX2052U				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine				
Only flexible conductors	440 V	19.5 A	-	0.08 - 2.5
Only rigid conductors	440 V	23.5 A	-	0.08 - 4


# STTB 2,5-PV BU - Double-level terminal block





3035108

<https://www.phoenixcontact.com/us/products/3035108>

 <b>IECEx</b> Approval ID: IECEx KEM 06.0051U				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
Only flexible conductors	440 V	19.5 A	-	0.08 - 2.5
Only rigid conductors	440 V	23.5 A	-	0.08 - 4

 <b>CCC</b> Approval ID: 2020322313000621				
---	--	--	--	--

 <b>UKCA-EX</b> Approval ID: DEKRA 21UKEX0300U				
--	--	--	--	--

 <b>EAC Ex</b> Approval ID: KZ 7500525010101950				
---	--	--	--	--

# STTB 2,5-PV BU - Double-level terminal block



3035108

<https://www.phoenixcontact.com/us/products/3035108>

## Classifications

### ECLASS

ECLASS-13.0	27250102
ECLASS-15.0	27250102

### ETIM

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

### UNSPSC

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

# STTB 2,5-PV BU - Double-level terminal block



3035108

<https://www.phoenixcontact.com/us/products/3035108>

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

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)