

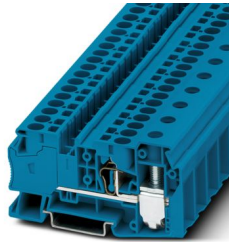
# STU 35/ 4X10 BU - Potential collective terminal



3033210

<https://www.phoenixcontact.com/us/products/3033210>

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.



Potential collective terminal, nom. voltage: 1000 V, nominal current: 41 A, Load contact, connection method: Spring-cage connection, Rated cross section: 6 mm<sup>2</sup>, cross section: 0.2 mm<sup>2</sup> - 10 mm<sup>2</sup>, Line contact, connection method: Screw connection, Rated cross section: 35 mm<sup>2</sup>, cross section: 1.5 mm<sup>2</sup> - 50 mm<sup>2</sup>, mounting: NS 35/7,5, NS 35/15, color: blue

## Your advantages

- The STU 35/4x10 spring-cage hybrid terminal block is used to divide a 35 mm<sup>2</sup> supply line into four 10 mm<sup>2</sup> connections
- The system-internal distribution is via four spring-cage connections with a nominal cross section of 10 mm<sup>2</sup>
- Supplied using a 35 mm<sup>2</sup> screw connection
- Can be consistently bridged to standard terminal blocks in the ST spring-cage terminal block series
- The double bridge shaft supports further potential distributions

## Commercial data

Item number	3033210
Packing unit	25 pc
Minimum order quantity	25 pc
Sales key	BE02
Product key	BE2119
GTIN	4046356296045
Weight per piece (including packing)	58.84 g
Weight per piece (excluding packing)	55.04 g
Customs tariff number	85369010
Country of origin	CN

# STU 35/ 4X10 BU - Potential collective terminal



3033210

<https://www.phoenixcontact.com/us/products/3033210>

## Technical data

### Notes

#### General

Note	The maximum load current of a single clamping unit must not be exceeded.
	For power distribution applications, IEC 60364-4-43:2008; modified + corrigendum Okt. 2008 (DIN VDE 0100-430:2010-10) section 433.2 ff must be observed!

### Product properties

Product type	Hybrid terminal block
Product family	STU
Number of connections	5
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	4.06 W

### Connection data

Number of connections per level	5
Nominal cross section	35 mm <sup>2</sup>

#### Load contact

Connection method	Spring-cage connection
Stripping length	12 mm
Internal cylindrical gage	A5
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 10 mm <sup>2</sup>
Cross section AWG	24 ... 8 (converted acc. to IEC)
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.25 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross-section flexible (2 conductors with the same cross-section, with TWIN ferrule and plastic sleeve)	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Nominal cross section	6 mm <sup>2</sup>
Nominal current	41 A
Maximum load current	41 A (in case of a 10 mm <sup>2</sup> conductor cross-section, the maximum

# STU 35/ 4X10 BU - Potential collective terminal



3033210

<https://www.phoenixcontact.com/us/products/3033210>

	load current must not be exceeded by the total current of all connected conductors.)
Nominal voltage	1000 V

## Line contact

Connection method	Screw connection
Screw thread	M6
Tightening torque	3.2 ... 3.7 Nm
Stripping length	18 mm
Internal cylindrical gage	B9
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	1.5 mm <sup>2</sup> ... 50 mm <sup>2</sup>
Cross section AWG	16 ... 1/0 (converted acc. to IEC)
Conductor cross-section flexible	1.5 mm <sup>2</sup> ... 35 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	16 ... 2 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	1.5 mm <sup>2</sup> ... 35 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	1.5 mm <sup>2</sup> ... 35 mm <sup>2</sup>
Conductor cross-section flexible (2 conductors with the same cross-section, with TWIN ferrule and plastic sleeve)	1.5 mm <sup>2</sup> ... 10 mm <sup>2</sup>
2 conductors with same cross section, rigid	1.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>
2 conductors with same cross section, flexible	1.5 mm <sup>2</sup> ... 10 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	1.5 mm <sup>2</sup> ... 10 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	1.5 mm <sup>2</sup> ... 10 mm <sup>2</sup>
Nominal cross section	35 mm <sup>2</sup>
Nominal current	125 A
Maximum load current	125 A (with 50 mm <sup>2</sup> conductor cross-section)
Nominal voltage	1000 V

## Dimensions

Width	16.2 mm
Height	86 mm
Depth on NS 35/7,5	46.8 mm
Depth on NS 35/15	54.3 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))	130 °C
Relative insulation material temperature index (Elec., UL 746 B)	125 °C
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3

# STU 35/ 4X10 BU - Potential collective terminal



3033210

<https://www.phoenixcontact.com/us/products/3033210>

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	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 10 mm <sup>2</sup>	1.2 kA
Short-time withstand current 6 mm <sup>2</sup>	0.72 kA
Result	Test passed

### Power-frequency withstand voltage

Test voltage setpoint	2 kV
Result	Test passed

## Mechanical properties

### Mechanical data

Open side panel	No
-----------------	----

## Mechanical tests

### Mechanical strength

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

### Attachment on the carrier

DIN rail/fixing support	NS 35/7,5
Result	Test passed

### Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross-section/weight	1.5 mm <sup>2</sup> / 0.4 kg
	35 mm <sup>2</sup> / 6.8 kg
	50 mm <sup>2</sup> / 9.5 kg
Result	Test passed

## Environmental and real-life conditions

# STU 35/ 4X10 BU - Potential collective terminal



3033210

<https://www.phoenixcontact.com/us/products/3033210>

## 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 1, class B, body mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
ASD level	$1.857 \text{ (m/s}^2\text{)/Hz}$
Acceleration	0.8g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

## Shocks

Specification	DIN EN 50155 (VDE 0115-200):2018-05
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
Permissible humidity (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

## Standards and regulations

Connection in acc. with standard	IEC 60947-7-1
	IEC 60947-7-1

## Mounting

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

# STU 35/ 4X10 BU - Potential collective terminal



3033210

<https://www.phoenixcontact.com/us/products/3033210>

## Drawings

### Circuit diagram



# STU 35/ 4X10 BU - Potential collective terminal





3033210

<https://www.phoenixcontact.com/us/products/3033210>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3033210>

 <b>UL Recognized</b> Approval ID: E60425				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
<b>B</b>				
Spring-cage connection	1000 V	50 A	24 - 8	-
Screw connection	1000 V	115 A	14 - 2	-
<b>C</b>				
Spring-cage connection	1000 V	50 A	24 - 8	-
Screw connection	1000 V	115 A	14 - 2	-

 <b>EAC</b> Approval ID: RU C-DE.BL08.B.00644	
---	--

 <b>EAC</b> Approval ID: KZ7500651131219505	
---	--

# STU 35/ 4X10 BU - Potential collective terminal



3033210

<https://www.phoenixcontact.com/us/products/3033210>

## Classifications

### ECLASS

ECLASS-13.0	27250201
ECLASS-15.0	27250201

### ETIM

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

### UNSPSC

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

# STU 35/ 4X10 BU - Potential collective terminal



3033210

<https://www.phoenixcontact.com/us/products/3033210>

## 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)