STTB 2,5 OG - Double-level spring-cage terminal block

3035373

https://www.phoenixcontact.com/us/products/3035373

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Double-level spring-cage terminal block, nom. voltage: 500 V, nominal current: 22 A, connection method: Spring-cage connection, Rated cross section: 2.5 mm^2, cross section: 0.08 mm^2 - 4 mm^2, mounting type: NS 35/7,5, NS 35/15, color: orange

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	3035373
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE02
Product key	BE2114
GTIN	4046356122795
Weight per piece (including packing)	10.36 g
Weight per piece (excluding packing)	9.64 g
Customs tariff number	85369010
Country of origin	DE

Technical data

Product properties

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

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 mm²
Connection method	Spring-cage connection
Stripping length	10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.08 mm² ... 4 mm²
Cross section AWG	28 ... 12 (converted acc. to IEC)
Conductor cross-section flexible	0.08 mm² ... 2.5 mm²
Conductor cross-section, flexible [AWG]	28 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm² ... 2.5 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.25 mm² ... 2.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm²
Nominal cross section	2.5 mm²
Nominal current	22 A
Maximum load current	26 A (with 4 mm² conductor cross-section)
Nominal voltage	500 V

Ex data

Rated data (ATEX/IECEx)

Identification	Ⓔx II 2 GD Ex eb IIC Gb
Operating temperature range	-60 °C ... 85 °C
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 mm²
Ex temperature increase	40 K (21.9 A / 2.5 mm²)
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 mm²
Rated cross section AWG	14
Connection capacity rigid	0.08 mm² ... 4 mm²
Connection capacity AWG	28 ... 12
Connection capacity flexible	0.08 mm² ... 2.5 mm²
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

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	orange (RAL 2003)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA

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 2.5 mm²	0.3 kA
	0.3 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

Mechanical strength

Result	Test passed

Attachment on the carrier

DIN rail/fixing support	NS 32/NS 35
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	0.08 mm² / 0.1 kg
	2.5 mm² / 0.7 kg
	4 mm² / 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):2018-05
Spectrum	Long life test category 2, bogie-mounted
Frequency	f_1 = 5 Hz to f_2 = 250 Hz
ASD level	6.12 (m/s²)²/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

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

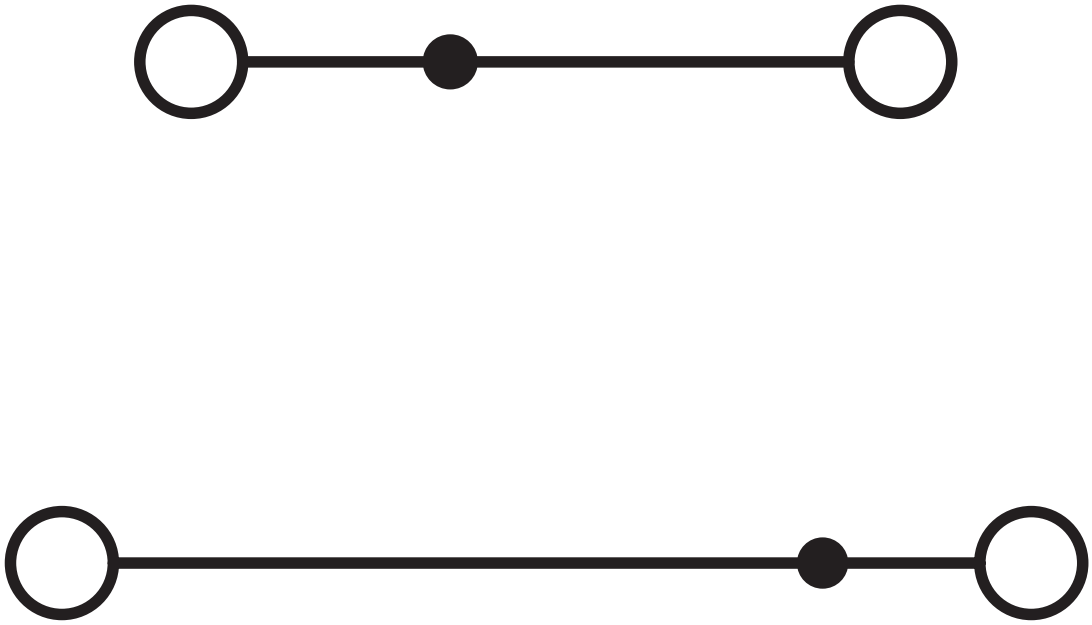
Connection in acc. with standard	IEC 60947-7-1

Mounting

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

Drawings

Circuit diagram



Approvals

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CSA
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	-

IECEE CB Scheme
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

KR
Approval ID: HMB17372-EL002

NK
Approval ID: 09 ME 140

VDE Zeichengenehmigung
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

cULus Recognized
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	-

ATEX
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

IECEx
Approval ID: IECEx KEM 06.0051U

	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

CCC
Approval ID: 2020322313000621

UKCA-EX
Approval ID: DEKRA 21UKEX0300U

EAC Ex
Approval ID: KZ 7500525010101950

Classifications

ECLASS

ECLASS-13.0	27250102
ECLASS-15.0	27250102

ETIM

ETIM 10.0	EC000897

UNSPSC

UNSPSC 21.0	39121400

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 USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com