

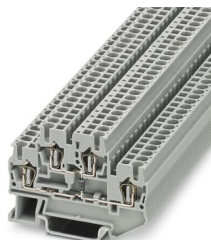
STTB 2,5-DIO/U-O - Component terminal block



3031563

<https://www.phoenixcontact.com/sg/products/3031563>

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Component terminal block, The max. current is determined by the diode. Installed: Diode 1N 4007, reverse voltage: 1300 V, maximum continuous current: 0.5 A., with integrated 1N4007 diode, nominal current: 0.5 A, 1st and 2nd level, connection method: Spring-cage connection, Rated cross section: 2.5 mm², cross section: 0.08 mm² - 4 mm², mounting: NS 35/7,5, NS 35/15, color: gray

Your advantages

- For more versions and versions for soldering in components yourself, visit [phoenixcontact.com/products](https://www.phoenixcontact.com/products)
- Double-level diode and LED terminal blocks perform a wide range of switching tasks

Commercial data

Item number	3031563
Packing unit	50 pc
Minimum order quantity	1 pc
Sales key	0164*
Product key	BE2172
Catalog page	Page 219 (C-1-2019)
GTIN	4017918183080
Weight per piece (including packing)	10.895 g
Weight per piece (excluding packing)	9.7 g
Customs tariff number	85369010
Country of origin	PL

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Technical data

Notes

General	The max. current is determined by the diode. Installed: Diode 1N 4007, reverse voltage: 1300 V, maximum continuous current: 0.5 A.
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Product properties

Product type	Component terminal block
Number of connections	4
Number of rows	2
Potentials	2

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated insulation voltage	500 V
Rated surge voltage	4 kV

Connection data

Number of connections per level	2
Nominal cross section	2.5 mm ²

1st and 2nd level

Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Conductor cross section rigid	0.08 mm ² ... 4 mm ²
Cross section AWG	28 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.08 mm ² ... 2.5 mm ²
Conductor cross section, flexible [AWG]	28 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm ² ... 2.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm ² ... 2.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ²
Nominal current	0.5 A
Maximum load current	0.5 A
Nominal cross section	2.5 mm ²
Component type	Diode 1N4007
Reverse voltage	1300 V

Dimensions

Width	5.2 mm
End cover width	2.2 mm

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Height	67.5 mm
Depth on NS 35/7,5	47.5 mm
Depth on NS 35/15	55 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 2.5 mm ²	0.3 kA
Short-time withstand current 4 mm ²	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
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Mechanical tests

Mechanical strength

Result	Test passed
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Attachment on the carrier

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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 ² / 0.1 kg
	2.5 mm ² / 0.7 kg
	4 mm ² / 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

Ambient conditions

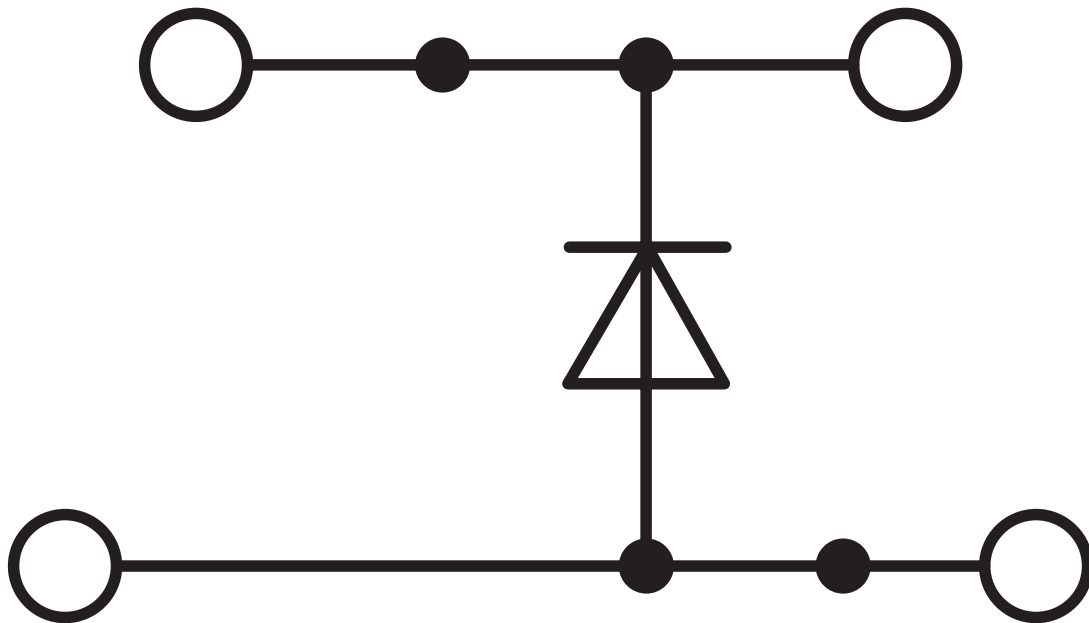
Ambient temperature (operation)	-60 °C ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

Mounting

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

Drawings

Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/sg/products/3031563>

 CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	300 V	0.5 A	28 - 12	-
Use group C				
	300 V	0.5 A	28 - 12	-

 EAC Approval ID: RU C-DE.BL08.B.00644				
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 cULus Recognized Approval ID: E60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	300 V	0.5 A	28 - 12	-
Use group C				
	300 V	0.5 A	28 - 12	-

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Classifications

ECLASS

ECLASS-11.0	27141127
ECLASS-12.0	27141127
ECLASS-13.0	27250114

ETIM

ETIM 9.0	EC000903
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a)

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	e9ba63f8-c46e-4771-8b91-224843f13186

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