

STIO-IN 2,5/4-PE OG - Installation protective conductor terminal block



3209109

<https://www.phoenixcontact.com/us/products/3209109>

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Installation protective conductor terminal block, nom. voltage: 250 V, nominal current: 30 A, number of connections: 5, connection method: Spring-cage connection, Rated cross section: 2.5 mm², cross section: 0.08 mm² - 4 mm², mounting type: NS 35/7,5, NS 35/15, color: orange

Your advantages

- Upper level for signal wiring

Commercial data

Item number	3209109
Packing unit	25 pc
Minimum order quantity	25 pc
Sales key	BE02
Product key	BE2118
GTIN	4046356143295
Weight per piece (including packing)	19.264 g
Weight per piece (excluding packing)	16.834 g
Customs tariff number	85369010
Country of origin	TR

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Technical data

Product properties

Product type	Sensor/actuator terminal block
Number of connections	5
Number of rows	3

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	4 kV
Maximum power dissipation for nominal condition	0.77 W

Connection data

Number of connections per level	5
Nominal cross section	2.5 mm ²
Connection method	Spring-cage connection
Note	Please observe the current carrying capacity of the DIN rails.
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1/IEC 60947-7-2
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	30 A (For central infeed and 4 mm ² conductor cross-section) 18 A (For single-sided infeed and 2.5 mm ² conductor cross-section)
Maximum load current	30 A (with 4 mm ² conductor cross-section)
Nominal voltage	250 V
Nominal cross section	2.5 mm ²

Dimensions

Width	10.4 mm
End cover width	2.2 mm
Height	92.3 mm
Depth on NS 35/7,5	44.5 mm

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Depth on NS 35/15	52 mm
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Material specifications

Color	orange (RAL 2003)
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)	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)	28 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	4.8 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
Result	Test passed

Power-frequency withstand voltage	
Test voltage setpoint	1.5 kV
Result	Test passed

Mechanical properties

Mechanical data	
Open side panel	No

Mechanical tests

Mechanical strength	
Result	Test passed

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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 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 %

Standards and regulations

Connection in acc. with standard	IEC 60947-7-1/IEC 60947-7-2
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Mounting

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

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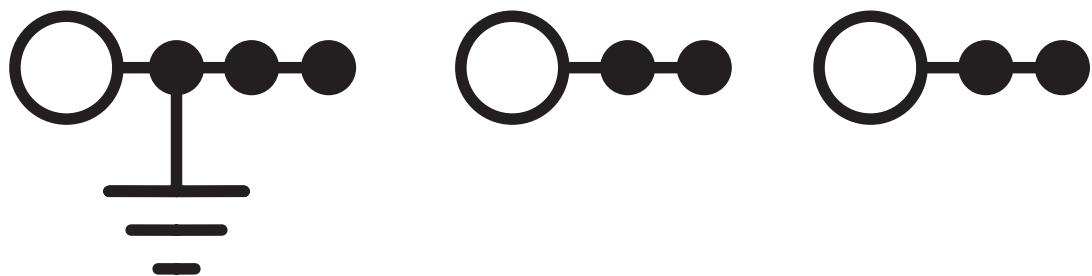


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Drawings

Circuit diagram



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Approvals

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EAC

Approval ID: RU C-DE.BL08.B.00644



cULus Recognized

Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B	300 V	10 A	28 - 12	-
C	150 V	20 A	28 - 12	-
D	300 V	10 A	28 - 12	-



EAC

Approval ID: KZ7500651131219505

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Classifications

ECLASS

ECLASS-13.0	27250112
ECLASS-15.0	27250112

ETIM

ETIM 9.0	EC000900
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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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%
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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com