

STIO 2,5/3-2B/L-LA24GN/O-M - Initiator/actuator terminal block



3209031

<https://www.phoenixcontact.com/us/products/3209031>

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Initiator/actuator terminal block, nom. voltage: 24 V, nominal current: 18 A, number of connections: 4, 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: gray

Your advantages

- Three-conductor output terminal block of the same shape with PE connection in the lower level for wiring actuators
- Power terminal blocks can be located at any point on the terminal strip for supply or extension purposes
- Easy bridging and potential distribution using the patented plug-in bridges from the CLIPLINE complete system
- Versions with LED for indicating the switching states
- The upper level is for signal wiring, whereas the two lower levels are used to distribute the positive and negative potential
- Potential is supplied via the STIO-IN power terminal blocks
- For space and time-saving wiring of three-conductor initiators and actuators

Commercial data

Item number	3209031
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE02
Product key	BE2117
GTIN	4046356143523
Weight per piece (including packing)	10.263 g
Weight per piece (excluding packing)	9.277 g
Customs tariff number	85369010
Country of origin	TR

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Technical data

Notes

General

Note	Current and voltage are determined by the resistance and the light indicator.
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Product properties

Product type	Sensor/actuator terminal block
Number of connections	4
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
LED voltage range	15 V DC ... 30 V DC
LED current range	1 mA ... 2.5 mA

Input data

LED voltage range	15 V DC ... 30 V DC
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Connection data

Number of connections per level	2
Nominal cross section	2.5 mm ²
Connection method	Spring-cage connection
Stripping length	8 mm ... 10 mm
Connection in acc. with standard	IEC 60947-7-1
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 cross section	2.5 mm ²
Nominal current	18 A
Maximum load current	18 A (with 4 mm ² conductor cross-section)
Nominal voltage	24 V (Light indicator, green)

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Dimensions

Width	5.2 mm
End cover width	2.2 mm
Height	75 mm
Depth on NS 35/7,5	44.5 mm
Depth on NS 35/15	52 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
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

Power-frequency withstand voltage

Test voltage setpoint	1.5 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	Yes
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Mechanical tests

Attachment on the carrier

Result	Test passed
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Environmental and real-life conditions

Oscillation/broadband noise

Specification	EN 50155:2021-07
Spectrum	Long life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

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
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Mounting

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

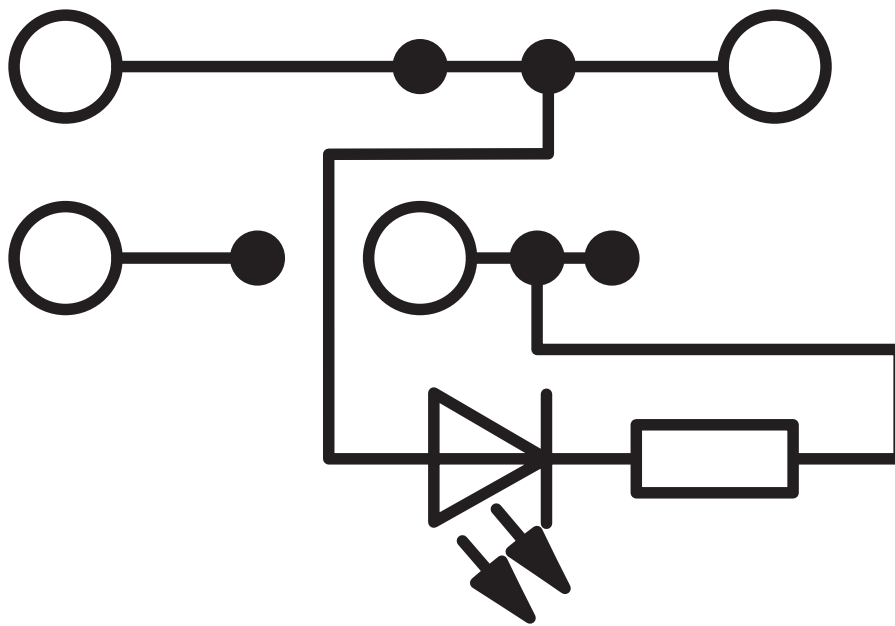
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Drawings

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	18 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 10.0	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.)	Hexahydromethylphthalic anhydride(CAS: n/a)
SCIP	632c5754-50a8-44ad-91bf-000474f20378

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