

ST-REL3-SG-B 24/21/P - Relay connectors



2824255

<https://www.phoenixcontact.com/us/products/2824255>

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Relay plug, fitted with remanence miniature switching relay, contacts (AgSnO): small to large loads, 1 changeover contact, input voltage 24 V DC, with polarity protection and freewheeling diode, positive switching

The figure shows version ST-REL3-SG-B 24/21/M

Commercial data

Item number	2824255
Packing unit	10 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	C460
Product key	DK61B2
GTIN	4017918077631
Weight per piece (including packing)	34.13 g
Weight per piece (excluding packing)	34.13 g
Customs tariff number	85364190
Country of origin	DE

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Technical data

Product properties

Product type	Relay Module
Operating mode	100% operating factor
Mechanical service life	approx. 10^7 cycles

Insulation characteristics

Overvoltage category	II
Pollution degree	2

Insulation characteristics: Air clearances and creepage distances between the power circuits

Insulation	Basic insulation
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Data management status

Date of last data management	01.04.2026
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Electrical properties

Maximum power dissipation for nominal condition	0.19 W
Test voltage (Winding/contact)	2 kV _{rms} (50 Hz, 1 min., winding/contact)
Rated insulation voltage	250 V AC
Rated surge voltage	2.5 kV

Input data

Coil side

Nominal input voltage U_N	24 V DC
Input voltage range	19.2 V DC ... 26.4 V DC (20 °C)
Drive and function	bistable
Drive (polarity)	polarized
Typical input current at U_N	typ. 8 mA
Typical response time	5 ms
Typical release time	5 ms
Pulse time range	30 ms ... 5 s
Coil voltage	24 V DC
Protective circuit	Freewheeling diode; Freewheeling diode Reverse polarity protection; Polarity protection diode

Output data

Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (At 5 V)

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	24 V (at 24 V)
Limiting continuous current	6 A
Maximum inrush current	8 A
Min. switching current	1 mA (at 24 V) 100 mA (At 5 V)
Interrupting rating (ohmic load) max.	144 W (at 24 V DC) 43 W (at 48 V DC) 42 W (at 60 V DC) 55 W (at 110 V DC) 100 W (at 220 V DC) 1500 VA (for 250 V AC)

Switching: when the gold layer is destroyed

Limiting continuous current	6 A
Interrupting rating (ohmic load) max.	120 W (at 24 V DC) 40 W (at 48 V DC) 35 W (at 60 V DC) 30 W (at 110 V DC) 60 W (at 220 V DC)

Dimensions

Item dimensions

Width	20.8 mm
Height	33 mm
Depth	66.5 mm

Material specifications

Color	green (RAL 6021)
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Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-40 °C ... 50 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C

Standards and regulations

Standards/regulations	IEC 60664 IEC 60664A DIN VDE 0110 DIN VDE 0109-11, draft DIN EN 50178/VDE 0160 (in relevant parts)
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Air clearances and creepage distances between the power circuits

Standards/regulations	DIN EN 50178
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Mounting

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Mounting type	Plug-in mounting
Assembly note	in rows with zero spacing
Mounting position	any

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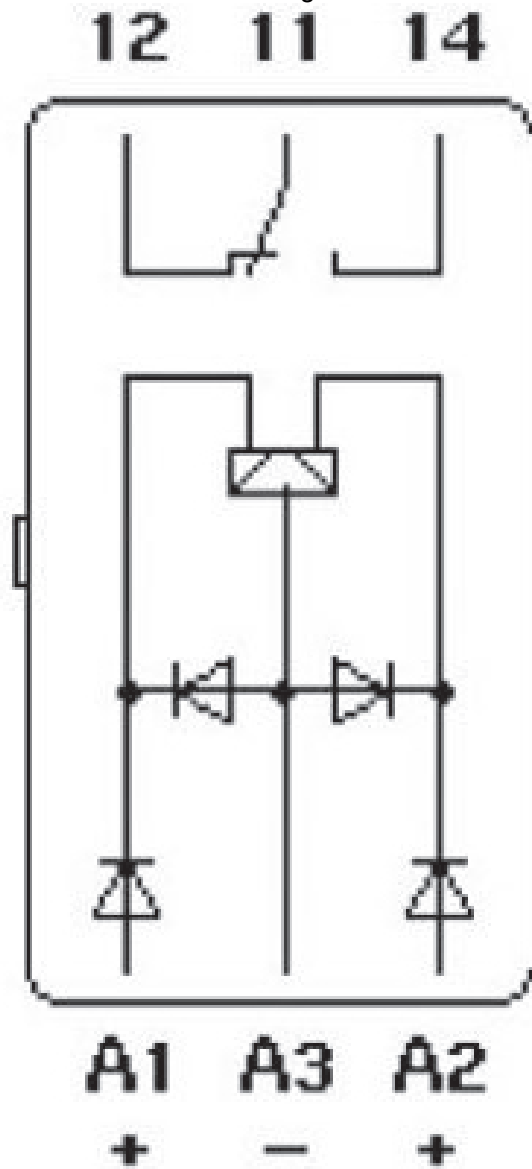


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Drawings

Circuit diagram



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Classifications

ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

ETIM

ETIM 10.0	EC001437
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UNSPSC

UNSPSC 21.0	39122300
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

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	15775aa2-96fc-4166-b4fd-f04dab6089ea

EF3.1 Climate Change

CO2e kg	1.861 kg CO2e
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