

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



2824255

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

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



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

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
------------	------------------

Data management status

Date of last data management	01.04.2026
------------------------------	------------

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)

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



2824255

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

	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)
-------	------------------

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)
-----------------------	--

Air clearances and creepage distances between the power circuits

Standards/regulations	DIN EN 50178
-----------------------	--------------

Mounting

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



2824255

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

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

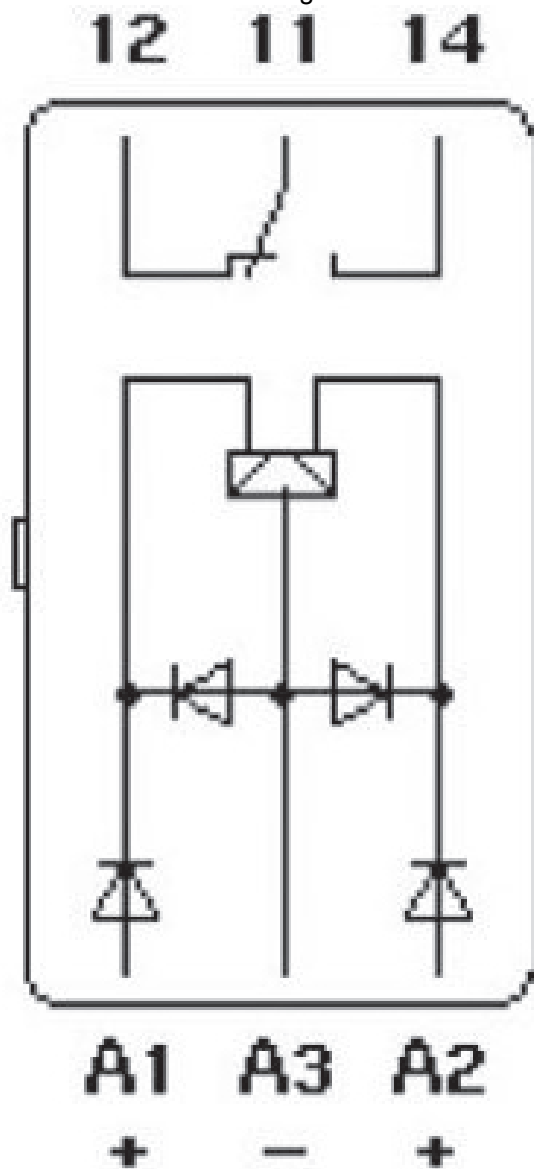
ST-REL3-SG-B 24/21/P - Relay connectors

2824255

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

Drawings

Circuit diagram



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



2824255

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

Classifications

ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

ETIM

ETIM 10.0	EC001437
-----------	----------

UNSPSC

UNSPSC 21.0	39122300
-------------	----------

2824255

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

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
---------	---------------

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

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