

Relay Module - DEK-REL-G24/21 - 2964500

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Relay terminal block, with soldered-in miniature power relay, contacts (AgSnO): medium to large loads, 1 PDT, input voltage 24 V DC, for assembly on NS 35/7.5, terminal width 6.2 mm

Your advantages

- ✓ Less wiring effort, thanks to the use of EB-DIK insertion bridges
- ✓ Just 6.2 mm wide
- ✓ Cadmium-free relay contacts
- ✓ Less storage, since PDT, N/O or N/C contacts can be wired
- ✓ High switching power of 250 V AC/6 A
- ✓ Safe isolation according to DIN EN 50178 (VDE 0160)
- ✓ Relay housing with IP67 protection
- ✓ LED for indicating the switching state
- ✓ 4 kV electrical isolation between input and output



Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 117733
GTIN	4017918117733
Weight per Piece (excluding packing)	28.000 g
Custom tariff number	85364190
Country of origin	China

Technical data

Note

Relay Module - DEK-REL-G24/21 - 2964500

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
Type of note	Note on application
Note	Use of EB 80-DIK... bridges in the DEK terminal blocks: Absorption of humidity from the ambient air as well as an unfavorable tolerance between a larger number of DEK terminal blocks and the EB 80-DIK... bridge may cause (minor) expansion of the DEK housing. When the EB 80-DIK... bridges are used, therefore, it is recommended that these be disconnected after about 10 to 12 DEK terminal blocks and a wire bridge to the next DEK terminal block be inserted in their place.

Dimensions

Width	6.2 mm
Height	80 mm
Depth	56 mm

Ambient conditions

Ambient temperature (operation)	-20 °C ... 50 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

Coil side

Nominal input voltage U_N	24 V DC
Input voltage range in reference to U_N	0.8 ... 1.1
Typical input current at U_N	9 mA
Typical response time	8 ms
Typical release time	5 ms
Protective circuit	Reverse polarity protection Polarity protection diode Free-wheeling diode Damping diode
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.22 W

Contact side

Contact type	1 PDT
Type of switch contact	Single contact
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V AC/DC
Min. switching current	10 mA
Maximum inrush current	6 A
Limiting continuous current	6 A
Interrupting rating (ohmic load) max.	140 W (at 24 V DC) 20 W (at 48 V DC)

Relay Module - DEK-REL-G24/21 - 2964500

Technical data

Contact side

	18 W (at 60 V DC)
	23 W (at 110 V DC)
	40 W (at 220 V DC)
	1500 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)

General

Test voltage relay winding/relay contact	4 kV AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Mechanical service life	approx. 10 ⁷ cycles
Mounting position	any
Assembly instructions	In rows with zero spacing

Connection data

Connection name	Coil side
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	0.2 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 14
Torque	0.5 Nm

Connection data 2

Connection name	Contact side
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	0.2 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 14
Torque	0.5 Nm

Standards and Regulations

Relay Module - DEK-REL-G24/21 - 2964500

Technical data

Standards and Regulations

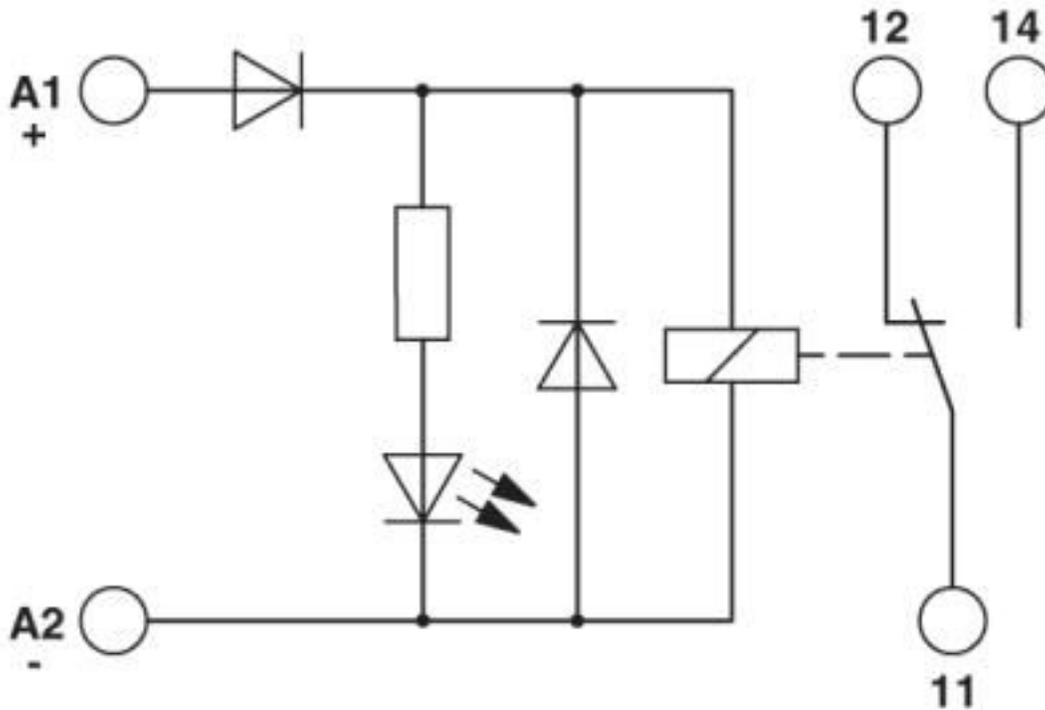
Connection in acc. with standard	CUL
Standards/regulations	IEC 60664
	EN 50178
Rated insulation voltage	250 V
Rated surge voltage	6 kV
Insulation	Safe isolation: Control side / contact side
Pollution degree	2
Overvoltage category	III

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Circuit diagram



Relay Module - DEK-REL-G24/21 - 2964500

Classifications

eCl@ss

eCl@ss 10.0.1	27371601
eCl@ss 4.0	27371100
eCl@ss 4.1	27371100
eCl@ss 5.0	27371600
eCl@ss 5.1	27371600
eCl@ss 6.0	27371600
eCl@ss 7.0	27371601
eCl@ss 8.0	27371601
eCl@ss 9.0	27371601

ETIM

ETIM 2.0	EC001437
ETIM 3.0	EC001437
ETIM 4.0	EC001437
ETIM 5.0	EC001437
ETIM 6.0	EC001437
ETIM 7.0	EC001437

UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39122334
UNSPSC 18.0	39122334
UNSPSC 19.0	39122334
UNSPSC 20.0	39122334
UNSPSC 21.0	39122334

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized

Ex Approvals

Relay Module - DEK-REL-G24/21 - 2964500

Approvals

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
EAC			TR_TS_D_00573_c
EAC			RU*C- DE.*08.B.00010
cULus Recognized			

Accessories

Accessories

Insertion bridge

Insertion bridge - EB 2- DIK RD - 2716693



Insertion bridge, pitch: 6.15 mm, number of positions: 2, color: red

Relay Module - DEK-REL-G24/21 - 2964500

Accessories

Insertion bridge - EB 3- DIK RD - 2716745



Insertion bridge, pitch: 6.15 mm, number of positions: 3, color: red

Insertion bridge - EB 4- DIK RD - 2716758



Insertion bridge, pitch: 6.15 mm, number of positions: 4, color: red

Insertion bridge - EB 5- DIK RD - 2716761



Insertion bridge, pitch: 6.15 mm, number of positions: 5, color: red

Insertion bridge - EB 10- DIK RD - 2716774



Insertion bridge, pitch: 6.15 mm, number of positions: 10, color: red

Insertion bridge - EB 2- DIK BU - 2716648



Insertion bridge, pitch: 6.15 mm, number of positions: 2, color: blue

Relay Module - DEK-REL-G24/21 - 2964500

Accessories

Insertion bridge - EB 3- DIK BU - 2716651



Insertion bridge, pitch: 6.15 mm, number of positions: 3, color: blue

Insertion bridge - EB 4- DIK BU - 2716664



Insertion bridge, pitch: 6.15 mm, number of positions: 4, color: blue

Insertion bridge - EB 5- DIK BU - 2716677



Insertion bridge, pitch: 6.15 mm, number of positions: 5, color: blue

Insertion bridge - EB 10- DIK BU - 2716680



Insertion bridge, pitch: 6.15 mm, number of positions: 10, color: blue

Insertion bridge - EB 80- DIK BU - 2715940



Insertion bridge, pitch: 6.2 mm, number of positions: 80, color: blue

Relay Module - DEK-REL-G24/21 - 2964500

Accessories

Insertion bridge - EB 80- DIK RD - 2715953



Insertion bridge, pitch: 6.2 mm, number of positions: 80, color: red

Insertion bridge - EB 80- DIK WH - 2715788



Insertion bridge, pitch: 6.15 mm, number of positions: 80, color: white

Labeled terminal marker

Zack marker strip - ZB 6,LGS:FORTL.ZAHLEN - 1051016



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Partition plate

Separating plate - D-DEK 1,5 GN - 2716949



Cover for setting the end of a terminal row, color: green

Sensor/actuator terminal block

Relay Module - DEK-REL-G24/21 - 2964500

Accessories

Sensor/actuator terminal block - DIKD 1,5 - 2715979



Sensor/actuator terminal block, connection method: Screw connection, cross section: 0.2 mm² - 4 mm², AWG: 24 - 12, width: 6.2 mm, color: gray, mounting type: NS 35/7,5, NS 35/15

Terminal marking

Zack marker strip - ZB 6:UNBEDRUCKT - 1051003



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Zack marker strip - ZB 6/WH-100:UNBEDRUCKT - 5060935



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10