

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

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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)

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## 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 <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
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 <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
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

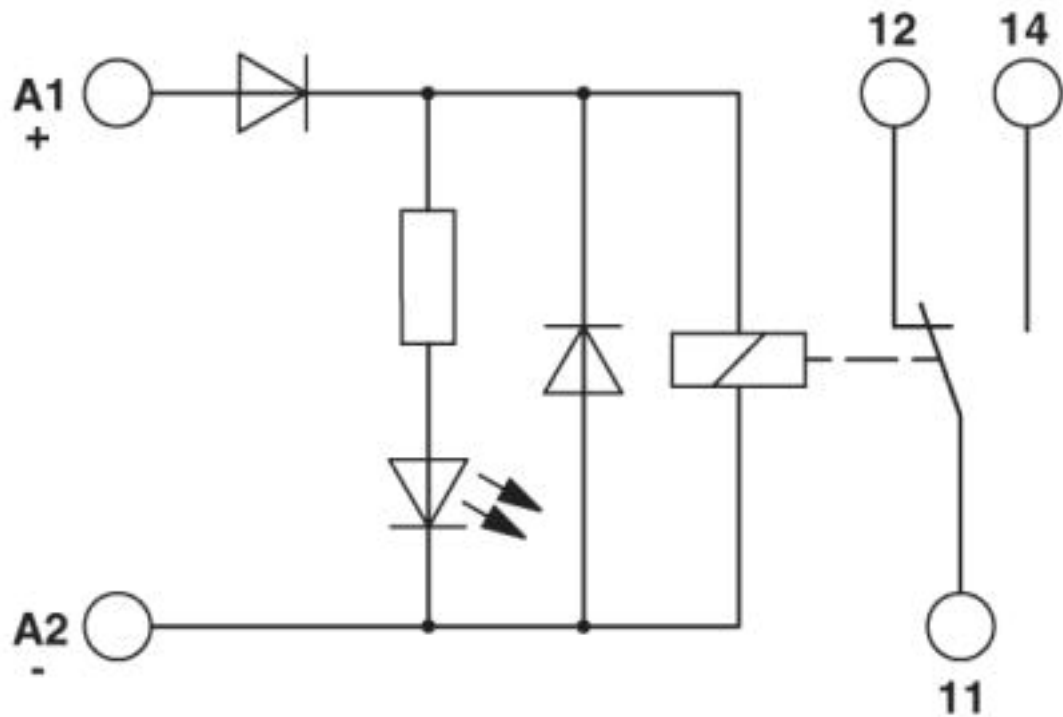
Connection in acc. with standard	CUL
Standards/regulations	IEC 60664
	EN 50178
Rated insulation voltage	250 V
Rated surge voltage	6 kV
Insulation	Safe isolation: Control side / contact side
Pollution degree	2
Overvoltage category	III

### Environmental Product Compliance

	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	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 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

### Approvals

#### Approvals

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##### Approvals

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

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##### Ex Approvals

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#### Approval details

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

### Approvals

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



TR\_TS\_S\_00010\_c

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

Insertion bridge - EB 3- DIK RD - 2716745



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

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

### Accessories

Insertion bridge - EB 4- DIK RD - 2716758



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

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Insertion bridge - EB 5- DIK RD - 2716761



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

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Insertion bridge - EB 10- DIK RD - 2716774



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

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Insertion bridge - EB 2- DIK BU - 2716648



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

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Insertion bridge - EB 3- DIK BU - 2716651



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

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

### Accessories

Insertion bridge - EB 4- DIK BU - 2716664



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

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Insertion bridge - EB 5- DIK BU - 2716677



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

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Insertion bridge - EB 10- DIK BU - 2716680



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

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Insertion bridge - EB 80- DIK BU - 2715940



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

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Insertion bridge - EB 80- DIK RD - 2715953



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

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

### Accessories

Insertion bridge - EB 80- DIK WH - 2715788



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

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### 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

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### Partition plate

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



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

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### Sensor/actuator terminal block

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



Sensor/actuator terminal block, connection method: Screw connection, cross section: 0.2 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 24 - 12, width: 6.2 mm, color: gray, mounting type: NS 35/7,5, NS 35/15

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### Terminal marking

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

### Accessories

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

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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