

# DEK-REL- 5/O/1 - Relay module



2941170  
<https://www.phoenixcontact.com/us/products/2941170>

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Relay terminal block, with soldered-in miniature relays, contact (AgNi+Au): small to medium loads, 1 N/O contact, input voltage 5 V AC/DC, for assembly on NS 35/7.5, terminal width 6.2 mm, design rotated

## Your advantages

- Reduced costs as N terminal block is no longer required
- Up to 73 % more space
- Wiring reduced to a minimum
- Integrated input circuit
- 2-layer contact with hard gold plating for universal applications from 1 mA to 5 A continuous current
- 2 kV<sub>rms</sub> electrical isolation between input and output

## Commercial data

Item number	2941170
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	C460
Product key	CK61A2
Catalog page	Page 441 (C-5-2019)
GTIN	4017918080327
Weight per piece (including packing)	23.012 g
Weight per piece (excluding packing)	23.012 g
Customs tariff number	85364190
Country of origin	CN

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## Technical data

### Notes

Note on application	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.
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### Product properties

Product type	Relay Module
Product family	DEK
Application	Input function
Operating mode	100% operating factor
Mechanical service life	approx. $2 \times 10^7$ cycles

### Data management status

Date of last data management	22.05.2024
Article revision	19

### Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

### Electrical properties

Maximum power dissipation for nominal condition	0.12 W
Test voltage (Winding/contact)	2 kV AC (50 Hz, 1 min., winding/contact)

### Input data

#### Coil side

Nominal input voltage $U_N$	5 V AC/DC
Input voltage range	4.5 V AC/DC ... 5.5 V AC/DC (20 °C)
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at $U_N$	23 mA
Typical response time	8 ms
Typical release time	15 ms
Protective circuit	Bridge rectifier; Bridge rectifier
Operating voltage display	Yellow LED

### Output data

#### Switching

# DEK-REL- 5/O/1 - Relay module



2941170

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Contact switching type	1 N/O contact
Type of switch contact	Double contact
Contact material	AgNi, hard gold-plated
Maximum switching voltage	250 V AC
	125 V DC
Minimum switching voltage	0.1 V
Limiting continuous current	3 A (5 A up to 35°C at 24 V DC)
Maximum inrush current	5 A
Min. switching current	1 mA
Interrupting rating (ohmic load) max.	72 W (at 24 V DC)
	60 W (at 48 V DC)
	50 W (at 60 V DC)
	50 W (at 110 V DC)
	750 VA (for 250 V AC)
	120 W (at 24 V DC - up to 35°)

## Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	0.2 mm² ... 2.5 mm²
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section AWG	24 ... 14
Tightening torque	0.5 Nm

## Dimensions

Width	6.2 mm
Height	80 mm
Depth	56 mm

## Material specifications

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

### Ambient conditions

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

## Standards and regulations

Standards/regulations	IEC 60947-5-1
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## Mounting

Mounting type	DIN rail mounting
Thread type	()

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Assembly note	in rows with zero spacing
Mounting position	any

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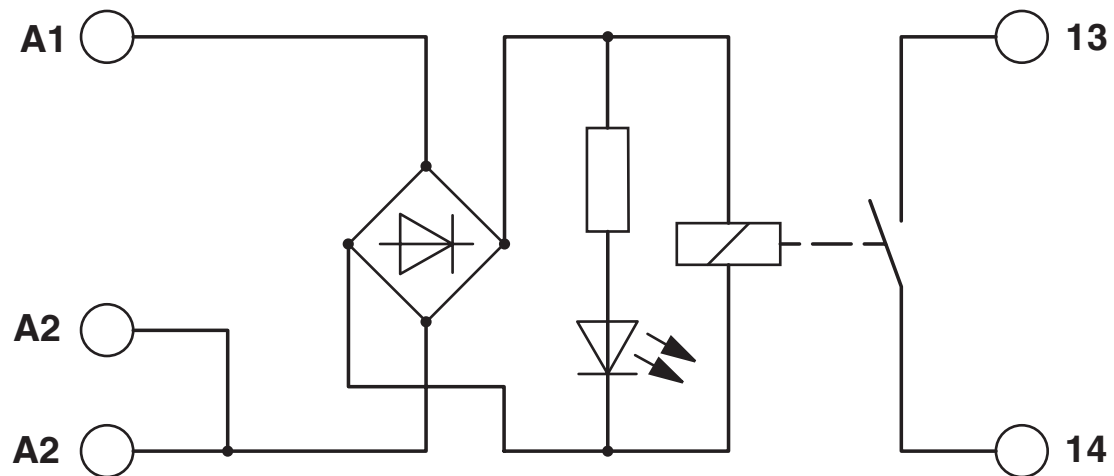
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## Drawings

Circuit diagram




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## Approvals

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**EAC**

Approval ID: TR\_TS\_D\_00573\_c



**EAC**

Approval ID: RU\*C-DE.\*08.B.00010

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## Classifications

### ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

### ETIM

ETIM 9.0	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	5b839385-52ee-4a00-be30-3a0a914ea8b1

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