

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



2941170
<https://www.phoenixcontact.com/pc/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_{rms} electrical isolation between input and output

Commercial data

Item number	2941170
Packing unit	10 pc
Minimum order quantity	1 pc
Product key	DK61A2
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. 2×10^7 cycles

Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	12.09.2025
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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

Contact switching type	1 N/O contact
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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	0.4 Nm ... 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
Assembly note	in rows with zero spacing
Mounting position	any

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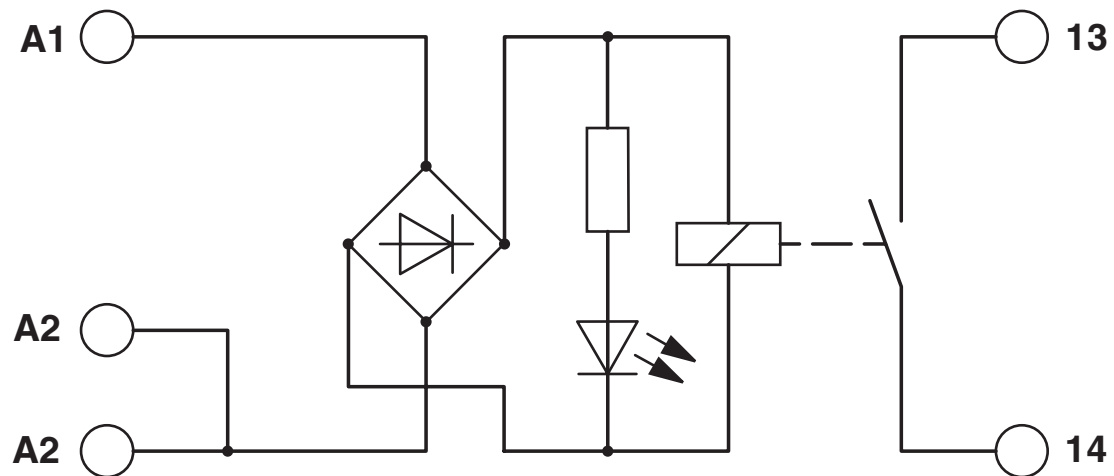
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Drawings

Circuit diagram



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Approvals

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EAC

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

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Classifications

ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	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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Accessories

i Note: Applying some accessories below might limit this product.

EB 80- DIK RD - Insertion bridge

2715953

<https://www.phoenixcontact.com/pc/products/2715953>



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

i Max. current carrying capacity: 26 A

EB 80- DIK BU - Insertion bridge

2715940

<https://www.phoenixcontact.com/pc/products/2715940>



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

i Max. current carrying capacity: 26 A

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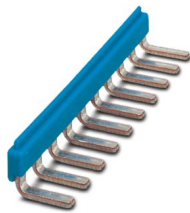
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EB 10- DIK BU - Insertion bridge

2716680

<https://www.phoenixcontact.com/pc/products/2716680>



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

 Max. current carrying capacity: 26 A

EB 5- DIK BU - Insertion bridge

2716677

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

 Max. current carrying capacity: 26 A

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EB 10- DIK RD - Insertion bridge

2716774

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

 Max. current carrying capacity: 26 A

EB 5- DIK RD - Insertion bridge

2716761

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

 Max. current carrying capacity: 26 A

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EB 4- DIK RD - Insertion bridge

2716758

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



 Max. current carrying capacity: 26 A

EB 3- DIK RD - Insertion bridge

2716745

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



 Max. current carrying capacity: 26 A

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D-DEK 1,5 GN - Separating plate

2716949

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



ZB 6:UNBEDRUCKT - Zack marker strip

1051003

<https://www.phoenixcontact.com/pc/products/1051003>



Zack marker strip, Strip, white, unmarked, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: latching, for terminal block width: 6.2 mm, Number of individual labels: 10, text field height: 10.5 mm, text field width: 6.15 mm

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

1051016

<https://www.phoenixcontact.com/pc/products/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: latching, for terminal block width: 6.2 mm, Number of individual labels: 10, text field height: 10.5 mm, text field width: 6.15 mm

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

5060935

<https://www.phoenixcontact.com/pc/products/5060935>



Zack marker strip, Strip, white, unmarked, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: latching, for terminal block width: 6.2 mm, Number of individual labels: 1000, text field height: 10.5 mm, text field width: 6.15 mm

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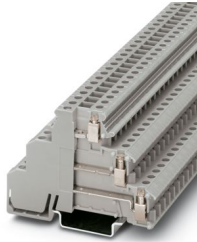
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DIKD 1,5 - Initiator/actuator terminal block

2715979

<https://www.phoenixcontact.com/pc/products/2715979>



Initiator/actuator terminal block, nom. voltage: 250 V, nominal current: 24 A, connection method: Screw connection, 1st, 2nd and 3rd level, Rated cross section: 2.5 mm², cross section: 0.2 mm² - 4 mm², mounting type: NS 35/7,5, NS 35/15, color: gray

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