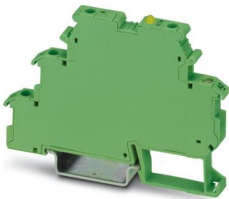


DEK-OE- 24DC/ 24DC/100KHZ - Solid-state relay  
terminal block



2964283  
<https://www.phoenixcontact.com/pc/products/2964283>

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Input solid-state relay, transmission frequency: 100 kHz, with LED and protective circuit in input and output circuits, input: 24 V DC, output: 4 - 30 V DC/50 mA

Your advantages

- With capacitor on the input side for interference suppression
- Limit frequency of up to 100 kHz
- Includes signal inputs on PLC counter boards

Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 2964283       |
| Packing unit                         | 10 pc         |
| Minimum order quantity               | 1 pc          |
| Product key                          | DK61A1        |
| GTIN                                 | 4017918107413 |
| Weight per piece (including packing) | 21.6 g        |
| Weight per piece (excluding packing) | 18.172 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:<br>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. |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Product properties

|                |                           |
|----------------|---------------------------|
| Product type   | Solid-state relay module  |
| Product family | DEK                       |
| Application    | 100 kHz input optocoupler |
| Operating mode | 100% operating factor     |

#### Insulation characteristics

|                      |                  |
|----------------------|------------------|
| Insulation           | Basic insulation |
| Overvoltage category | II               |
| Pollution degree     | 2                |

#### Data management status

|                              |            |
|------------------------------|------------|
| Date of last data management | 15.09.2025 |
|------------------------------|------------|

### Electrical properties

|                                                 |                          |
|-------------------------------------------------|--------------------------|
| Maximum power dissipation for nominal condition | 3 mW                     |
| Test voltage (Input/output)                     | 2.5 kV AC (Input/output) |

### Input data

|                                                      |                                                                            |
|------------------------------------------------------|----------------------------------------------------------------------------|
| Nominal input voltage $U_N$                          | 24 V DC                                                                    |
| Input voltage range in reference to $U_N$            | 0.8 ... 1.2                                                                |
| Input voltage range                                  | 19.2 V DC ... 28.8 V DC                                                    |
| Switching threshold "0" signal in reference to $U_N$ | $\leq 0.4$                                                                 |
| Switching threshold "1" signal in reference to $U_N$ | $\geq 0.8$                                                                 |
| Typical input current at $U_N$                       | 6 mA                                                                       |
| Typical response time                                | 1.5 $\mu$ s                                                                |
| Typical turn-off time                                | 2 $\mu$ s                                                                  |
| Operating voltage display                            | Yellow LED                                                                 |
| Protective circuit                                   | Reverse polarity protection; Polarity protection diode<br>Surge protection |
| Transmission frequency                               | 100 kHz                                                                    |

### Output data

# DEK-OE- 24DC/ 24DC/100KHZ - Solid-state relay terminal block



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|                                                  |                                    |
|--------------------------------------------------|------------------------------------|
| Contact switching type                           | 1 N/O contact                      |
| Design of digital output                         | electronic                         |
| Output voltage range                             | 4 V DC ... 30 V DC                 |
| Limiting continuous current                      | 50 mA                              |
| Quiescent current                                | 4.3 mA                             |
| Voltage drop at max. limiting continuous current | ≤ 0.5 V DC                         |
| Output circuit                                   | 3-conductor, ground-referenced     |
| Protective circuit                               | Surge protection; Suppressor diode |

## 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) |
|-------|------------------|

## Environmental and real-life conditions

### Ambient conditions

|                                         |                  |
|-----------------------------------------|------------------|
| Ambient temperature (operation)         | -20 °C ... 60 °C |
| Ambient temperature (storage/transport) | -20 °C ... 70 °C |

## Standards and regulations

|                       |               |
|-----------------------|---------------|
| Standards/regulations | IEC 60947-5-1 |
|-----------------------|---------------|

## Mounting

|                   |                           |
|-------------------|---------------------------|
| Mounting type     | DIN rail mounting         |
| Assembly note     | in rows with zero spacing |
| Mounting position | any                       |

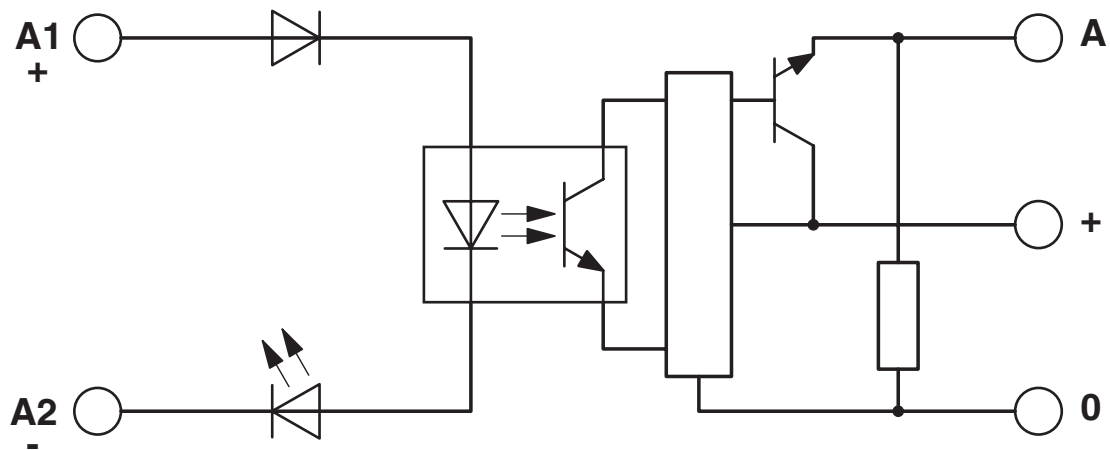
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## Drawings

Circuit diagram



# DEK-OE- 24DC/ 24DC/100KHZ - Solid-state relay terminal block



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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27371604 |
| ECLASS-15.0 | 27371604 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC001504 |
|----------|----------|

### UNSPSC

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

# DEK-OE- 24DC/ 24DC/100KHZ - Solid-state relay terminal block



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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.) | Hexahydromethylphthalic anhydride(CAS: n/a) |
|                                     | Lead(CAS: 7439-92-1)                        |
| SCIP                                | 60be34a8-84a3-4e7f-9c73-345aef5db9d4        |

# DEK-OE- 24DC/ 24DC/100KHZ - Solid-state relay terminal block



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## Accessories

 Note: Applying some accessories below might limit this product.

### EB 2- DIK RD - Insertion bridge

2716693

<https://www.phoenixcontact.com/pc/products/2716693>

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



 Max. current carrying capacity: 26 A

### EB 3- DIK RD - Insertion bridge

2716745

<https://www.phoenixcontact.com/pc/products/2716745>

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



 Max. current carrying capacity: 26 A

# DEK-OE- 24DC/ 24DC/100KHZ - Solid-state relay terminal block



2964283

<https://www.phoenixcontact.com/pc/products/2964283>

## EB 4- DIK RD - Insertion bridge

2716758

<https://www.phoenixcontact.com/pc/products/2716758>



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

 Max. current carrying capacity: 26 A

---

## EB 5- DIK RD - Insertion bridge

2716761

<https://www.phoenixcontact.com/pc/products/2716761>



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

 Max. current carrying capacity: 26 A

# DEK-OE- 24DC/ 24DC/100KHZ - Solid-state relay terminal block



2964283

<https://www.phoenixcontact.com/pc/products/2964283>

## EB 10- DIK RD - Insertion bridge

2716774

<https://www.phoenixcontact.com/pc/products/2716774>

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



 Max. current carrying capacity: 26 A

---

## 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



 Max. current carrying capacity: 26 A

# DEK-OE- 24DC/ 24DC/100KHZ - Solid-state relay terminal block



2964283

<https://www.phoenixcontact.com/pc/products/2964283>

## EB 5- DIK BU - Insertion bridge

2716677

<https://www.phoenixcontact.com/pc/products/2716677>



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

 Max. current carrying capacity: 26 A

---

## 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

# DEK-OE- 24DC/ 24DC/100KHZ - Solid-state relay terminal block



2964283

<https://www.phoenixcontact.com/pc/products/2964283>

## 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



 Max. current carrying capacity: 26 A

---

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

2716949

<https://www.phoenixcontact.com/pc/products/2716949>

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



# DEK-OE- 24DC/ 24DC/100KHZ - Solid-state relay terminal block



2964283

<https://www.phoenixcontact.com/pc/products/2964283>

## 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

## 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

# DEK-OE- 24DC/ 24DC/100KHZ - Solid-state relay terminal block



2964283

<https://www.phoenixcontact.com/pc/products/2964283>

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

5060935

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



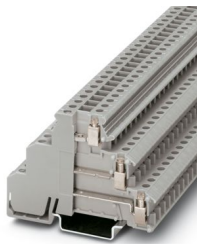
Zack marker strip, Strip, white, unmarked, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: latching, for terminal block width: 6.2 mm, Number of individual labels: 1000, text field height: 10.5 mm, text field width: 6.15 mm

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## 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 mm<sup>2</sup>, cross section: 0.2 mm<sup>2</sup> - 4 mm<sup>2</sup>, mounting type: NS 35/7,5, NS 35/15, color: gray

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