

DEK-OE-125DC/ 48DC/100/T - Solid-state relay terminal block



2940294  
<https://www.phoenixcontact.com/us/products/2940294>

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Input solid-state relay terminal block, input: 125 V DC, output: 3 - 48 V DC/100 mA, with isolating plug in output, terminal block width: 6.2 mm

Commercial data

|                                      |                   |
|--------------------------------------|-------------------|
| Item number                          | 2940294           |
| Packing unit                         | 1 pc              |
| Sales key                            | C460              |
| Product key                          | CK61A1            |
| Catalog page                         | Page 71 (IF-2002) |
| GTIN                                 | 4017918079994     |
| Weight per piece (including packing) | 21.5 g            |
| Weight per piece (excluding packing) | 21.5 g            |
| Customs tariff number                | 85364900          |
| Country of origin                    | CN                |

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## Technical data

### Notes

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Order information:  | The housing is open on one side. The appropriate cover is D-DEK 1,5 GN (2716949).                                                                                                                                                                                                                                                                                                                                                                                                           |
| 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    | Input function           |
| Operating mode | 100% operating factor    |

### Data management status

|                              |            |
|------------------------------|------------|
| Date of last data management | 03.05.2024 |
| Article revision             | 18         |

### Insulation characteristics

|                      |     |
|----------------------|-----|
| Overvoltage category | III |
| Pollution degree     | 2   |

### Electrical properties

|                             |                          |
|-----------------------------|--------------------------|
| Test voltage (Input/output) | 2.5 kV AC (Input/output) |
|-----------------------------|--------------------------|

### Input data

|                                           |                                               |
|-------------------------------------------|-----------------------------------------------|
| Nominal input voltage $U_N$               | 125 V DC                                      |
| Input voltage range in reference to $U_N$ | 0.9 ... 1.1                                   |
| Input voltage range                       | 112.5 V DC ... 137.5 V DC                     |
| Switching threshold "0" signal, voltage   | $\leq 50$ V                                   |
| Switching threshold "1" signal voltage    | $\geq 100$ V                                  |
| Typical input current at $U_N$            | 3 mA                                          |
| Typical response time                     | 40 $\mu$ s (delay)                            |
| Typical turn-off time                     | 40 $\mu$ s (delay)                            |
| Status display                            | LED (yellow)                                  |
| Protective circuit                        | Reverse polarity protection; Bridge rectifier |
| Transmission frequency                    | 30 Hz                                         |

### Output data

|                          |               |
|--------------------------|---------------|
| Contact switching type   | 1 N/O contact |
| Design of digital output | electronic    |

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|                                                  |                                                        |
|--------------------------------------------------|--------------------------------------------------------|
| Output voltage range                             | 3 V DC ... 48 V DC                                     |
| Limiting continuous current                      | 100 mA                                                 |
| Voltage drop at max. limiting continuous current | ≤ 0.9 V                                                |
| Output circuit                                   | 2-conductor, floating                                  |
| Protective circuit                               | Reverse polarity protection; Polarity protection diode |
|                                                  | Surge protection                                       |

## Connection data

|                                  |                                             |
|----------------------------------|---------------------------------------------|
| Connection method                | Screw connection                            |
| Stripping length                 | 8 mm                                        |
| Screw thread                     | M3                                          |
| Conductor cross section rigid    | 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                                   |
| Tightening torque                | 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 60664    |
|                       | IEC 60664A   |
|                       | DIN VDE 0110 |

## Mounting

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

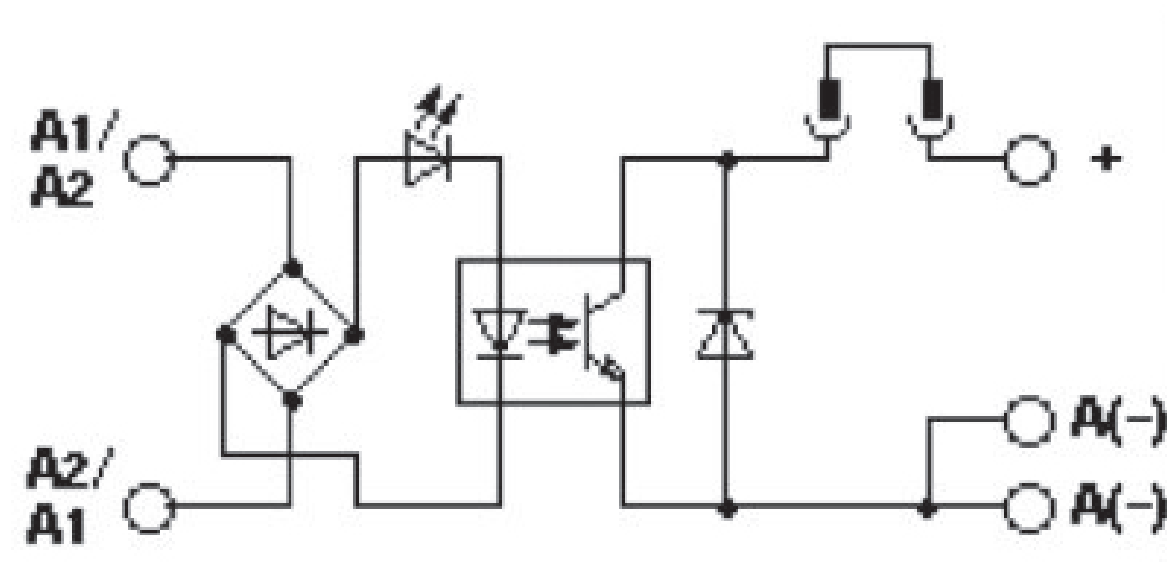
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## Drawings

Circuit diagram



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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27371604 |
| ECLASS-12.0 | 27371604 |
| ECLASS-13.0 | 27371604 |

### ETIM

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

### 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.)     | Hexahydromethylphthalic anhydride(CAS: n/a)                                                                                                                                                                                       |
|                                         | Lead(CAS: 7439-92-1)                                                                                                                                                                                                              |
| SCIP                                    | 1f3ff541-6629-4e61-a77e-10f0bb5996bc                                                                                                                                                                                              |

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## Accessories

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

### EB 2- DIK RD - Insertion bridge

2716693

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



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

**i** Max. current carrying capacity: 26 A

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### EB 3- DIK RD - Insertion bridge

2716745

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



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

**i** Max. current carrying capacity: 26 A

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## EB 4- DIK RD - Insertion bridge

2716758

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

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



 Max. current carrying capacity: 26 A

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## EB 5- DIK RD - Insertion bridge

2716761

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

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



 Max. current carrying capacity: 26 A



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## EB 10- DIK RD - Insertion bridge

2716774

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

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



 Max. current carrying capacity: 26 A

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## EB 80- DIK RD - Insertion bridge

2715953

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

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



 Max. current carrying capacity: 26 A

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## EB 5- DIK BU - Insertion bridge

2716677

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

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 BU - Insertion bridge

2716680

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

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



 Max. current carrying capacity: 26 A

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## EB 80- DIK BU - Insertion bridge

2715940

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

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



 Max. current carrying capacity: 26 A

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

2716949

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

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



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## ZB 6:UNBEDRUCKT - Zack marker strip

1051003

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



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, 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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## ZB 6,LGS:FORTL.ZAHLEN - Zack marker strip

1051016

<https://www.phoenixcontact.com/us/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: snapped, 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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## ZB 6/WH-100:UNBEDRUCKT - Zack marker strip

5060935

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



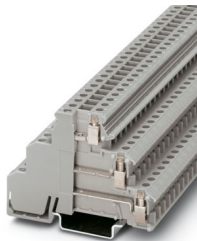
Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 1000

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## DIKD 1,5 - Initiator/actuator terminal block

2715979

<https://www.phoenixcontact.com/us/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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