## 2964319

https://www.phoenixcontact.com/us/products/2964319

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Inverter module. The inverter module inverts the signals of ground switching n-p-n transistor
 outputs into plus switching p-n-p outputs, and vice versa.

## Your advantages

- The DEK-TR/INV inverter module inverts the signals of ground switching NPN transistor outputs into positive switching PNP outputs and vice versa


## Commercial data

| Item number | 2964319 |
| :--- | :--- |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | C 460 |
| Product key | CK6153 |
| Catalog page | 4017918176068 |
| GTIN | 20.61 g |
| Weight per piece (including packing) | 19.9 g |
| Weight per piece (excluding packing) | 85364190 |
| Customs tariff number | CN |
| Country of origin |  |

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## Technical data

## Notes

## General

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.

Product properties

| Product type | Solid-state relay module |
| :--- | :--- |
| Product family | DEK |
| Application | Inverter module |
| Insulation characteristics |  |
| Overvoltage category | II |
| Pollution degree | 2 |

Electrical properties

| Maximum power dissipation for nominal condition | 4.8 W |
| :--- | :--- |
| Supply |  |
| Supply voltage range | $20 \mathrm{VDC} \ldots 30 \mathrm{~V} \mathrm{DC}$ |

Input data

| Typical input current at $U_{N}$ | 200 mA |
| :--- | :--- |
| Transmission frequency | 15 kHz |


| NPN | $<5 \mathrm{~V}\left(\right.$ at $\left.U_{V}=24 \mathrm{~V} ;<\left(\mathrm{U}_{\mathrm{V}}-19 \mathrm{~V}\right)\right)$ |
| :--- | :--- |
| Switching threshold "1" signal voltage | $>15 \mathrm{~V}\left(\right.$ at $\left.U_{V}=24 \mathrm{~V} ;>\left(\mathrm{U}_{\mathrm{V}}-9 \mathrm{~V}\right)\right)$ |
| Switching threshold " 0 " signal, voltage | -2 V |
| Min. voltage input signal | $26 \mathrm{~V}\left(\right.$ at $\left.U_{\mathrm{V}}=24 \mathrm{~V} ; \mathrm{U}_{\mathrm{V}}+2 \mathrm{~V}\right)$ |
| Max. voltage input signal |  |
| PNP | $>19 \mathrm{~V}$ |
| Switching threshold "1" signal voltage | $<9 \mathrm{~V}$ |
| Switching threshold "0" signal, voltage | -2 V |
| Min. voltage input signal | $26 \mathrm{~V}\left(\right.$ at $\left.U_{V}=24 \mathrm{~V} ; \mathrm{U}_{\mathrm{V}}+2 \mathrm{~V}\right)$ |
| Max. voltage input signal |  |

Output data

| Continuous load current | 200 mA |
| :--- | :--- |
| Leakage current | $<1 \mathrm{~mA}$ |
| Residual voltage | $<1 \mathrm{~V}$ |
| Transmission frequency | 15 kHz |

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| Contact switching type | 1 N/O contact |
| :--- | :--- |
| Output nominal voltage | max. $\pm 26 \mathrm{~V}$ |

## Connection data

Cross section AWG

Stripping length
Screw thread
Conductor cross section rigid
Conductor cross section flexible
Conductor cross section AWG
(converted acc. to IEC)
Screw connection
8 mm
M3
$0.2 \mathrm{~mm}^{2} . . .4 \mathrm{~mm}^{2}$
$0.2 \mathrm{~mm}^{2} \ldots 2.5 \mathrm{~mm}^{2}$
24 ... 12
Dimensions

| Width | 6.2 mm |
| :--- | :--- |
| Height | 80 mm |
| Depth | 56 mm |

Material specifications
Housing material
Polyamide PA non-reinforced
Environmental and real-life conditions

Ambient conditions
Ambient temperature (operation)
Ambient temperature (storage/transport)
$-20^{\circ} \mathrm{C} \ldots 50^{\circ} \mathrm{C}$
$-20^{\circ} \mathrm{C} \ldots 70^{\circ} \mathrm{C}$
Standards and regulations
Standards/regulations IEC 60947-5-1

Mounting

Mounting type
Assembly instructions
Mounting position

DIN rail mounting
in rows with zero spacing
any

DEK-TR/INV - Switching amplifier

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## Drawings

Application drawing

a = NPN output
b = load


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## Approvals

:

```
EIL
EAC
Approval ID: RU C-DE.A*30.B. 01742
```

cULus Recognized

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## Classifications

| ECLASS |  |
| :---: | :---: |
| ECLASS-11.0 | 27371604 |
| ECLASS-12.0 | 27371604 |
| ECLASS-13.0 | 27371604 |
| ETIM |  |
| ETIM 9.0 | EC001504 |
| UNSPSC | 39122300 |
| UNSPSC 21.0 |  |

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Environmental product compliance

Environmentally Friendly Use Period = 50 years
For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

## Accessories

- 

Note: Applying some accessories below might limit this product.

## EB 2- DIK RD - Insertion bridge

2716693
https://www.phoenixcontact.com/us/products/2716693Max. current carrying capacity: 26 A

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
Max. current carrying capacity: 26 A
}

DEK-TR/INV - Switching amplifier
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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

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
Max. current carrying capacity: 26 A

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
(i) Max. current carrying capacity: 26 A

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

(1) Max. current carrying capacity: 26 A
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EB 80- DIK BU - Insertion bridge
2715940
https://www.phoenixcontact.com/us/products/2715940
Max. current carrying capacity: 26 A

D-DEK 1,5 GN - Separating plate
2716949
https://www.phoenixcontact.com/us/products/2716949
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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: $6.15 \times 10.5 \mathrm{~mm}$, Number of individual labels: 10

## 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 $1 \ldots 10,11 \ldots 20$, 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: $6.15 \times 10.5 \mathrm{~mm}$, Number of individual labels: 1000

DIKD 1,5-Sensor/actuator terminal block
2715979
https://www.phoenixcontact.com/us/products/2715979


Sensor/actuator terminal block, nom. voltage: 250 V , nominal current: 24 A , connection method: Screw connection, 1st, 2nd and 3rd level, Rated cross section: $2.5 \mathrm{~mm}^{2}$, cross section: $0.2 \mathrm{~mm}^{2}-4 \mathrm{~mm}^{2}$, mounting type: NS $35 / 7,5$ NS 35/15, color: gray

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