

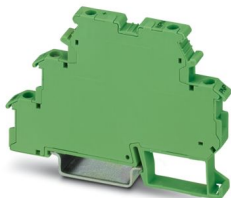
DEK-TR/INV - Switching amplifier

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 | 10 pc |
| Minimum order quantity | 1 pc |
| Sales key | C460 |
| Product key | DK61A3 |
| GTIN | 4017918176068 |
| Weight per piece (including packing) | 20.61 g |
| Weight per piece (excluding packing) | 19.9 g |
| Customs tariff number | 85365019 |
| 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. |
|---------------------|---|

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 V DC ... 30 V DC |
|----------------------|---------------------|

Input data

| | |
|--------------------------------|--------|
| Typical input current at U_N | 200 mA |
| Transmission frequency | 15 kHz |

NPN

| | |
|---|---|
| Switching threshold "1" signal voltage | $< 5 \text{ V}$ (at $U_V = 24 \text{ V}$; $< (U_V - 19 \text{ V})$) |
| Switching threshold "0" signal, voltage | $> 15 \text{ V}$ (at $U_V = 24 \text{ V}$; $> (U_V - 9 \text{ V})$) |
| Min. voltage input signal | -2 V |
| Max. voltage input signal | 26 V (at $U_V = 24 \text{ V}$; $U_V + 2 \text{ V}$) |

PNP

| | |
|---|---|
| Switching threshold "1" signal voltage | $> 19 \text{ V}$ |
| Switching threshold "0" signal, voltage | $< 9 \text{ V}$ |
| Min. voltage input signal | -2 V |
| Max. voltage input signal | 26 V (at $U_V = 24 \text{ V}$; $U_V + 2 \text{ V}$) |

Output data

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

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| | |
|------------------------|-----------------|
| Contact switching type | 1 N/O contact |
| Output nominal voltage | max. ± 26 V |

Connection data

| | |
|----------------------------------|---|
| Connection method | Screw connection |
| Stripping length | 8 mm |
| Screw thread | M3 |
| Conductor cross section rigid | 0.2 mm ² ... 4 mm ² |
| Conductor cross section flexible | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross section AWG | 24 ... 12 |

Dimensions

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

Material specifications

| | |
|------------------|-----------------------------|
| Color | green (RAL 6021) |
| Housing material | Polyamide PA non-reinforced |

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 |
|-----------------------|---------------|

Mounting

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

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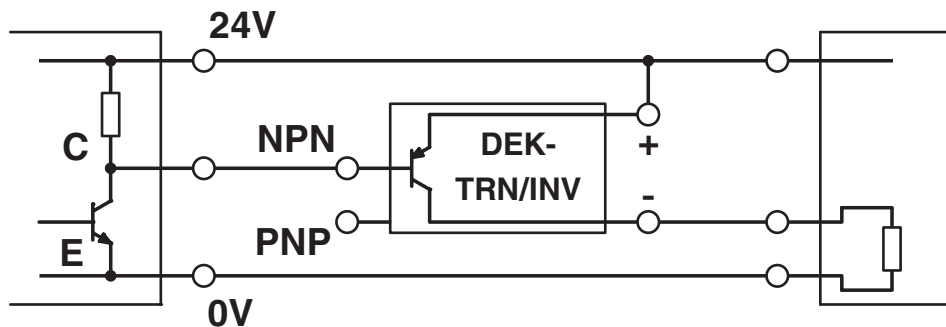
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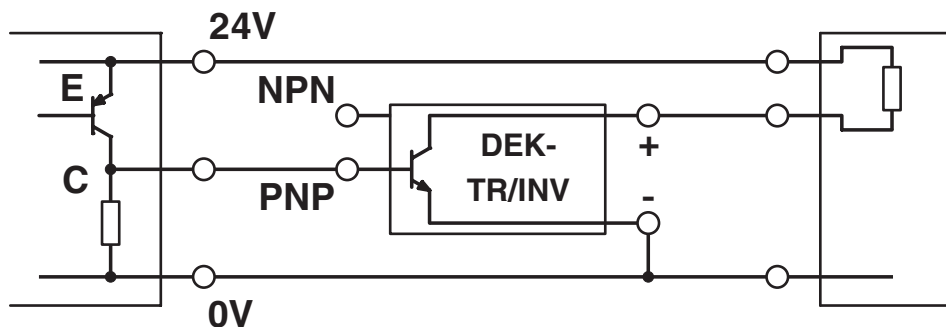
Drawings

Application drawing

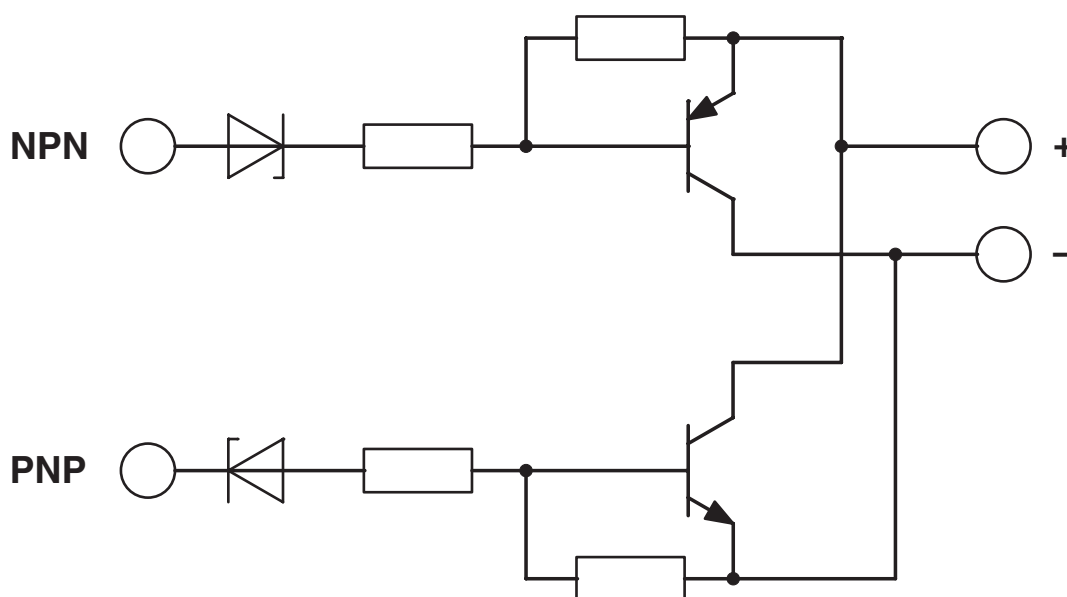


a = NPN output
b = load

Application drawing



Circuit diagram



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Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2964319>



cUL Recognized
Approval ID: FILE E 238705



UL Recognized
Approval ID: FILE E 238705



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

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27371604 |
| ECLASS-15.0 | 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(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.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

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