

# OPT-24DC/ 48DC/100 - Miniature solid-state relay



2966618

<https://www.phoenixcontact.com/in/products/2966618>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Plug-in miniature solid-state relay, input solid-state relay, 1 N/O contact, input: 24 V DC, output: 3 - 48 V DC/100 mA

## Your advantages

- Vibration and shock resistant
- RT III-proof (wash-proof)
- Wear-free and durable
- Zero voltage switch at AC output
- Can be soldered on PCB
- Switching power of up to 24 V DC/5 A

## Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 2966618             |
| Packing unit                         | 10 pc               |
| Minimum order quantity               | 10 pc               |
| Sales key                            | CK6                 |
| Product key                          | DK69K1              |
| Catalog page                         | Page 287 (C-5-2019) |
| GTIN                                 | 4017918130466       |
| Weight per piece (including packing) | 4.83 g              |
| Weight per piece (excluding packing) | 4.83 g              |
| Customs tariff number                | 85364110            |
| Country of origin                    | HU                  |

# OPT-24DC/ 48DC/100 - Miniature solid-state relay



2966618

<https://www.phoenixcontact.com/in/products/2966618>

## Technical data

### Product properties

|                |                          |
|----------------|--------------------------|
| Product type   | Single solid-state relay |
| Operating mode | 100% operating factor    |

### Insulation characteristics: Standards/regulations

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

### Data management status

|                              |            |
|------------------------------|------------|
| Date of last data management | 11.07.2024 |
|------------------------------|------------|

### Electrical properties

|                                                 |                                      |
|-------------------------------------------------|--------------------------------------|
| Maximum power dissipation for nominal condition | 0.17 W                               |
| Test voltage (Input/output)                     | 2.5 kV (50 Hz, 1 min., 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 $U_N$ | 0.4                     |
| Switching threshold "1" signal in reference to $U_N$ | 0.7                     |
| Typical input current at $U_N$                       | 7 mA                    |
| Typical response time                                | 20 $\mu$ s (at $U_N$ )  |
| Typical turn-off time                                | 300 $\mu$ s (at $U_N$ ) |
| Transmission frequency                               | 300 Hz                  |

### Output data

|                                                  |                                                 |
|--------------------------------------------------|-------------------------------------------------|
| Contact switching type                           | 1 N/O contact                                   |
| Design of digital output                         | electronic                                      |
| Output voltage range                             | 3 V DC ... 48 V DC                              |
| Limiting continuous current                      | 100 mA                                          |
| Voltage drop at max. limiting continuous current | $\leq 1$ V                                      |
| Output circuit                                   | 2-conductor, floating                           |
| Protective circuit                               | Reverse polarity protection<br>Surge protection |

### Dimensions

|        |       |
|--------|-------|
| Width  | 5 mm  |
| Height | 28 mm |
| Depth  | 15 mm |

### Material specifications

# OPT-24DC/ 48DC/100 - Miniature solid-state relay



2966618

<https://www.phoenixcontact.com/in/products/2966618>

|       |                  |
|-------|------------------|
| Color | black (RAL 9005) |
|-------|------------------|

## Environmental and real-life conditions

### Ambient conditions

|                                         |                  |
|-----------------------------------------|------------------|
| Degree of protection                    | RT III           |
| Ambient temperature (operation)         | -25 °C ... 60 °C |
| Ambient temperature (storage/transport) | -25 °C ... 70 °C |

## Approvals

### Corrosive gas test

|                |                            |
|----------------|----------------------------|
| Identification | ISA-S71.04. G3 Harsh Group |
|                | EN 60068-2-60              |

## Standards and regulations

### Standards/regulations

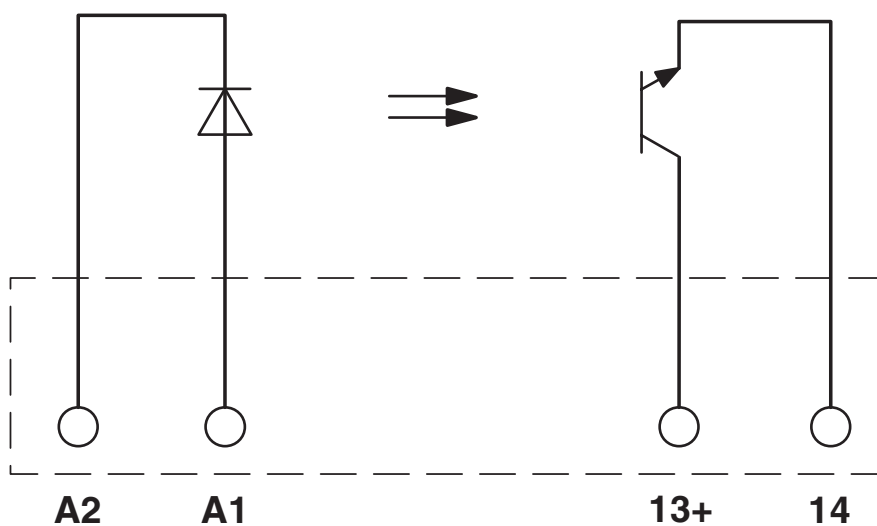
|                       |           |
|-----------------------|-----------|
| Standards/regulations | IEC 60664 |
|                       | EN 50178  |

## Mounting

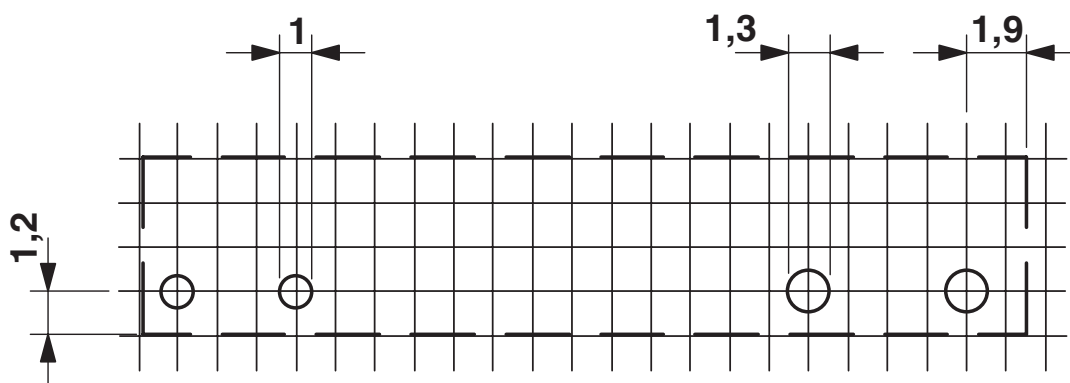
|                   |                           |
|-------------------|---------------------------|
| Assembly note     | in rows with zero spacing |
| Mounting position | any                       |

## Drawings

Circuit diagram



Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

# OPT-24DC/ 48DC/100 - Miniature solid-state relay



2966618

<https://www.phoenixcontact.com/in/products/2966618>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/in/products/2966618>



**cUL Recognized**  
Approval ID: FILE E 195083



**UL Recognized**  
Approval ID: FILE E 195083



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



**UL Recognized**  
Approval ID: FILE E 195083



**cUL Recognized**  
Approval ID: FILE E 195083



**GL**  
Approval ID: 46016-03 HH

# OPT-24DC/ 48DC/100 - Miniature solid-state relay



2966618

<https://www.phoenixcontact.com/in/products/2966618>

## Classifications

### ECLASS

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

### ETIM

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

### UNSPSC

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

# OPT-24DC/ 48DC/100 - Miniature solid-state relay



2966618

<https://www.phoenixcontact.com/in/products/2966618>

## Environmental product compliance

### EU RoHS

|                                         |        |
|-----------------------------------------|--------|
| Fulfills EU RoHS substance requirements | Yes    |
| Exemption                               | 7(c)-I |

### China RoHS

|                                        |                                          |
|----------------------------------------|------------------------------------------|
| Environment friendly use period (EFUP) | EFUP-E                                   |
|                                        | No hazardous substances above the limits |

### EU REACH SVHC

|                                     |                            |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT (I) Pvt. Ltd.

A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420

[info@phoenixcontact.co.in](mailto:info@phoenixcontact.co.in)