

# IOA REL 120V DI/1.0A/EX - Relay module



2910157

<https://www.phoenixcontact.com/us/products/2910157>

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.



Relay module for VIP I/O-Marshalling base elements. For the electrically isolated coupling of 120 V AC field devices to digital inputs. Integrated fuse and fuse failure indication.

## Product description

Relay module for digital input signals for the electrically isolated coupling of 120 V AC field devices. The control path is protected by an integrated replaceable 1 A fuse. If the fuse fails, this is indicated by an LED. The module is installed on a corresponding VIP I/O-Marshalling base element by means of plug-in contact. Installation in zone 2, "ec" type of protection is permitted.

## Your advantages

- Active relay coil indication
- Two-stage progressive release allowing for voltage checks with field-powered devices
- Channel for marking accessories
- Replaceable TE5-style fusing
- 120 V internal marshalling option for connected field device
- Integrated keying reduces possible user error during replacement

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 2910157       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | C480          |
| Product key                          | DK1153        |
| GTIN                                 | 4055626447704 |
| Weight per piece (including packing) | 68.2 g        |
| Weight per piece (excluding packing) | 68.2 g        |
| Customs tariff number                | 85364900      |
| Country of origin                    | US            |

# IOA REL 120V DI/1.0A/EX - Relay module



2910157

<https://www.phoenixcontact.com/us/products/2910157>

## Technical data

### Product properties

|                         |                           |
|-------------------------|---------------------------|
| Product type            | Relay Module              |
| Product family          | VIP I/O-Marshalling       |
| Application             | Input function            |
| Operating mode          | 100% operating factor     |
| Mechanical service life | 2x 10 <sup>7</sup> cycles |

### Insulation characteristics

|                      |    |
|----------------------|----|
| Overvoltage category | II |
| Pollution degree     | 2  |

### Data management status

|                              |            |
|------------------------------|------------|
| Date of last data management | 01.04.2026 |
|------------------------------|------------|

### Input data

#### Coil side

|   |                  |
|---|------------------|
| Nominal input voltage $U_N$               | 120 V AC         |
| Input voltage range in reference to $U_N$ | 0.9 ... 1.1      |
| Typical input current at $U_N$            | 3 mA             |
| Typical response time                     | 5 ms             |
| Typical release time                      | 4 ms             |
| Protective circuit                        | Bridge rectifier |
| Operating voltage display                 | Yellow LED       |

### Output data

#### Switching

|                                       |                         |
|---------------------------------------|-------------------------|
| Contact switching type                | 1 N/O contact           |
| Type of switch contact                | Single contact          |
| Contact material                      | AgSnO, hard gold-plated |
| Maximum switching voltage             | 24 V DC                 |
| Limiting continuous current           | 50 mA                   |
| Maximum inrush current                | 50 mA                   |
| Min. switching current                | 1 mA (at 24 V)          |
| Interrupting rating (ohmic load) max. | 1.2 W (at 24 V DC)      |

### Connection data

#### Control circuits

|                   |           |
|-------------------|-----------|
| Connection method | Pin strip |
|-------------------|-----------|

### Ex data

#### Safety data

# IOA REL 120V DI/1.0A/EX - Relay module



2910157

<https://www.phoenixcontact.com/us/products/2910157>

|                     |          |
|---------------------|----------|
| Input voltage $U_i$ | 120 V AC |
| Input current $I_i$ | 3 mA     |

## Dimensions

### Item dimensions

|        |         |
|--------|---------|
| Width  | 10.3 mm |
| Height | 64.2 mm |
| Depth  | 72.9 mm |

## Material specifications

|  |                 |
|--|-----------------|
| Color                                  | gray (RAL 7042) |
| Flammability rating according to UL 94 | V0              |

## Environmental and real-life conditions

### Ambient conditions

|   |                               |
|---|-------------------------------|
| Degree of protection                    | IP20                          |
| Ambient temperature (operation)         | -40 °C ... 70 °C              |
| Ambient temperature (storage/transport) | -40 °C ... 70 °C              |
| Altitude                                | ≤ 2000 m                      |
| Permissible humidity (operation)        | 0 % ... 95 % (non-condensing) |

## Approvals

### ATEX

|                |                            |
|----------------|----------------------------|
| Identification | Ⓜ II 3G Ex ec nC IIC T4 Gc |
| Certificate    | Sira 17ATEX4293X           |

### IECEX

|                |                    |
|----------------|--------------------|
| Identification | Ex ec nC IIC T4 Gc |
| Certificate    | IECEX SIR 17.0078X |

### UKEX

|                |                            |
|----------------|----------------------------|
| Identification | Ⓜ II 3G Ex ec nC IIC T4 Gc |
| Certificate    | PxCIF23UKEX2910153X        |

### UL, USA/Canada

|                |                                       |
|----------------|---------------------------------------|
| Identification | Class I, Div. 2, Groups A, B, C, D T4 |
|                | Class I, Zone 2, Group IIC T4         |

### CSA, USA/Canada

|                |                                       |
|----------------|---------------------------------------|
| Identification | Class I, Div. 2, Groups A, B, C, D T4 |
|                | Class I, Zone 2, AEx ec nC IIC T4 Gc  |
|                | Ex ec nC IIC T4 Gc                    |

## Standards and regulations

|                       |           |
|-----------------------|-----------|
| Standards/regulations | IEC 60664 |
|-----------------------|-----------|

# IOA REL 120V DI/1.0A/EX - Relay module



2910157

<https://www.phoenixcontact.com/us/products/2910157>

|  |              |
|--|--------------|
|  | DIN EN 50178 |
|--|--------------|

## Mounting

|                   |                           |
|-------------------|---------------------------|
| Mounting type     | Plug-in mounting          |
| Assembly note     | Plugs into VIP/...BASE... |
| Mounting position | any                       |

# IOA REL 120V DI/1.0A/EX - Relay module

2910157

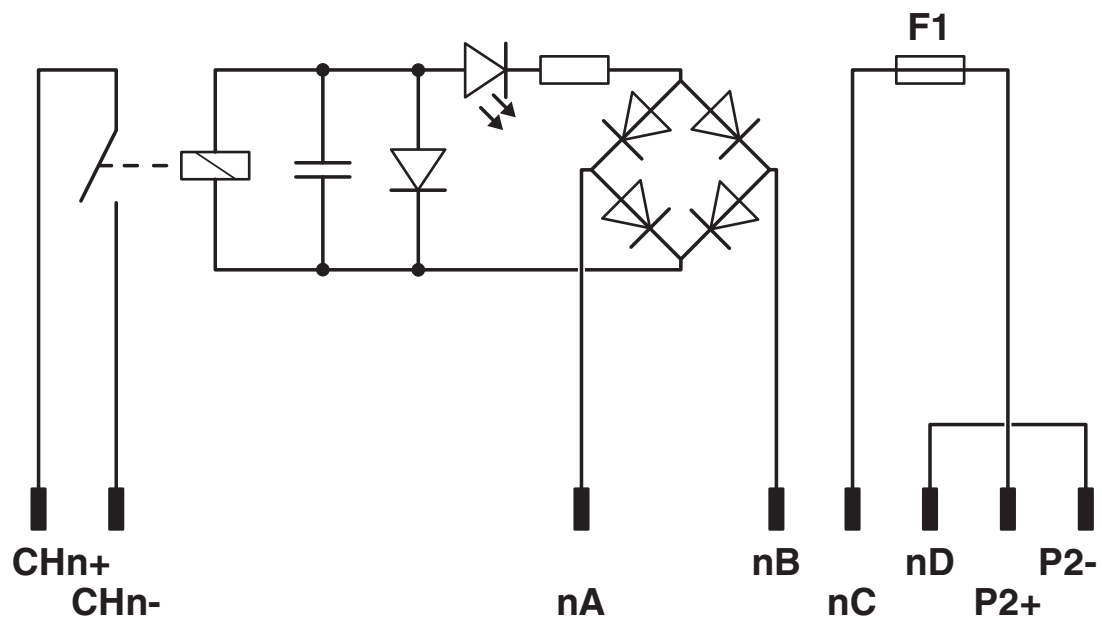
<https://www.phoenixcontact.com/us/products/2910157>

## Drawings

Dimensional drawing



Circuit diagram



# IOA REL 120V DI/1.0A/EX - Relay module



2910157

<https://www.phoenixcontact.com/us/products/2910157>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2910157>



**IECEx**

Approval ID: IECEx SIR 17.0078X



**ATEX**

Approval ID: SIRA 17ATEX4293X



**CSA**

Approval ID: 70134758



**CSAus**

Approval ID: 70134758



**cUL Listed**

Approval ID: FILE E 196811



**UL Listed**

Approval ID: FILE E 196811

# IOA REL 120V DI/1.0A/EX - Relay module



2910157

<https://www.phoenixcontact.com/us/products/2910157>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27371601 |
| ECLASS-15.0 | 27371601 |

### ETIM

|           |          |
|-----------|----------|
| ETIM 10.0 | EC001437 |
|-----------|----------|

### UNSPSC

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

# IOA REL 120V DI/1.0A/EX - Relay module



2910157

<https://www.phoenixcontact.com/us/products/2910157>

## Environmental product compliance

### EU RoHS

|   |                    |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes                |
| Exemption                               | 6(c), 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.) | Lead(CAS: 7439-92-1)                 |
| SCIP                                | 5040228c-7d17-4db3-8ddd-b0709142f05c |

Phoenix Contact 2026 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)