

# IOA REL 120V DO/BFI/3.0A/EX - Relay module



2910154

<https://www.phoenixcontact.com/us/products/2910154>

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Relay module for VIP I/O-Marshalling base elements. For switching 120 V AC loads up to max. 3 A. Integrated fuse and fuse failure indication. N/O contact or N/C contact can be used.

## Product description

Relay module for digital output signals for switching loads with max. 3 A nominal current and a maximum voltage of 120 V AC. The switch contact is protected by an integrated replaceable 3 A fuse. If the fuse fails, this is indicated by an LED. A plug-in bridge determines whether an N/O contact or an N/C contact is used. 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

- Output blown fuse indication
- 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
- 1 PDT relay with user selectable NO or NC contact

## Commercial data

Item number	2910154
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	C480
Product key	DK1154
GTIN	4055626447285
Weight per piece (including packing)	68.2 g
Weight per piece (excluding packing)	71.2 g
Customs tariff number	85364900
Country of origin	US

## Technical data

### Product properties

Product type	Relay Module
Product family	VIP I/O-Marshalling
Application	Output 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	09.10.2025
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### Input data

#### Coil side

Nominal input voltage $U_N$	24 V DC
Input voltage range in reference to $U_N$	0.9 ... 1.1
Typical input current at $U_N$	13.5 mA
Typical response time	5 ms
Typical release time	8 ms
Protective circuit	Reverse polarity protection; Polarity protection diode Freewheeling diode; Freewheeling diode
Operating voltage display	Yellow LED

### Output data

#### Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact connection type	Power contact
Contact material	AgSnO
Maximum switching voltage	120 V AC
Limiting continuous current	3 A (fuse limited)
Maximum inrush current	on request
Min. switching current	10 mA (at 12 V)
Interrupting rating (ohmic load) max.	23 W (at 110 V DC) 360 VA (at 120 V AC)

### Connection data

#### Control circuits

Connection method	Pin strip
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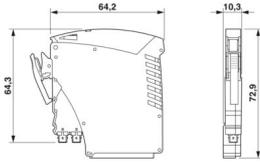
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## Ex data

### Safety data

Input voltage $U_i$	24 V DC
Input current $I_i$	13.5 mA

## Dimensions

Dimensional drawing	
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

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## 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
	DIN EN 50178

## Mounting

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

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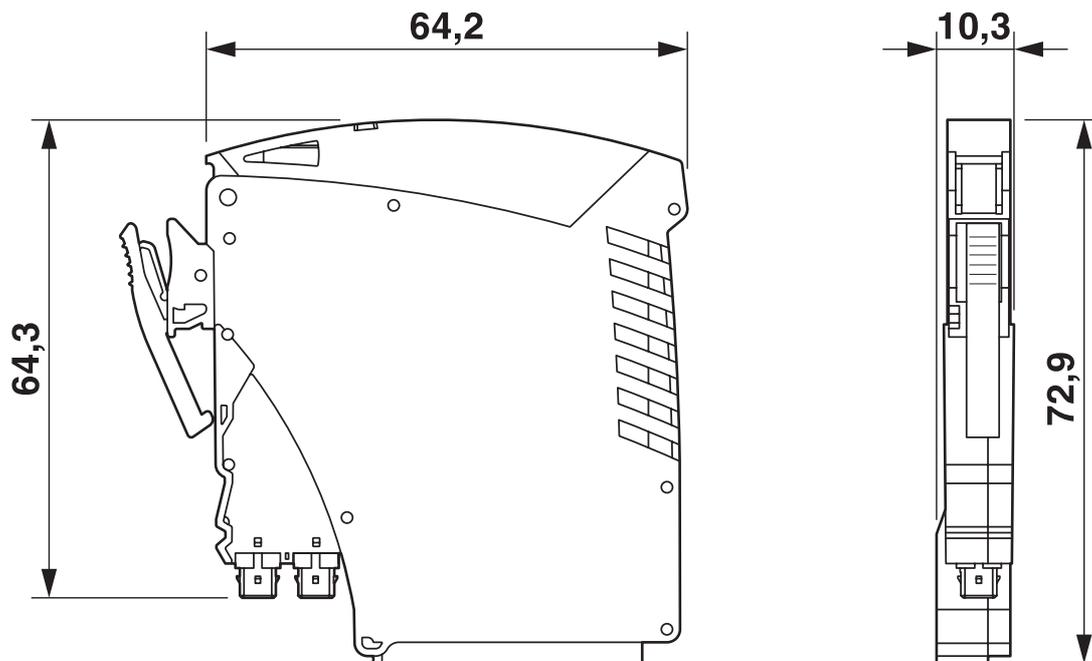


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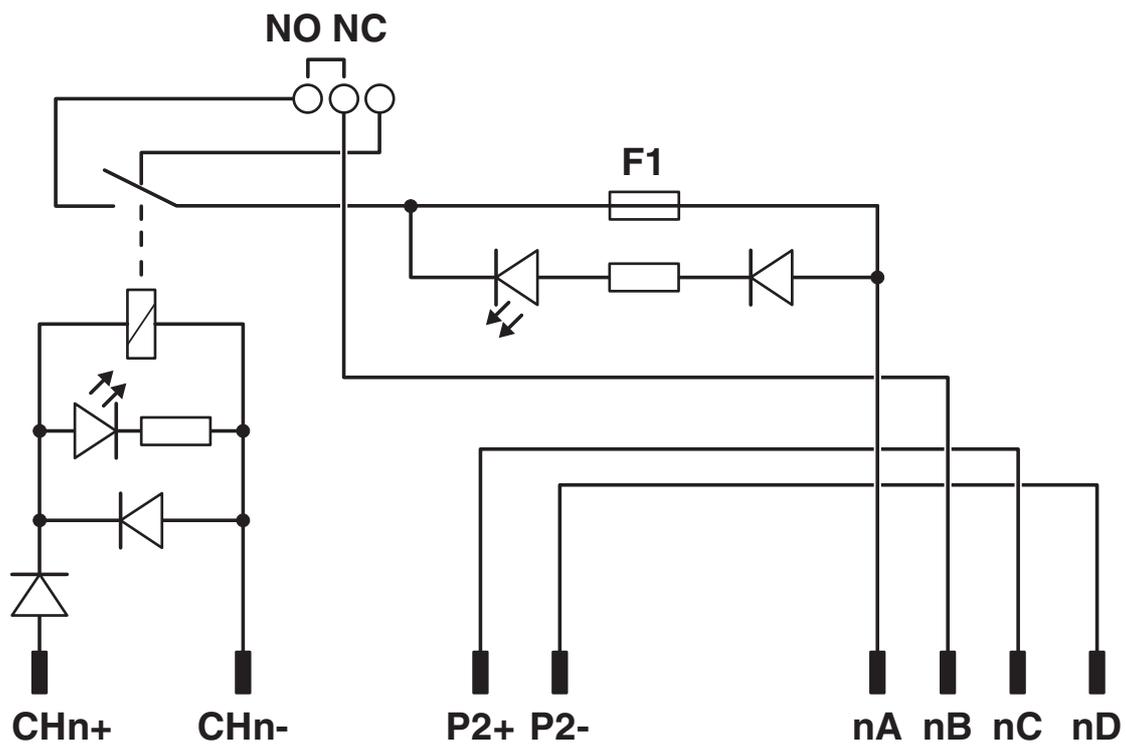
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## Drawings

Dimensional drawing



Circuit diagram



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2910154>



### Functional Safety

Approval ID: 1435.IM.131623/19



### 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

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## Classifications

### ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

### ETIM

ETIM 9.0	EC001437
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### UNSPSC

UNSPSC 21.0	39122300
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## 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	ec7713df-c8fa-4699-9336-78a33ac4de84

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