

# IOA REL 230V DO/BFI/NO/3.0A/EX - Relay Module



2910421

<https://www.phoenixcontact.com/us/products/2910421>

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Relay module for VIP I/O-Marshalling base elements. For switching 230 V AC loads up to max. 3 A. Integrated fuse and fuse failure indication. N/O 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 230 V AC. The switch contact is protected by an integrated replaceable 3 A fuse. If the fuse fails, this is indicated by an LED. One N/O contact is available on the field side. 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
- 230 V internal marshalling option for connected field device
- Integrated keying reduces possible user error during replacement
- Relay with NO contact

## Commercial data

Item number	2910421
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	C480
Product key	CK8222
GTIN	4055626495989
Weight per piece (including packing)	67.3 g
Weight per piece (excluding packing)	67.3 g
Customs tariff number	85364900
Country of origin	US

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## 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

### 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 N/O contact
Type of switch contact	Single contact
Contact connection type	Power contact
Contact material	AgSnO
Maximum switching voltage	230 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) 690 VA (230 V AC)

### Connection data

#### Control circuits

Connection method	Pin strip
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### Ex data

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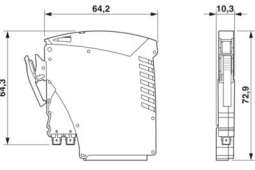
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## Safety data

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

### CSA, USA/Canada

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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 instructions	Plugs into VIP/...BASE...
Mounting position	any

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## Classifications

### ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

### ETIM

ETIM 9.0	EC001437
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### UNSPSC

UNSPSC 21.0	39122300
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## Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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