

IB IL 24/230 DOR1/W-PAC - Relay module



2861881
<https://www.phoenixcontact.com/us/products/2861881>

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Inline, Relay terminal, Relay output: 1 (floating), Changeover contact, 24 V DC, 230 V AC, for switching ohmic loads, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connector and labeling field; The product is being prepared for compliance with the Cyber Resilience Act (CRA).

Product description

The terminal is designed for use within an Inline station. It has one floating relay changeover contact. You can use the terminal block in protective extra-low voltage applications and in AC applications. When using the terminal block in AC applications, be sure to follow the applicable regulations and safety notes.

Your advantages

- Safe isolation
- Floating connection for one actuator
- Nominal current at the output: 3 A
- Total current of the terminal: 3 A



Commercial data

Item number	2861881
Packing unit	1 pc
Minimum order quantity	1 pc

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2861881

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Sales key	DR01
Product key	DRI133
GTIN	4017918894580
Weight per piece (including packing)	79.6 g
Weight per piece (excluding packing)	46 g
Customs tariff number	85389099
Country of origin	DE

IB IL 24/230 DOR1/W-PAC - Relay module

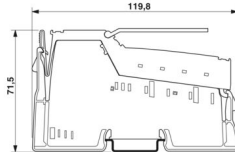


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Technical data

Dimensions

Dimensional drawing	
Width	12.2 mm
Height	119.8 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

Notes

Note on application	Only for industrial use
Note on application	As things stand now, we are preparing the product so that, as of December 11, 2027, it will comply with the requirements of the EU Cyber Resilience Act (CRA) based on the information currently available regarding the CRA.
Utilization restriction	
CCCex note	Use in potentially explosive areas is not permitted in China.

Mounting

Mounting type	DIN rail mounting
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Material specifications

Color (Housing)	gray (RAL 7042)
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Interfaces

Inline local bus	
Number of interfaces	2
Connection method	Inline data jumper
Transmission speed	500 kbps

System properties

Programming data	
Length code (hex)	C2
ID code (dec.)	189
Length code (dec)	194
Process data channel	2 bit
Input address area	0 Byte

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2861881

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Output address area	2 bit (Only bit0 is occupied)
Parameter channel (PCP)	0 bit
Register length (bus)	2 bit

Fieldbus data telegram (PROFIBUS)

Required parameter data	3 Byte
Required configuration data	4 Byte

Output data

Relay

Number of outputs	1 (floating)
Connection method	Spring-cage connection
Contact switching type	Changeover contact
Contact material	AgSnO ₂ , hard gold-plated
Contact resistance	≤ 50 mΩ (at 100 mA/6 V)
Nominal output voltage (DC)	24 V DC
Nominal output voltage (AC)	230 V AC
Output voltage range (AC)	5 V AC ... 253 V AC
Output current (max. per channel)	max. 3 A (per channel)
Output current (max. per module)	max. 3 A (per module)
Inrush current	max. 6 A (for 200 μs, with lamp loads and capacitive loads)
Switching voltage	min. 5 V DC max. 250 V DC max. 253 V AC
Switching current	max. 3 A (At 30 V DC) max. 0.15 A (for 250 V DC) max. 3 A (at 253 V AC)
Limiting continuous current	3 A
Switching power	max. 750 VA (see to derating)
Switching frequency	max. 20 Hz (without load) max. 0.1 Hz (with load)
Coil resistance	119 Ω ±12 Ω (at 20 °C)
Typical response time	typ. 5 ms
Bouncing time	typ. 5 ms
Typical release time	typ. 6 ms
Service life electrical	10 ⁵ switching cycles (at 20 switching cycles per minute)
Mechanical service life	2x 10 ⁷ cycles
Common potentials	all contacts floating

Product properties

Product type	I/O component
Product family	Inline
Type	modular
Installation location	Control cabinet

IB IL 24/230 DOR1/W-PAC - Relay module



2861881

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Scope of supply	including Inline connector and labeling field
Operating mode	Process data mode with 2 bits
Special properties	The product is being prepared for compliance with the Cyber Resilience Act (CRA) for switching ohmic loads

Insulation characteristics

Protection class	II (IEC 61140, EN 61140, VDE 0140-1) ()
Overvoltage category	III (IEC 60664-1, EN 60664-1)
Pollution degree	2 (IEC 60664-1, EN 60664-1)

Electrical properties

Maximum power dissipation for nominal condition	0.9 W
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Potentials: Communications power (U_L)

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 60 mA

Electrical isolation/isolation of the voltage ranges

Test voltage: Relay contact / Bus logics	4 kV, 50 Hz, 1 min
Test voltage: Contact/contact	1 kV, 50 Hz, 1 min
Test voltage: Contact / PE	1 kV, 50 Hz, 1 min

Connection data

Connection technology

Connection name	Inline connector
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Inline connector

Connection method	Spring-cage connection
Conductor cross-section, rigid	0.08 mm ² ... 1.5 mm ²
Conductor cross-section, flexible	0.08 mm ² ... 1.5 mm ²
Conductor cross-section AWG	28 ... 16
Stripping length	8 mm

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
Degree of protection	IP20
Air pressure (operation)	80 kPa ... 106 kPa (up to 2000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)

Mechanical test

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Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6	2g
Shock in accordance with EN 60068-2-27/IEC 60068-2-27	2g

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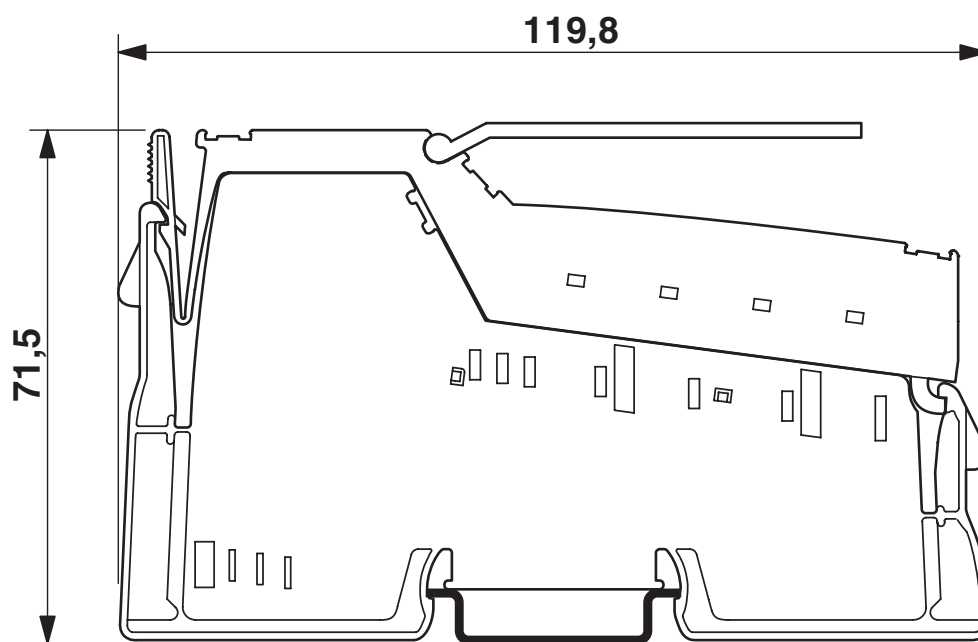


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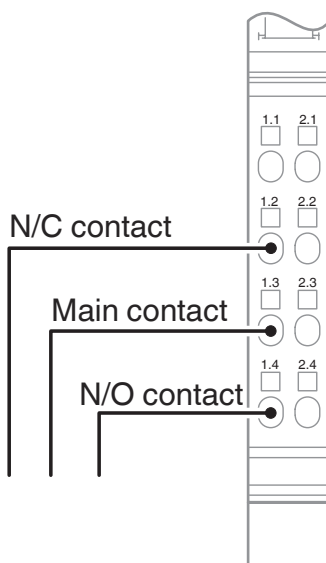
Drawings

Dimensional drawing



Dimensions (in mm)

Connection diagram



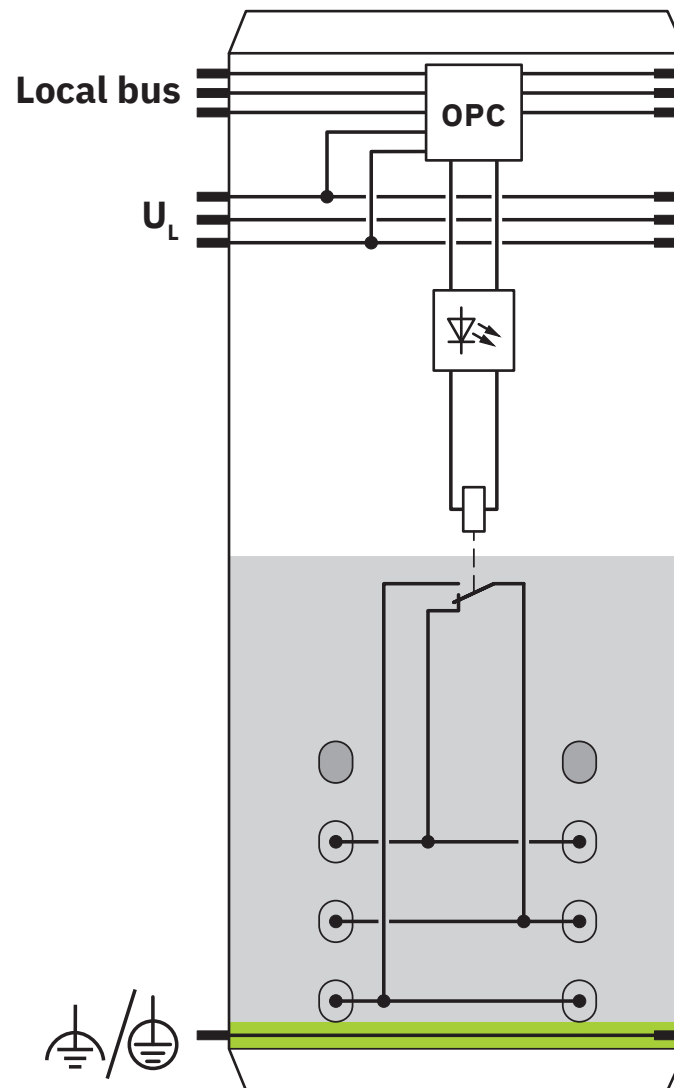
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Block diagram



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Approvals

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BV

Approval ID: 21725/C1 BV

ABS

Approval ID: 22-2226444-PDA



cULus Recognized

Approval ID: E140324



cULus Listed

Approval ID: E199827

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Classifications

ECLASS

ECLASS-13.0	27242604
ECLASS-15.0	27242604

ETIM

ETIM 10.0	EC001599
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UNSPSC

UNSPSC 21.0	32151600
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	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	13c16034-a8ca-443c-a470-e16f445a66c3

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