

Safety module - IB IL 24 PSDOR 4-PAC



2985864

<https://www.phoenixcontact.com/pc/products/2985864>

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Safety-related decentralized relay output module, IP20 degree of protection, for SafetyBridge, INTERBUS-Safety, and PROFI-safe systems. The module has four safe relay outputs, each with two contacts.

Product Description

The safety module is an output module from the Inline product range designed for use at any point within a SafetyBridge, INTERBUS-Safety or PROFI-safe system. The transmission speed can be set to 500 kbaud or 2 Mbaud on the safety module using a switch. One transmission speed must be used consistently within a station. The module has four safe relay outputs, each with two relay contacts.

Your advantages

- SIL 3 according to IEC 61508/EN 61508
- SIL 3 in accordance with EN 62061
- PL e in accordance with EN ISO 13849-1

Commercial Data

Item number	2985864
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	DNA432
Catalog Page	Page 268 (C-6-2019)
GTIN	4046356131599
Weight per Piece (including packing)	461.5 g
Weight per Piece (excluding packing)	386 g
Customs tariff number	85389091
Country of origin	DE

Technical Data

Dimensions

Width	73.2 mm
Height	119.8 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

Material specifications

Color	yellow
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Interfaces

Inline local bus

No. of channels	2
Connection method	Inline data jumper
Transmission speed	500 kbps / 2 Mbps (can be switched)

System properties

Module

ID code (dec.)	167
ID code (hex)	A7
Length code (hex)	04
Length code (dec)	04
Process data channel	8 Byte
Input address area	8 Byte ((Operating mode: SafetyBridge))
Output address area	8 Byte ((Operating mode: SafetyBridge))
Register length	8 Byte
Required parameter data	1 Byte ((Operating mode: SafetyBridge))
Required configuration data	5 Byte ((Operating mode: SafetyBridge))

Output data

Relay

Number of outputs	4 (Safety relays with 2 floating contacts each)
Connection method	Spring-cage connection
Contact type	N/O contact

Product properties

Type	modular
Product type	I/O component
Application	Functional safety PROFIsafe

Electrical properties

Maximum power dissipation for nominal condition	8.7 W
Transmission medium	Copper

Potentials: Communications power (U_L)

Supply voltage	7.5 V DC (see safety data)
Current draw	max. 360 mA

Potentials: Main circuit supply (U_M)

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current draw	max. 0.03 A typ. 30 mA (all outputs set including actuator current)

Potentials: Segment circuit supply (U_S)

Supply voltage	24 V
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Supply: Module electronics

Supply voltage	24 V DC (via voltage jumper)
Supply voltage range	19.2 V DC ... 30 V DC

Connection data

Connection technology

Connection name	Inline connector
pluggable	yes

Conductor connection

Connection method	Spring-cage connection
Conductor cross section solid	0.2 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross section AWG	24 ... 16

Inline connector

Connection method	Spring-cage connection
Conductor cross section, rigid	0.2 mm ² ... 1.5 mm ²
Conductor cross section, flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross section AWG	24 ... 16

Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
Degree of protection	IP20
Air pressure (operation)	80 kPa ... 108 kPa (up to 2000 m above sea level)
Air pressure (storage/transport)	66 kPa ... 108 kPa (up to 3500 m above sea level)
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Permissible humidity (operation)	10 % ... 85 % (Take suitable measures against increased air humidity within the permitted temperature range.)

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Permissible humidity (storage/transport)	10 % ... 85 % (Take suitable measures against increased air humidity within the permitted temperature range.)
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Standards and regulations

Protection class	I (IEC 61140, EN 61140, VDE 0140-1)
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Mounting

Mounting type	DIN rail mounting
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Approvals



UL Listed

Approval ID: FILE E 140324



cUL Listed

Approval ID: FILE E 140324



Functional Safety

Approval ID: 968/FSP 2449.00/22



Functional Safety

Approval ID: 968/FSP 2449.00/22

PROFIsafe

Approval ID: Z20211



Functional Safety

Approval ID: 968/EZ 650.02/17



Functional Safety

Approval ID: 968/EZ 650.04/20



Functional Safety

Approval ID: 968/EZ 650.04/20

cULus Listed

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Classifications

ECLASS

ECLASS-9.0	27242604
ECLASS-10.0.1	27242604
ECLASS-11.0	27242604

ETIM

ETIM 8.0	EC001599
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UNSPSC

UNSPSC 21.0	32151600
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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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Accessories

Connector set

Connector set - IB IL 24 SDOR 4-PLSET/CP - 2916914

<https://www.phoenixcontact.com/pc/products/2916914>

Connector set (yellow), color coded, for safe SDOR boards.



Labeling field

Labeling field - IB IL FIELD 2 - 2727501

<https://www.phoenixcontact.com/pc/products/2727501>

Labeling field, width: 12.2 mm



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Labeling field

Labeling field - IB IL FIELD 8 - 2727515

<https://www.phoenixcontact.com/pc/products/2727515>

Labeling field, width: 48.8 mm



Insert strip

Insert strip - ESL 62X10 - 0809492

<https://www.phoenixcontact.com/pc/products/0809492>

Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems:
Laser printer, mounting type: insert, lettering field size: 62 x 10 mm, Number of individual labels: 72



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Insert strip

Insert strip - ESL 62X46 - 0809502

<https://www.phoenixcontact.com/pc/products/0809502>

Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems: Laser printer, mounting type: insert, lettering field size: 62 x 46 mm, Number of individual labels: 15



Connecting cable

Connecting cable - COM CAB MINI DIN - 2400127

<https://www.phoenixcontact.com/pc/products/2400127>

Connecting cable, for connecting the controller to a PC (RS-232) for PC WORX with flow control, 3 m in length



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PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstraße 8
D-32825 Blomberg
+49 (0) 5235-3 00
info@phoenixcontact.com