

Safety module - IB IL 24 PSDOR 4-PAC - 2985864

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Safety-oriented decentral relay output module, IP20 degree of protection, for the INTERBUS-Safety and the PROFIsafe system. This module has four safe digital relay outputs, each having two contacts.

Product Description

The safety module is an output module from the Inline product range, designed for use in an INTERBUS-Safety or PROFIsafe system. The safety module can be used as part of an Inline station at any point within an INTERBUS-Safety or PROFIsafe Inline system. The transmission speed of the safety module can be set to 500 kbaud or 2 Mbaud using a switch. Only one transmission speed must be used uniformly within a station. The module has four safe digital relay outputs, each with two relay contacts. The outputs can be parameterized according to the application and enable the integration of actuators in the safe INTERBUS system (INTERBUS-Safety) and in the PROFIsafe system. The safety-related segment circuit can be switched on or off using suitable wiring. When the output is switched off, the supply to the subsequent modules is disconnected safely. The module also has two clock outputs with assigned alarm inputs for monitoring external contact extensions. Depending on the installation and parameterization, in these systems the safety module can achieve the following safety integrity:

- Up to category 4 according to standard EN 954-1
- Up to SIL 3 according to standards EN 61508 and EN 62061
- Up to PL e according to standard EN ISO 13849-1

Why buy this product

- SIL 3 according to IEC 61508/EN 61508
- SILCL 3 according to EN 62061
- PL e according to EN ISO 13849-1

Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 131599

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---

Dimensions

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

Ambient conditions

Safety module - IB IL 24 PSDOR 4-PAC - 2985864

Technical data

Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
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.)
Permissible humidity (storage/transport)	10 % ... 85 % (Take suitable measures against increased air humidity within the permitted temperature range.)
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 mean sea level)
Degree of protection	IP20

Interfaces

Fieldbus system	INTERBUS
Designation	Inline local bus
Connection method	Inline data jumper
Transmission speed	500 kBit/ / 2 MBit/s (can be switched)

Digital outputs

Output name	Relay output
Connection method	Spring-cage connection
	2-wire
Number of outputs	4 (Safety relays)
Output voltage	24 V DC ($U_S - 1 V$)
Nominal output voltage	24 V DC (Inline connector)
Output current	max. 4 A (Inline connector, pro contact, observe derating)
	max. 6 A (COMBICON connector, pro contact, observe derating)
Maximum output current per channel	4 A

Power supply for module electronics

Supply voltage	24 V DC (via voltage jumper)
Supply voltage range	19.2 V DC ... 30 V DC
Communications power U_L	7.5 V (via voltage jumper)
Current consumption	max. 360 mA (from the local bus)

General

Net weight	386 g
Note on weight specifications	with connectors
Mounting type	DIN rail

Inline potentials

Communications power U_L	7.5 V DC (see safety data)
Current consumption from U_L	max. 360 mA
Main circuit supply U_M	24 V DC
Supply voltage range U_M	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current consumption from U_M	typ. 30 mA (all outputs set including actuator current)

Safety module - IB IL 24 PSDOR 4-PAC - 2985864

Technical data

Inline potentials

	max. 0.03 A
Segment circuit supply U_S	24 V

Safety-related characteristic data

Designation	IEC 61508 - High demand
Safety Integrity Level (SIL)	max. 3 (two channel; dependent in parameterization and wiring)
Designation	IEC 61508 - Low demand
Safety Integrity Level (SIL)	max. 3 (two channel; dependent in parameterization and wiring)
Designation	EN ISO 13849
Performance level (PL)	max. e (two channel; dependent in parameterization and wiring)
Category	max. 4 (two channel; dependent in parameterization and wiring)
Designation	EN 62061
Safety Integrity Level Claim Limit (SIL CL)	max. 3 (two channel; dependent in parameterization and wiring)

Standards and Regulations

Test section	5 V supply, incoming remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min.
	5 V supply, outgoing remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min.
	7.5 V supply (bus logics)/24 V supply (I/O) 500 V AC 50 Hz 1 min.
	24 V supply (U_M , U_S), GND, clock outputs/7.5 V supply (bus logic), relay outputs 500 V AC 50 Hz 1 min.
	COMBICON X3 relay outputs/COMBICON X4 relay outputs, Inline connector relay outputs, 7.5 V supply (bus logic), 24 V supply (U_M , U_S), GND, clock outputs, FE 2500 V AC 50 Hz 1 min.
	COMBICON X4 relay outputs/COMBICON X3 relay outputs, Inline connector relay outputs, 7.5 V supply (bus logic), 24 V supply (U_M , U_S), GND, clock outputs, 2500 V AC 50 Hz 1 min.
Protection class	I, IEC 61140, EN 61140, VDE 0140-1

Classifications

eCl@ss

eCl@ss 4.0	27240404
eCl@ss 4.1	27240404
eCl@ss 5.0	27242204
eCl@ss 5.1	27242604
eCl@ss 6.0	27242604
eCl@ss 7.0	27242604
eCl@ss 8.0	27242604
eCl@ss 9.0	27242604

ETIM

ETIM 3.0	EC001599
----------	----------

Safety module - IB IL 24 PSDOR 4-PAC - 2985864

Classifications

ETIM

ETIM 4.0	EC001599
ETIM 5.0	EC001599

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	43201404

Approvals

Approvals

Approvals

UL Listed / cUL Listed / Functional Safety / PROFIBUS / cULus Listed

Ex Approvals

Approvals submitted

Approval details

UL Listed

cUL Listed

Functional Safety

PROFIBUS

cULus Listed

Phoenix Contact 2016 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>