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

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Safety-related distributed relay output module, IP20 protection, for the INTERBUS-Safety and PROFIsafe system. The module has 4 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 PROFIsafe 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.

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

RoHS | PL EN ISO 13849 | SILCL IEC 62061

Key Commercial Data

Packing unit	1 STK
GTIN	(barcode) 4 046356 131599
GTIN	4046356131599
Weight per Piece (excluding packing)	400.000 g
Custom tariff number	85389091
Country of origin	Germany

Technical data

Note

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

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Technical data

Dimensions

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

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 sea level)
Degree of protection	IP20

General

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

Interfaces

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

Power supply for module electronics

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

Inline potentials

Designation	Communications power U_L
Supply voltage	7.5 V DC (see safety data)
Current consumption	max. 360 mA
Designation	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 consumption	typ. 30 mA (all outputs set including actuator current)
	max. 0.03 A
Designation	Segment circuit supply U_S

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Technical data

Inline potentials

Supply voltage	24 V

Relay outputs

Number of outputs	4 (Safety relays with 2 floating contacts each)
Connection method	Spring-cage connection
Connection technology	2-wire
Switching current	min. 5 mA
	max. 4 A
Switching capacity	min. 60 mW
Limiting continuous current	4 A
Switching voltage	24 V DC (Inline connector)
	250 V AC/DC (COMBICON connector)
Switching voltage range	5 V AC/DC ... 30 V AC/DC (Inline connector)
	5 V AC/DC ... 250 V AC/DC (COMBICON connector)
Switching current	min. 5 mA
	max. 4 A
Switching capacity	min. 60 mW

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

Protection class	I, IEC 61140, EN 61140, VDE 0140-1

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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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
ETIM 4.0	EC001599
ETIM 5.0	EC001599
ETIM 6.0	EC001599

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	32151602

Approvals

Approvals

Approvals

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

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140324

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Approvals

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140324

Functional Safety	FS	968/EZ 424.02/13

PROFIBUS	http://www.profibus.com	Z20082

Functional Safety	FS	968/EZ 424.05/17

Functional Safety	FS	968/EZ 424.05/17

Functional Safety	FS	968/EZ 650.02/17

cULus Listed	

Accessories

Accessories

Connector set

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

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

Labeling panel

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Accessories

Labeling field - IB IL FIELD 2 - 2727501

Labeling field, width: 12.2 mm

Labeling field - IB IL FIELD 8 - 2727515

Labeling field, width: 48.8 mm

Programming cable

Connecting cable - COM CAB MINI DIN - 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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Terminal marking

Insert strip - ESL 62X10 - 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

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Insert strip - ESL 62X46 - 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

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Accessories