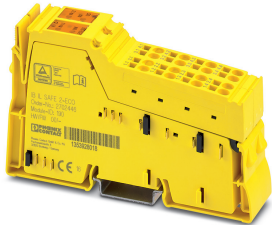


Safety module - IB IL SAFE 2-ECO - 2702446

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Inline ECO, Safety module, PROFIsafe, Digital inputs: 4 (for 2 sensor circuits (1- or 2-channel, non-equivalent/equivalent)), Enabling current path: 1 (internal, two-channel enabling current path), N/O contact, for safety-related shutdown of the segment voltage by means of potential routing, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connectors and marking fields

Product Description


Inline ECO safety module with sensor circuits for use within the 24 V area of an Inline station. The module monitors two sensor circuits. The sensor circuits can be designed as single/two-channel, non-equivalent/equivalent.

Your advantages

- Various safety functions with one module
- 2 sensor circuits
- Several modules can be cascaded
- Diagnostic and status indicators
- Can be used in different bus systems



Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 178004
GTIN	4055626178004
Weight per Piece (excluding packing)	180.000 g
Custom tariff number	85389099
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	24.4 mm
Height	119.8 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

Ambient conditions

Ambient temperature (operation)	0 °C ... 55 °C (observe derating)
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Degree of protection	IP20
Degree of protection at installation location	min. IP54

General

Housing material	PBT
Color	yellow
Net weight	182.5 g
Note on weight specifications	with connector
Operating mode	Process data operation with 4 bits
Degree of pollution	2 (according to EN 50178)
Mounting type	DIN rail mounting
Assembly instructions	See derating curve
Mounting position	vertical or horizontal
Maximum altitude	≤ 2000 m (Above sea level)
Operating voltage display	1 x green LED
Status and diagnostic indicators	4 x green LED, 1 x yellow LED

Interfaces

Designation	Inline local bus
Connection method	Inline data jumper
Transmission speed	500 kbps

Digital inputs

Input name	Digital inputs
Description of the input	IEC 61131-2 type 3
Connection method	Spring-cage connection
Number of inputs	4 (for 2 sensor circuits (1- or 2-channel, non-equivalent/equivalent))
Protective circuit	Surge voltage Suppressor diode
	Reverse polarity protection
Input voltage range "0" signal	0 V DC ... 5 V DC (for safe Off; at inputs 1.2, 1.3, 3.2, 3.3)
Input voltage range "1" signal	11 V DC ... 30 V DC (at inputs 1.2, 1.3, 2.3, 3.2, 3.3, 4.3)

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Technical data

Digital inputs

Input current range "0" signal	0 mA ... 2 mA (for safe Off; at inputs 1.2, 1.3, 3.2, 3.3)
Concurrence	∞

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
Current consumption	max. 35 mA
Designation	Main circuit supply (U_M)
Supply voltage	24 V DC -20 % / +15 %
Current consumption	typ. 70 mA
Power consumption	typ. 1.9 W (at U_M)

Relay outputs

Output name	Enabling current path
Number of outputs	1 (internal, two-channel enabling current path)
Switching current	min. 3 mA
	min. 6 A (30 V DC)
Switching capacity	min. 60 mW
Limiting continuous current	6 A (observe derating)
Contact type	N/O contact
Switching current	min. 3 mA
	min. 6 A (30 V DC)
Switching capacity	min. 60 mW
Min. switching current	min.
Max. switching current	min.
Output fuse	6 A gL/gG (See "Application examples" section)
Mechanical service life	10^6 cycles

Safety-related characteristic data

Designation	IEC 61508 - High demand
Safety Integrity Level (SIL)	3
Designation	EN ISO 13849
Performance level (PL)	e (4 A DC13; 5 A AC15; 8760 switching cycles/year)
Category	4
Designation	EN 62061

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Technical data

Safety-related characteristic data

Safety Integrity Level Claim Limit (SIL CL)	3
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Standards and Regulations

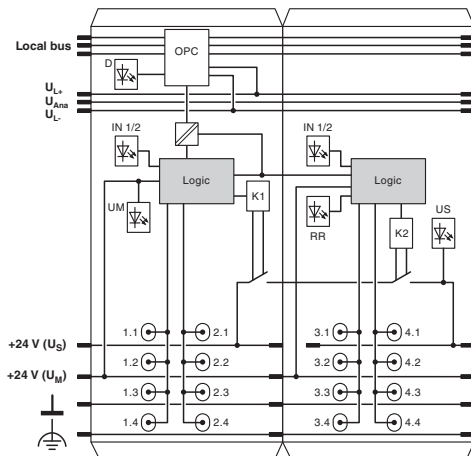
Air clearances and creepage distances	EN 50178
Overvoltage category	III

Environmental Product Compliance

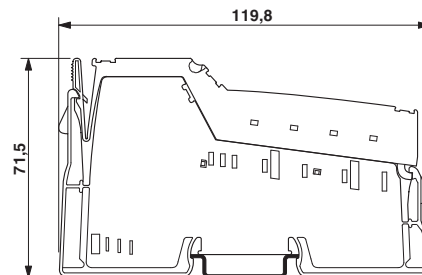
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Block diagram



Dimensional drawing



Internal wiring of the terminal points

Classifications

eCl@ss

eCl@ss 10.0.1	27371819
eCl@ss 11.0	27242604
eCl@ss 4.0	27240404
eCl@ss 4.1	27240404
eCl@ss 5.0	27242204
eCl@ss 5.1	27242604
eCl@ss 6.0	27371800

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Classifications

eCl@ss

eCl@ss 7.0	27371819
eCl@ss 9.0	27371819

ETIM

ETIM 2.0	EC001433
ETIM 3.0	EC001599
ETIM 4.0	EC001599
ETIM 6.0	EC001449
ETIM 7.0	EC001449

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	39121311
UNSPSC 12.01	39121311
UNSPSC 13.2	32151602
UNSPSC 18.0	39122205
UNSPSC 19.0	39122205
UNSPSC 20.0	39122205
UNSPSC 21.0	39122205

Approvals

Approvals

Approvals

UL Listed / cUL Listed / 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/XYVV/template/LISEXT/1FRAME/index.htm	FILE E 140324
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Functional Safety			01/205/5568.00/17
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cULus Listed			
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