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Safety module - AXL F PSDI8/4 1F - 2701559

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Safety-related digital input module, degree of protection IP20, for use in PROFIsafe systems. The module has 4 safe digital inputs for two-channel assignment or 8 safe digital inputs for single-channel assignment.

Product Description

The safety module is an input module from the Axioline F product range designed for use in a PROFIsafe system. The module has four safe digital inputs for two-channel assignment or eight safe digital inputs for single-channel assignment. The inputs can be parameterized according to the application and enable sensors to be integrated into the PROFIsafe system.

Your advantages

- Up to SIL 3 according to EN 61508
- Up to SILCL 3 according to EN 62061
- Up to cat. 4/PL e according to EN ISO 13849-1

Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 770026
GTIN	4046356770026
Weight per Piece (excluding packing)	222.000 g
Custom tariff number	85389091
Country of origin	Germany

Technical data

Dimensions

Width	53.6 mm
Height	126.1 mm
Depth	54 mm
Note on dimensions	Housing dimensions

Ambient conditions

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Technical data

Ambient conditions

Ambient temperature (operation)	-35 °C ... 60 °C (Mounting position: any)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	10 % ... 75 % (on average, 85% infrequently, non-condensing)
Permissible humidity (storage/transport)	10 % ... 75 % (non-condensing)
Air pressure (operation)	70 kPa ... 108 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	66 kPa ... 108 kPa (up to 3500 m above sea level)
Degree of protection	IP20

Interfaces

Designation	Axioline F local bus
Connection method	Bus base module

Digital inputs

Input name	Digital inputs
Description of the input	IEC 61131-2 type 3
Connection method	Push-in connection
Connection technology	2, 3, 4-wire
Number of inputs	4 (with two-channel assignment)
	8 (for single-channel assignment)
Nominal input voltage U_{IN}	24 V DC
Nominal input current at U_{IN}	typ. 4.2 mA
Input filter time	1.5 ms
	3 ms (Default)
	5 ms
	15 ms
Cable length	max. 1000 m (200 m from the clock output to the safe input (total based on forward and return path))
Input voltage	24 V DC (via clock outputs T1 and T2 or external supply)
Input voltage range	-3 V DC ... 30.2 V DC
Typical input current per channel	4.2 mA

General

Mounting type	DIN rail
Color	yellow
Net weight	222 g
Note on weight specifications	with connectors and bus base module

Axioline potentials

Designation	Axioline F local bus supply (U_{Bus})
Supply voltage	5 V DC (via bus base module)
Current consumption	typ. 280 mA (all inputs set; power supply by U_I of 19.2 V DC to 30.2 V DC)
	max. 310 mA

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Technical data

Axioline potentials

Designation	Supply for digital input modules (U_I)
Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30.2 V DC (including all tolerances, including ripple)
Current consumption	typ. 9 mA (all inputs set; power supply by U_I with 30.2 V DC; without power supply to the sensors via clock supplies T1 and T2)
Protective circuit	Protection against polarity reversal, EMC protective circuit, undervoltage detection

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	III (IEC 61140, EN 61140, VDE 0140-1)

Environmental Product Compliance

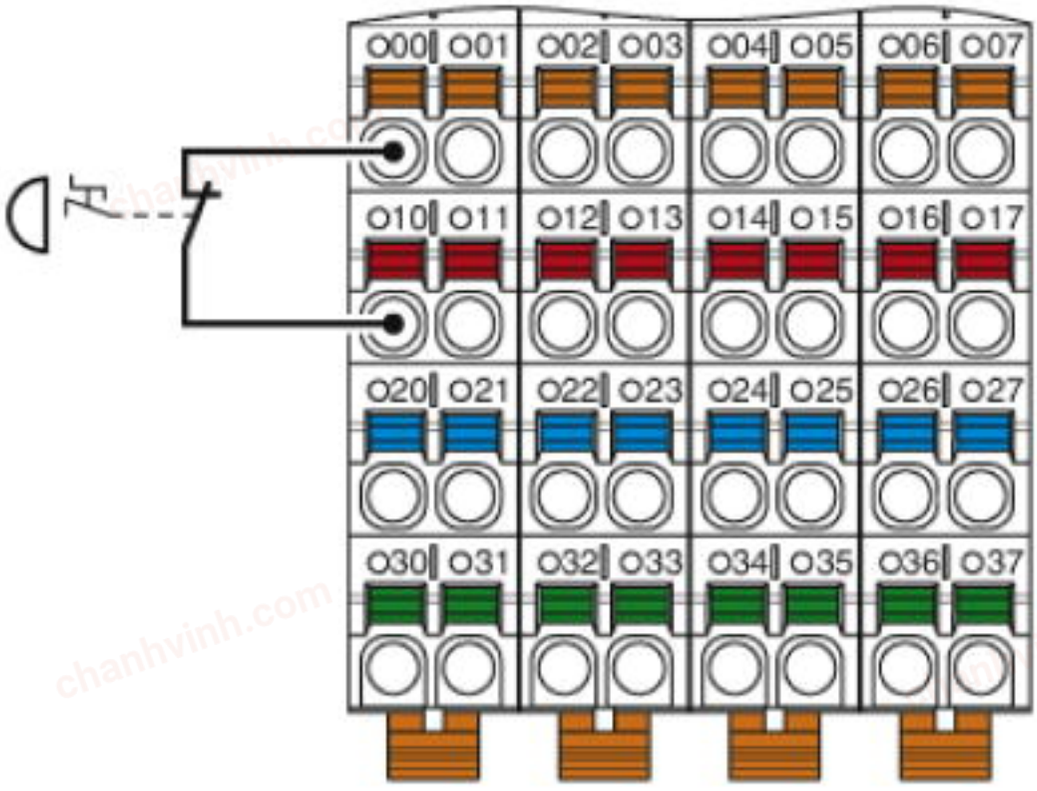
REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Drawings

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Connection diagram

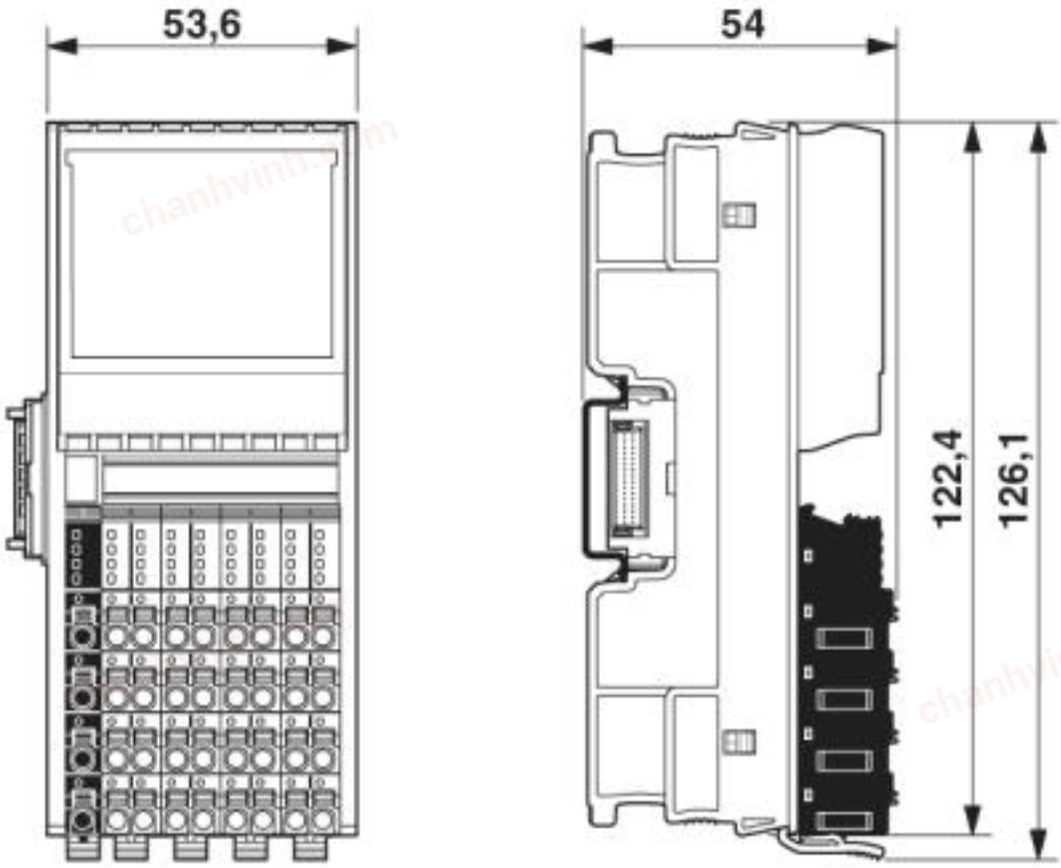


Connection example for an emergency stop circuit

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Dimensional drawing



Classifications

eCl@ss

eCl@ss 4.0	27240400
eCl@ss 4.1	27240400
eCl@ss 5.0	27242200
eCl@ss 5.1	27242600
eCl@ss 6.0	27242600
eCl@ss 7.0	27242604
eCl@ss 8.0	27242604
eCl@ss 9.0	27242604

ETIM

ETIM 3.0	EC001599
ETIM 4.0	EC001449
ETIM 5.0	EC001599
ETIM 6.0	EC001599
ETIM 7.0	EC001599

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Classifications

UNSPSC

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

Approvals

Approvals

Approvals

UL Listed / cUL Listed / PROFIsafe / Functional Safety / cULus Listed

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
PROFIsafe			Z20119
Functional Safety			968/EZ 650.00/14
cULus Listed			

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Accessories

Accessories

Device marking

Insert label - EMT (35X28)R - 0801602



Insert label, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK ROLL X1, THERMOMARK ROLL 2.0, THERMOMARK ROLL, mounting type: snapped into marker carrier, lettering field size: 35 x 28 mm, Number of individual labels: 500

DIN rail connector

Bus connector - AXL F BS F - 2688129



Axioline F bus base module for housing type F

Terminal marking

Zack marker strip - ZB 20,3 AXL UNPRINTED - 0829579



Zack marker strip for Axioline F (device labeling), in 2 x 20.3 mm pitch, unprinted, 25-section, for individual labeling with B-STIFT 0.8, X-PEN, or CMS-P1-PLOTTER

Zack Marker strip, flat - ZBF 10/5,8 AXL UNPRINTED - 0829580



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 10.15 mm, lettering field size: 4 of 10.15 x 5 mm and 1 of 5.8 x 5 mm, Number of individual labels: 50

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