

## Safety module - AXL F PSDO8/3 1F - 2701560

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

### Product Description


The safety module is an output module from the Axioline F product range designed for use in a PROFIsafe system. The module has four safe digital outputs for two-channel assignment or eight safe digital outputs for single-channel assignment. The outputs can be parameterized according to the application and enable the integration of actuators in the PROFIsafe system.

### Your advantages

- ✓ Up to Cat. 4/PL e in accordance with EN ISO 13849-1, SIL 3 in accordance with IEC 62061, SIL 3 in accordance with IEC 61508



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 769938
GTIN	4046356769938
Weight per Piece (excluding packing)	360.000 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

# Safety module - AXL F PSDO8/3 1F - 2701560

## 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

### Connection data

Designation	Axioline F connector
Connection method	Push-in connection
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	1.5 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	16

### Interfaces

Designation	Axioline F local bus
Connection method	Bus base module

### Digital outputs

Output name	Digital outputs
Connection method	Direct plug-in technology
Connection technology	2-, 3-conductor
Number of outputs	4 (with two-channel assignment)
	8 (for single-channel assignment)
	8
Protective circuit	Overload protection, freewheeling circuit for inductive loads, Discharge circuit for accelerated discharge of capacitive loads
Output voltage	24 V DC
Output current	max. 2 A (per channel)
	max. 1.5 A (per channel according to CUL <sub>US</sub> )
	max. 4 A (per group)
	max. 3 A (per group according to CUL <sub>US</sub> )
	max. 8 A (Total current of all outputs; Please observe the notes in the user manual.)
	max. 6 A (Total current of all outputs according to CUL <sub>US</sub> )

# Safety module - AXL F PSDO8/3 1F - 2701560

## Technical data

### Digital outputs

Behavior with overload	Affected output is disabled and a diagnostic message is generated.
------------------------	--

### 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. 260 mA (all outputs set; power supply by $U_O$ of 19.2 V DC to 30.2 V DC)
	max. 280 mA
Designation	Supply for digital output modules ( $U_O$ )
Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30.2 V DC (including all tolerances, including ripple)
Current consumption	typ. 25 mA (all outputs set; power supply by $U_O$ with 30.2 V DC; without power supply to the actuator)
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)
------------------	---------------------------------------

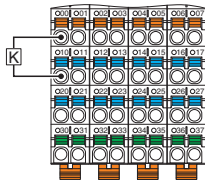
### Environmental Product Compliance

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"

# Safety module - AXL F PSDO8/3 1F - 2701560

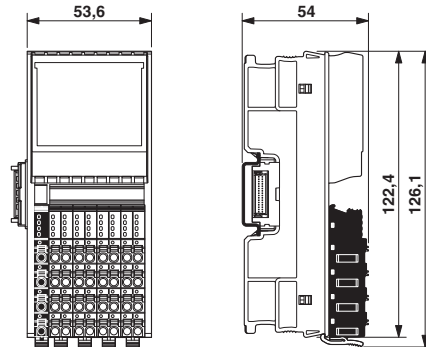
## Drawings

Connection diagram



Example connection of a contactor

Dimensional drawing



## Classifications

### eCl@ss

eCl@ss 10.0.1	27242604
eCl@ss 11.0	27242604
eCl@ss 4.0	27250300
eCl@ss 4.1	27250300
eCl@ss 5.0	27250300
eCl@ss 5.1	27242900
eCl@ss 6.0	27242600
eCl@ss 7.0	27242604
eCl@ss 9.0	27242604

### ETIM

ETIM 3.0	EC001617
ETIM 4.0	EC001449
ETIM 6.0	EC001599
ETIM 7.0	EC001599

### 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

# Safety module - AXL F PSDO8/3 1F - 2701560

## Classifications

### UNSPSC

UNSPSC 20.0	32151602
UNSPSC 21.0	32151602

## Approvals

### Approvals

---

#### Approvals

UL Listed / cUL Listed / PROFIsafe / Functional Safety / BSH / DNV GL / cULus Listed

---

#### Ex Approvals

---

### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
PROFIsafe			Z20121
Functional Safety			968/EZ 650.00/14
BSH			840
DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAA00000DF
cULus Listed			

## Safety module - AXL F PSDO8/3 1F - 2701560

### Accessories

#### Accessories

#### Device marking

##### Insert label - EMT (35X46)R - 0801604



Insert label, for the Axioline F series from Phoenix Contact, 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 46 mm, Number of individual labels: 500

---

##### Insert label - EMT (35X46)R YE - 0801605



Insert label, for the Axioline F series from Phoenix Contact, Roll, yellow, 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 46 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

## Safety module - AXL F PSDO8/3 1F - 2701560

### Accessories

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