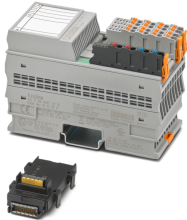


## I/O module - AXL F AI8 HART XC 1F - 1052434

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Axioline F XC, Analog input module, Active analog inputs: 8, 4 mA ... 20 mA, connection technology: 2-conductor, transmission speed in the local bus: 100 Mbps, Extreme conditions version, degree of protection: IP20, including bus base module and Axioline F connectors

### Product Description

The module is an Axioline F I/O module for use in the Axioline F modular I/O system.

The module is a modular I/O device that can be affixed to the Axioline F local bus, to communicate I/O data up to the Axioline F controller or bus coupler, which forms the head of the station.

The analog input I/O module with HART capabilities collects analog input and HART data from the field I/O terminals and makes this information available to the controller / bus coupler through the Axioline F local bus.


The active analog input module allows the connection of up to eight HART enabled, passive analog input signals.

### Your advantages

- ✓ Active analog input module
- ✓ Sources power for up to 8 HART enabled, passive analog input signals
- ✓ Cyclic access to PV, SV, TV, QV, and Loop Current
- ✓ Current range: 4 mA ... 20 mA
- ✓ Can be used under extreme ambient conditions
- ✓ Extended temperature range of -40 °C ... +70 °C (see "Tested successfully: use under extreme ambient conditions" in the data sheet)



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 676265
GTIN	4055626676265
Weight per Piece (excluding packing)	360.000 g
Custom tariff number	85389091
Country of origin	United States

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## Technical data

### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
	Use in potentially explosive areas is not permitted in China.

### Dimensions

Width	53.6 mm
Height	126.1 mm
Depth	77.14 mm
Note on dimensions	The depth is valid when a TH 35-7,5 DIN rail is used (according to EN 60715).

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C (Standard)
	-40 °C ... 70 °C (Extended, see section "Tested successfully: use under extreme ambient conditions" in the data sheet.)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
Air pressure (operation)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Maximum altitude	3000 m
Degree of protection	IP20

### Connection data

Designation	Axioline F connector
Connection method	Push-in connection
Note on the connection method	Please observe the information provided on conductor cross sections in the "Axioline F: system and installation" user manual.
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
Stripping length	8 mm

### General

Mounting type	DIN rail
Color	traffic grey A RAL 7042
Net weight	355 g

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## Technical data

### General

Note on weight specifications	with connectors and bus base module
Mounting position	any (no temperature derating)
Maximum altitude	3000 m

### Interfaces

Designation	Axioline F local bus
Number	2
Connection method	Bus base module
Transmission speed	100 Mbps

### Axioline potentials

Designation	Axioline F local bus supply ( $U_{BUS}$ )
Supply voltage	5 V DC (via bus base module)
Current consumption	typ. 40 mA
	max. 60 mA
Designation	Supply for analog modules ( $U_A$ )
Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current consumption	max. 240 mA

### Analog inputs

Description of the input	HART enabled, passive analog input signals
Input name	Active analog inputs
Number of inputs	8 (HART)
Connection method	Push-in connection
Connection technology	2-conductor
Note regarding the connection technology	shielded, twisted pair
Current input signal	4 mA ... 20 mA
Precision	0.1 % (of measuring range final value for active mean-value generation and 30 Hz filter)

### Electrical isolation

Test section	5 V supply of the local bus ( $U_{BUS}$ ) / 24 V supply (I/Os) 500 V AC 50 Hz 1 min.
	5 V supply of the local bus ( $U_{BUS}$ ) / functional ground 500 V AC 50 Hz 1 min.
	24 V supply (I/O) / functional ground 500 V AC 50 Hz 1 min.
	Field to functional earth 500 V AC 50 Hz 1 min.
	Field to 5V or 24V supplies 1500 V AC 50 Hz 1 min.

### Standards and Regulations

# I/O module - AXL F AI8 HART XC 1F - 1052434

## Technical data

### Standards and Regulations

Immunity to ESD	Noise immunity test in accordance with EN 61000-6-2 Electrostatic discharge (ESD) EN 61000-4-2/IEC 61000-4-2 Criterion A, 6 kV contact discharge, 8 kV air discharge
Immunity to EF	Noise immunity test in accordance with EN 61000-6-2 Electromagnetic fields EN 61000-4-3/IEC 61000-4-3 Criterion A, Field intensity: 10 V/m
Immunity to burst	Noise immunity test in accordance with EN 61000-6-2 Fast transients (burst) EN 61000-4-4/IEC 61000-4-4 Criterion B, 2 kV
Immunity to surge	Noise immunity test in accordance with EN 61000-6-2 Transient overvoltage (surge) EN 61000-4-5/IEC 61000-4-5 Criterion A, supply lines DC: $\pm 0.5$ kV/ $\pm 0.5$ kV (symmetrical/asymmetrical), $\pm 1$ kV to shielded I/O cables
Immunity to conducted interference	Noise immunity test in accordance with EN 61000-6-2 Conducted interference EN 61000-4-6/IEC 61000-4-6 Criterion A, Test voltage 10 V
Interference emission	Noise emission test as per EN 61000-6-4 Class A
Mechanical tests	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 5g
	Shock in acc. with EN 60068-2-27/IEC 60068-2-27 30g
	Continuous shock according to EN 60068-2-27/IEC 60068-2-27 10g
ATEX	DEMKO 20 ATEX 2334X II 3G Ex ec IIC T4 Gc
IECEX	IECEX UL 20.0002X Ex ec IIC T4 Gc
UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D T4
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)

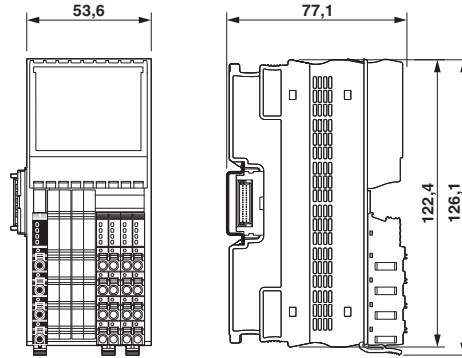
### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 25;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

# I/O module - AXL F AI8 HART XC 1F - 1052434

Dimensional drawing



## Classifications

### eCl@ss

eCl@ss 10.0.1	27242601
eCl@ss 11.0	27242601
eCl@ss 9.0	27242601

### ETIM

ETIM 7.0	EC001596
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### UNSPSC

UNSPSC 18.0	32151602
UNSPSC 19.0	32151602
UNSPSC 20.0	32151602
UNSPSC 21.0	32151602

## Approvals

### Approvals

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#### Approvals

UL Listed / cUL Listed / cULus Listed

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#### Ex Approvals

ATEX / IECEx / UL Listed / cUL Listed / cULus Listed

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### Approval details

# I/O module - AXL F AI8 HART XC 1F - 1052434

## Approvals

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
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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
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cULus Listed			
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## 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

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#### DIN rail connector

Bus connector - AXL F BS F - 2688129



Axioline F bus base module for housing type F

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#### Shield connection

## I/O module - AXL F AI8 HART XC 1F - 1052434

### Accessories

Shield connection - AXL SHIELD SET - 2700518



Axioline shield connection set (contains 2 shield bus holders and 2 SK 5 shield connection clamps)

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### 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

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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