

I/O module - AXL F DO16/1 1H - 2688349

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Axioline F, Digital output module, Digital outputs: 16, 24 V DC, 500 mA, connection method: 1-wire, transmission speed in the local bus: 100 Mbps, degree of protection: IP20, including bus base module and Axioline F connectors


Product Description

The module is designed for use within an Axioline F station. It is used to output digital signals. The outputs are protected against short circuit and overload.

Why buy this product

- 16 digital outputs
- 24 V DC, 500 mA
- Connection of actuators in single-wire technology
- Minimum update time of < 100 μ s
- Device rating plate stored

Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 606530
GTIN	4046356606530
Weight per Piece (excluding packing)	180.000 g
Custom tariff number	85389091
Country of origin	Germany

Technical data

Dimensions

Width	35 mm
Height	126.1 mm

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Technical data

Dimensions

Depth	54 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
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)
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 ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	1.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	16
Stripping length	8 mm

General

Mounting type	DIN rail
Net weight	134 g
Note on weight specifications	with connectors and bus base module
Diagnostics messages	I/O supply failure can be parameterized via PDI object FF8F _{hex}
	Short-circuit / overload of the digital outputs Yes

Interfaces

Designation	Axioline F local bus
No. of channels	2
Connection method	Bus base module
Transmission speed	100 Mbps

Axioline potentials

Designation	Supply of the Axioline F local bus U _{Bus}
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Technical data

Axioline potentials

Supply voltage	5 V DC (via bus base module)
Current consumption	max. 120 mA
Power consumption	max. 600 mW
Designation	Supply for digital output modules U _o
Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current consumption	max. 8 A (external fuse)
Power consumption	max. 240 W (Of which 560 mW with internal losses)
Type of protection	Surge protection of the supply voltage
	Polarity reversal protection of the supply voltage
Protection	max. 8 A (polarity reversal protection up to 5 A)

Digital outputs

Output name	Digital outputs
Connection method	Push-in connection
Connection technology	1-wire
Number of outputs	16
Type of protection	Short-circuit protection, overload protection of the outputs
Output voltage	24 V
Nominal output voltage	24 V DC
Maximum output current per channel	500 mA
Maximum output current per module	8 A (external fuse)
Nominal load, inductive	max. 12 VA (1.2 H, 48 Ω, with nominal voltage)
Nominal load, lamp	max. 12 W (at nominal voltage)
Nominal load, ohmic	max. 12 W (48 Ω, with nominal voltage)

Electrical isolation

Test section	5 V communications power (logic), 24 V supply (I/O) 500 V AC 50 Hz 1 min.
	5 V supply (logic)/functional earth ground 500 V AC 50 Hz 1 min.
	24 V supply (I/O) / functional earth ground 500 V AC 50 Hz 1 min.

Standards and Regulations

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

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
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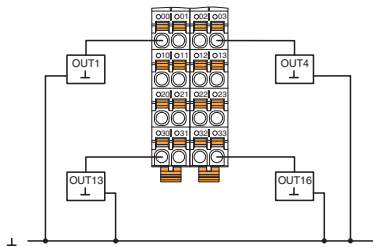
Technical data

Environmental Product Compliance

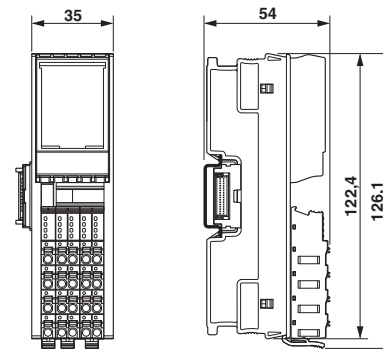
	No hazardous substances above threshold values
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Drawings

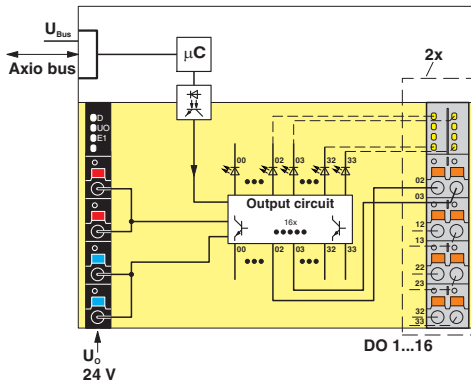
Connection diagram



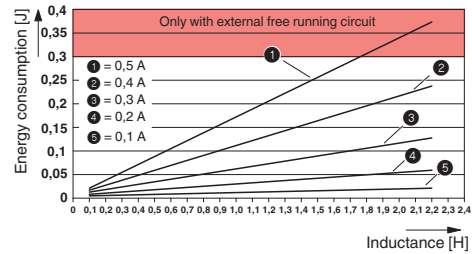
Dimensional drawing



Block diagram



Diagram



Internal wiring of the terminal points

Maximum energy consumption of the outputs when switching off inductive loads

The diagram shows the maximum amount of energy that may be fed back into the corresponding output groups (outputs 1 to 4, 5 to 8, 9 to 12, 13 to 16) for each switch off procedure when switching off an inductive load without external freewheeling circuit.

The current data refers to the ohmic DC voltage component of the inductive load.

Note: Restrict freewheeling voltage to a maximum of -15 V when using an external freewheeling circuit. The external freewheeling circuit has no function in the event of a higher negative voltage.

Classifications

eCl@ss

eCl@ss 4.0	27240404
eCl@ss 4.1	27240404

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Classifications

eCl@ss

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	39121311
UNSPSC 12.01	39121311
UNSPSC 13.2	32151602

Approvals

Approvals

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UL Listed / cUL Listed / EAC / BSH / RINA / NK / BSH / DNV GL / ABS / KR / cULus Listed

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
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Approvals

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
EAC			EAC-Zulassung
BSH		http://www.bsh.de/de/index.jsp	840
RINA		http://www.rina.org/en	ELE0078216XG
NK		http://www.classnk.or.jp/hp/en/	14A006
BSH		http://www.bsh.de/de/index.jsp	840
DNV GL		http://exchange.dnv.com/tari/	TAA00000DF
ABS		http://www.eagle.org/eagleExternalPortalWEB/	17-HG1669996-PDA
KR		http://www.krs.co.kr/eng/main/main.aspx	HMB17372-AC002
cULus Listed			

Accessories

Accessories

Connector set

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Accessories

Connector set - AXL CNS 2L-O/D/UO/E1 - 2700986



Axiline F connector set (for e.g., AXL F DO16/1 1H)

Device marking

Insert label - EMT (35X28)R - 0801602



Insert label, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK S1.1, mounting type: snapped into marker carrier, lettering field size: 35 x 28 mm

DIN rail connector

Bus connector - AXL F BS H - 2700992



Axiline F bus base module for housing type H

Terminal marking

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



Zack marker strip for Axiline 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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Accessories

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



Zack marker strip, flat, in 10 mm pitch, unprinted, 10-section, for individual labeling with M-PEN 0,8, X-PEN, or CMS-P1-PLOTTER