

AXL F DI8/2 24DC 1F - Digital module



2702783

<https://www.phoenixcontact.com/us/products/2702783>

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 documentation. Our general terms of use for downloads are valid.



Axioline F, Digital input module, Digital inputs: 8, 24 V DC, connection technology: 2-conductor, corresponds to standard IEC 61850-3, 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 acquire digital DC voltage signals in the low-voltage range. You can use low-voltage and extra-low voltage modules directly next to each other within an Axioline F station.

Your advantages

- 8 digital inputs according to EN 61131-2 type 1
- Connection of sensors in 2-conductor technology
- 24 V DC, 2.5 mA
- Filter time of < 1 ms
- Inputs are reverse polarity protected
- Safe isolation in accordance with EN 61010-2-201/IEC 61010-2-201
- Device rating plate stored
- Diagnostic and status indicators
- Meets the requirements of IEC 61850-3 and IEEE 1613

Commercial data

Item number	2702783
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR02
Product key	DRI231
Catalog page	Page 74 (C-6-2019)
GTIN	4055626320540
Weight per piece (including packing)	221.4 g
Weight per piece (excluding packing)	221.4 g
Customs tariff number	85389091
Country of origin	DE

AXL F DI8/2 24DC 1F - Digital module

2702783

<https://www.phoenixcontact.com/us/products/2702783>

Technical data

Dimensions

Dimensional drawing	
Width	53.6 mm
Height	126.1 mm
Depth	54 mm
Note on dimensions	The depth applies when a TH 35-7.5 DIN rail is used (in accordance with EN 60715).

Interfaces

Axioline F local bus

Number of interfaces	2
Connection method	Bus base module
Transmission speed	100 Mbps

System properties

Module

Input address area	1 Byte
Output address area	0 Byte
Required parameter data	3 Byte
Required configuration data	6 Byte

Input data

Digital

Input name	Digital inputs
Description of the input	EN 61131-2 type 1
Number of inputs	8
Connection method	Push-in connection
Connection technology	2-conductor
Input voltage	24 V DC (Nominal voltage) max. 100 V DC
Input voltage range	-100 V DC ... 100 V DC
Input voltage range "0" signal	-5 V DC ... 5 V DC
Input voltage range "1" signal	14.5 V DC ... 100 V DC
Nominal input voltage U_{IN}	24 V DC
Nominal input current at U_{IN}	2.5 mA

Input filter time	< 1 ms
Protective circuit	Polarity reversal protection of the inputs

Product properties

Type	block modular
Product type	I/O component
Product family	Axioline F
Mounting position	any (no temperature derating) Nominal mounting position: wall mounting on horizontal DIN rail
Scope of delivery	including bus base module and Axioline F connectors

Insulation characteristics

Overvoltage category	III (EN 61010-2-201/IEC 61010-2-201)
Pollution degree	2

Electrical properties

Potentials: Axioline F local bus supply (U_{Bus})

Supply voltage	5 V DC (via bus base module)
Current draw	max. 120 mA
Power consumption	max. 600 mW

Connection data

Connection technology

Connection name	Axioline F connector
Note on the connection method	Please observe the information provided on conductor cross sections in the "Axioline F: system and installation" user manual.

Conductor connection

Connection method	Push-in connection
Conductor cross section rigid	0.2 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross section AWG	24 ... 16
Stripping length	8 mm

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, rigid	0.2 mm ² ... 1.5 mm ²
Conductor cross section, flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross section AWG	24 ... 16
Stripping length	8 mm

Environmental and real-life conditions

Ambient conditions

AXL F DI8/2 24DC 1F - Digital module



2702783

<https://www.phoenixcontact.com/us/products/2702783>

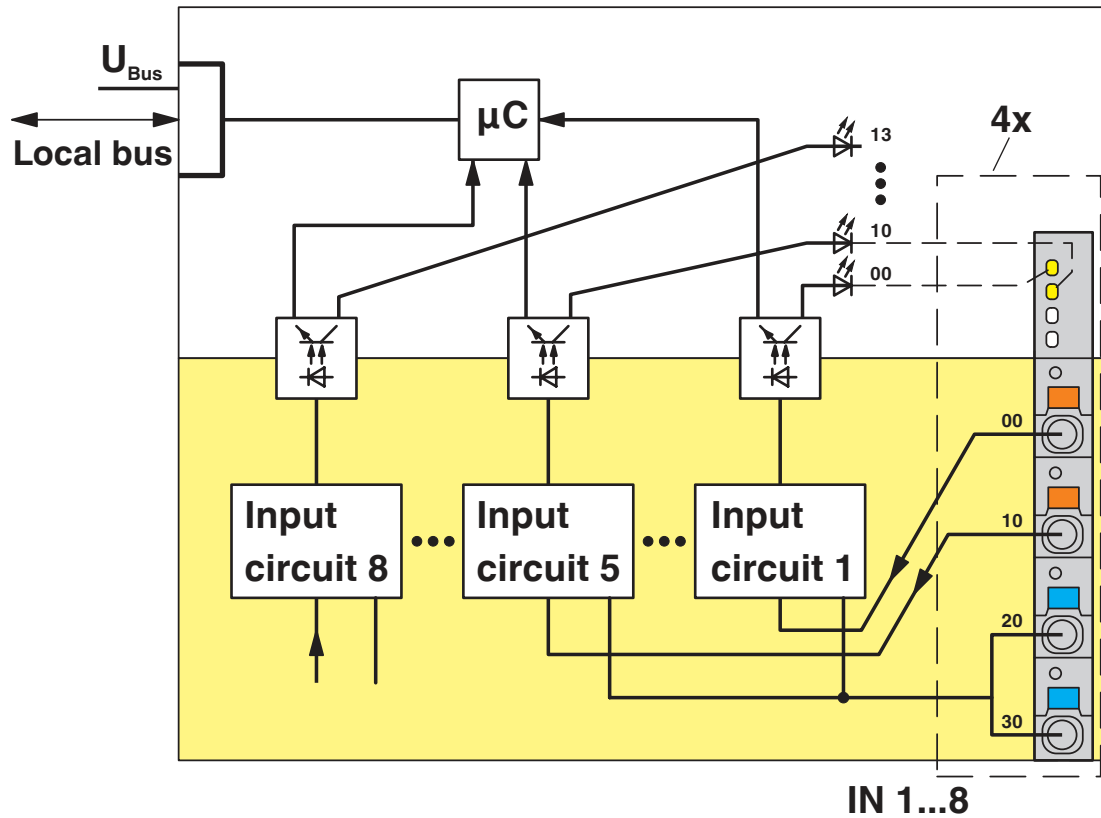
Ambient temperature (operation)	-25 °C ... 60 °C
Degree of protection	IP20
Air pressure (operation)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)

Mounting

Mounting type	DIN rail mounting
Mounting position	any (no temperature derating) Nominal mounting position: wall mounting on horizontal DIN rail

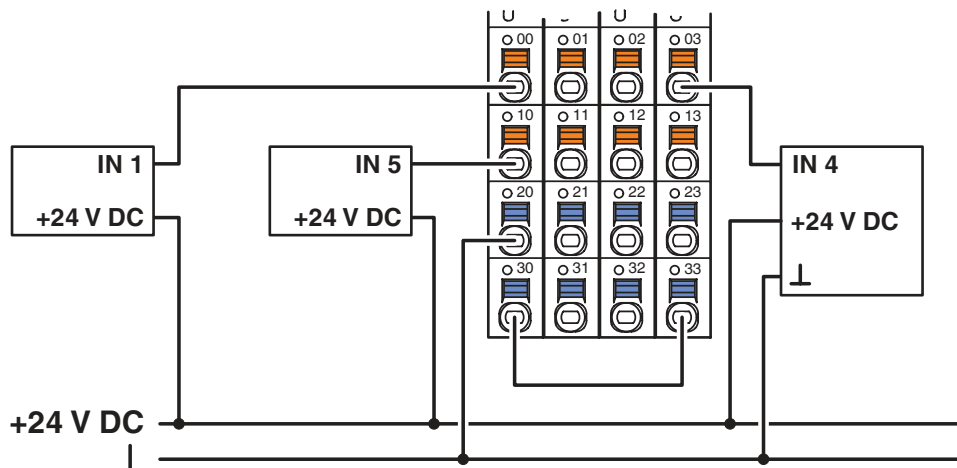
Drawings

Block diagram



Internal wiring of the terminal points

Connection diagram



Connection of sensors when using external busbars

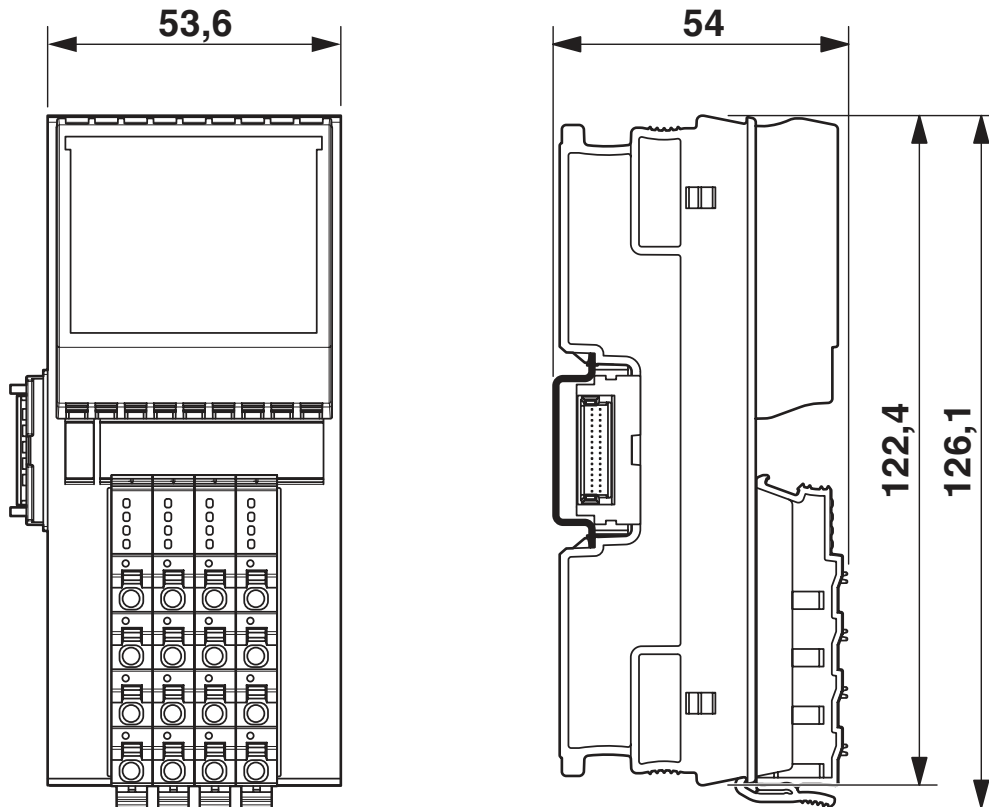
AXL F DI8/2 24DC 1F - Digital module

2702783

<https://www.phoenixcontact.com/us/products/2702783>



Dimensional drawing



AXL F DI8/2 24DC 1F - Digital module



2702783

<https://www.phoenixcontact.com/us/products/2702783>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2702783>



UL Listed

Approval ID: FILE E 238705



cUL Listed

Approval ID: FILE E 238705

UAE-RoHS

Approval ID: 23-02-63243

cULus Listed

AXL F DI8/2 24DC 1F - Digital module



2702783

<https://www.phoenixcontact.com/us/products/2702783>

Classifications

ECLASS

ECLASS-11.0	27242604
ECLASS-12.0	27242604
ECLASS-13.0	27242604

ETIM

ETIM 8.0	EC001599
----------	----------

UNSPSC

UNSPSC 21.0	32151600
-------------	----------

AXL F DI8/2 24DC 1F - Digital module



2702783

<https://www.phoenixcontact.com/us/products/2702783>

Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

AXL F DI8/2 24DC 1F - Digital module

2702783

<https://www.phoenixcontact.com/us/products/2702783>



Accessories

AXL F BS F - Bus connector

2688129

<https://www.phoenixcontact.com/us/products/2688129>



Axioline F bus base module for housing type F

ZB 20,3 AXL UNPRINTED - Zack marker strip

0829579

<https://www.phoenixcontact.com/us/products/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

AXL F DI8/2 24DC 1F - Digital module



2702783

<https://www.phoenixcontact.com/us/products/2702783>

ZBF 7,5:UNBEDRUCKT - Zack Marker strip, flat

0809942

<https://www.phoenixcontact.com/us/products/0809942>



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 7.5 mm, lettering field size: 5.15 x 7.4 mm, Number of individual labels: 10

EMT (35X46)R - Insert label

0801604

<https://www.phoenixcontact.com/us/products/0801604>



Insert label, for marking the Axioline F series from Phoenix Contact, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: insert, lettering field size: 35 x 46 mm, Number of individual labels: 500

AXL F DI8/2 24DC 1F - Digital module

2702783

<https://www.phoenixcontact.com/us/products/2702783>



TTC-6P-2X1-24DC-PT-I - Surge protection device

2906816

<https://www.phoenixcontact.com/us/products/2906816>



Surge protection, consisting of protective plug and base element, with integrated status indicator for two signal wires with common reference potential, e.g., Digital IN/OUT.

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com