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AXL F DI8/2 48/60DC 1F - Digital module

2702654

https://www.phoenixcontact.com/pc/products/2702654

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Axioline F, Digital input module, Digital inputs: 8, 48 V DC / 60 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. Low-voltage and extra-low-voltage modules can be used side by side within an Axioline F station.

Your advantages

- 8 digital inputs according to EN 61131-2 type 1
- Connection of sensors in 2-conductor technology
- 48 V DC / 60 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	2702654
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	DRI231
Catalog page	Page 74 (C-6-2019)
GTIN	4055626276885
Weight per piece (including packing)	222 g
Weight per piece (excluding packing)	222 g
Customs tariff number	85389091
Country of origin	DE

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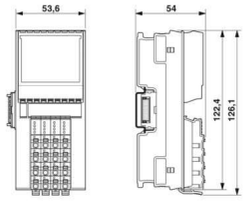
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Technical data

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).

Notes

Note on application

Note on application	Only for industrial use

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	48 V (Nominal voltage)
	60 V (Nominal voltage)

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	max. 100 V DC
Input voltage range	-100 V DC ... 100 V DC
Input voltage range "0" signal	-12 V DC ... 12 V DC
Input voltage range "1" signal	32 V DC ... 100 V DC
Nominal input voltage U_{IN}	48 V DC
	60 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

Product type	I/O component
Product family	Axioline F
Type	block modular
Mounting position	any (no temperature derating) Nominal mounting position: panel mounting on horizontal DIN rail
Scope of delivery	including bus base module and Axioline F connectors
Special properties	corresponds to standard IEC 61850-3

Insulation characteristics

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

Electrical properties

Maximum power dissipation for nominal condition	1.8 W

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

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

Electrical isolation/isolation of the voltage ranges

Test voltage: I/Os / logic	4 kV
	5 kV
Test voltage: I/O/functional ground	4 kV
	5 kV
Test voltage: I/O / I/O (adjacent connectors)	2.5 kV
Test voltage: Logic/functional ground	1 kV

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

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Conductor cross section rigid	0.2 mm² ... 1.5 mm²
Conductor cross section flexible	0.2 mm² ... 1.5 mm²
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 mm² ... 1.5 mm²
Conductor cross section, flexible	0.2 mm² ... 1.5 mm²
Conductor cross section AWG	24 ... 16
Stripping length	8 mm

Environmental and real-life conditions

Ambient conditions

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)

Standards and regulations

Standard designation	Ambient conditions
Standards/specifications	IEC 61850-3

Mounting

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

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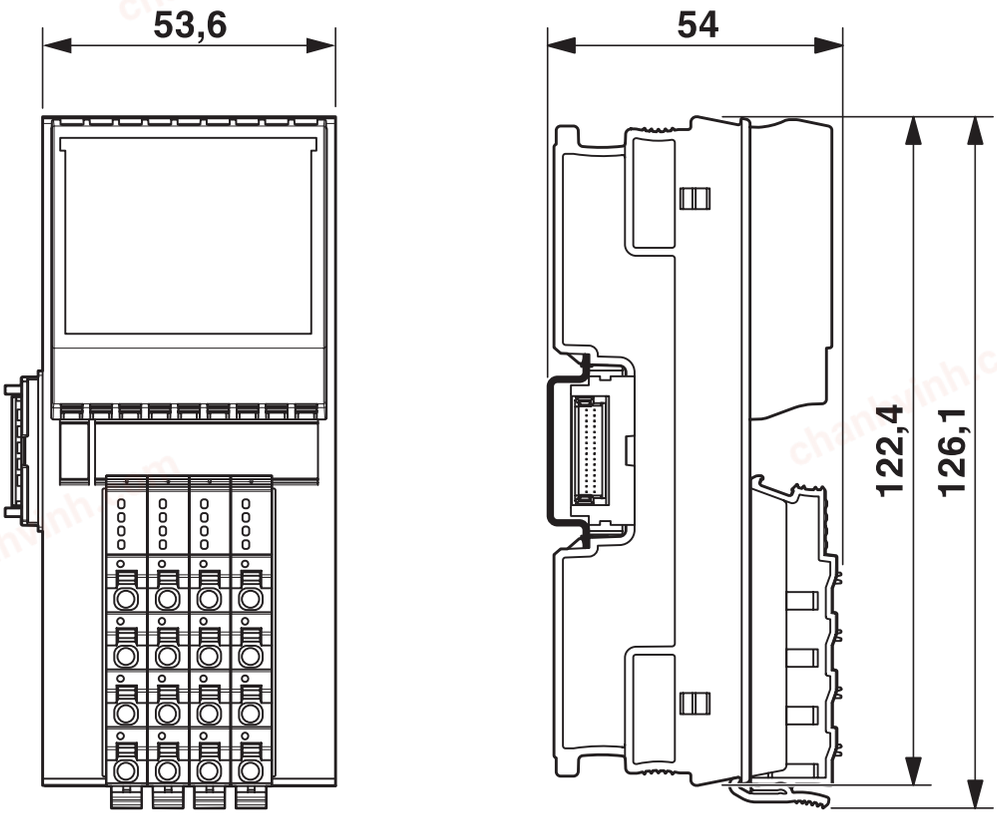
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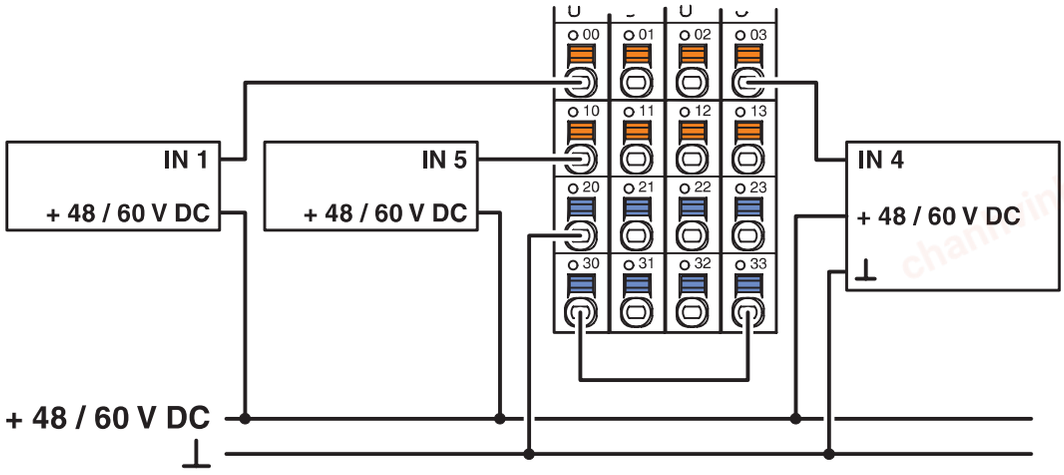
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Drawings

Dimensional drawing



Connection diagram



Connection of sensors when using external busbars

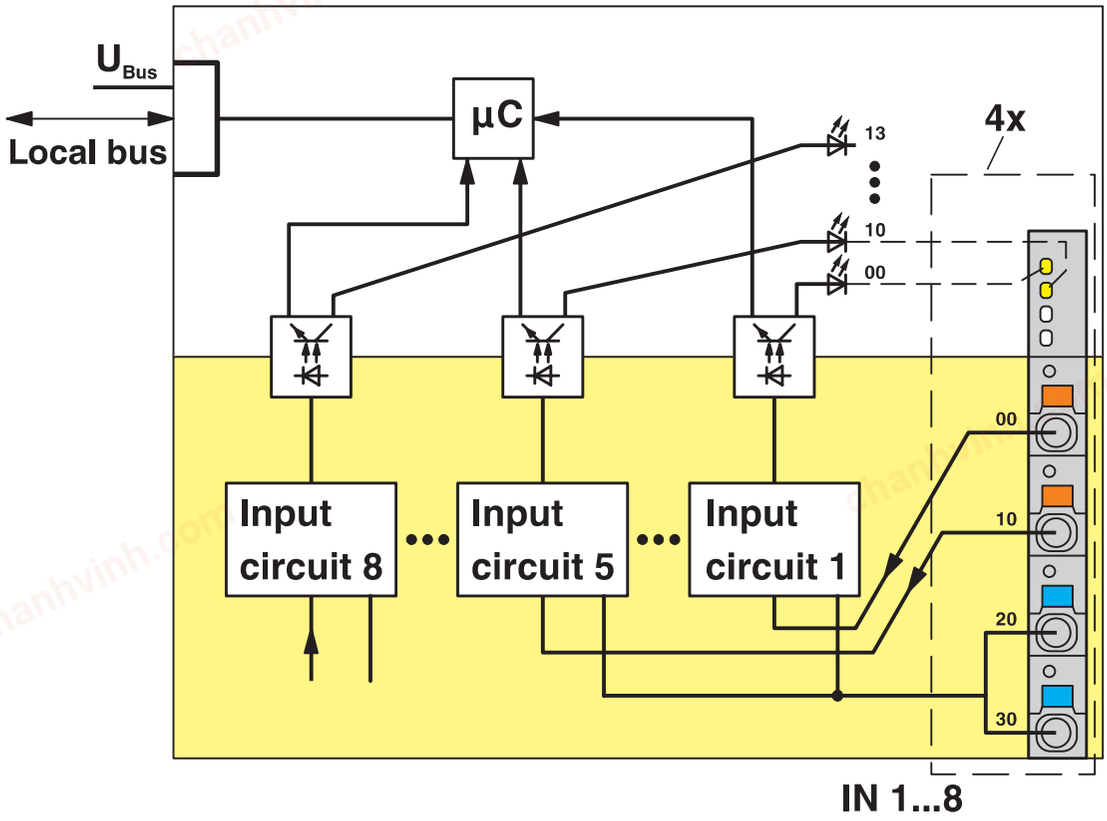
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Block diagram



Internal wiring of the terminal points

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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/pc/products/2702654

UAE-RoHS
Approval ID: 23-02-63243

cULus Listed
Approval ID: E238705

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Classifications

ECLASS

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

ETIM

ETIM 9.0	EC001599

UNSPSC

UNSPSC 21.0	32151600

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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	0ce2b8bf-d008-4281-b50c-5ce36d28fb9f

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