

AXL F CNT2 1H - Function module

1028066

<https://www.phoenixcontact.com/us/products/1028066>



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Axioline F, Function module, Counter input; Counter inputs: 2; Digital inputs: 6, 24 V DC; Digital outputs: 4, 24 V DC; transmission speed in the local bus: 100 Mbps; degree of protection: IP20; Scope of supply: including bus base module and Axioline F connectors

Product description

The module is designed for use within an Axioline F station. This counter module acquires and processes fast pulse sequences from sensors. The module has two counter channels. For each channel, the module has one counter input (source), one control input (gate), one counting direction input (direction), and two parameterizable outputs. You can operate the module in four operating modes: event counting, frequency measurement, time measurement, speed measurement.

Your advantages

- 2 counter inputs
- Maximum input frequency: 200 kHz
- 32-bit counter (up and down)
- Control of 2 outputs per channel depending on comparative values
- Counter control using a hardware or software gate
- Single or periodic count
- Device rating plate stored

Commercial data

Item number	1028066
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR02
Product key	DRI263
GTIN	4055626524252
Weight per piece (including packing)	188 g
Weight per piece (excluding packing)	135 g
Customs tariff number	85389091

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Country of origin	DE
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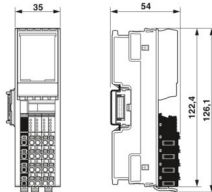
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Technical data

Dimensions

Dimensional drawing	
Width	35 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
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Material specifications

Color (Housing)	gray (RAL 7042)
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Interfaces

Axioline F local bus

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

System properties

Programming data (LocalbusSlave)

Input address area	28 Byte
Output address area	28 Byte

Fieldbus data telegram (PROFIBUS)

Required parameter data	80 Byte
Required configuration data	7 Byte

Input data

Digital:

Input name	Digital inputs
Description of the input	EN 61131-2 type 1
Number of inputs	6

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Connection method	Push-in connection
Input voltage range "0" signal	-3 V DC ... 5 V DC
Input voltage range "1" signal	15 V DC ... 30 V DC
Nominal input voltage U_{IN}	24 V DC
Input filter time	< 2.5 μ s

Counter:

Input name	Counter inputs
Description of the input	EN 61131-2 type 1
Connection method	Push-in connection
Number of inputs	2
Input voltage	24 V DC
Input voltage range "0" signal	-3 V DC ... 5 V DC
Input voltage range "1" signal	15 V DC ... 30 V DC
Input frequency	max. 200 kHz
Resolution	32 bits

Output data

Digital:

Output name	Digital outputs
Output description	Push-pull outputs, driver power = 500 mA against GND (high-side switch, PNP), reduced driver power = 100 mA against nominal voltage (low-side switch, NPN)
Connection method	Push-in connection
Number of outputs	4
Protective circuit	Short-circuit protection; electronic Overload protection; electronic
Output voltage	24 V DC
Output current	max. 500 mA (Per channel, high side) max. 100 mA (Per channel, low side)
Nominal output voltage	24 V DC
Output voltage range	19.2 V DC ... 30 V DC
Nominal load, ohmic	For applications with UL approval, only connect ohmic loads or general loads.

Product properties

Product type	I/O component
Product family	Axioline F
Type	block modular
Mounting position	any (no temperature derating)
Scope of supply	including bus base module and Axioline F connectors

Insulation characteristics

Overvoltage category	II (IEC 60664-1, EN 60664-1)
Pollution degree	2 (IEC 60664-1, EN 60664-1)

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Electrical properties

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

Supply voltage	5 V DC (via bus base module)
Current draw	max. 100 mA typ. 90 mA

Potentials: Supply voltage feed-in (U_{IO})

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current draw	max. 4 A
Current consumption	typ. 33 mA (Own current consumption; without wiring of the terminal points)
Protective circuit	Surge protection; electronic (35 V, 0.5 s) Reverse polarity protection; electronic

Supply: Sensor supply (U_S)

Designation	Sensor supply (U_{S1} , U_{S2})
Supply voltage	24 V DC (from U_{IO})
Supply voltage range	19.2 V DC ... 30 V DC

Electrical isolation/isolation of the voltage ranges

Test voltage: 5 V supply of the local bus (U_{BUS}) / 24 V supply (I/Os)	500 V AC, 50 Hz, 1 min
Test voltage: 5 V supply of the local bus (U_{BUS}) / functional ground	500 V AC, 50 Hz, 1 min
Test voltage: 24 V supply (I/O) / functional ground	500 V AC, 50 Hz, 1 min

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.

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

Ambient temperature (operation)	-25 °C ... 60 °C
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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)

Mechanical test

Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6	5g
Shock in accordance with EN 60068-2-27/IEC 60068-2-27	30g
Continuous shock in accordance with EN 60068-2-27/IEC 60068-2-27	10g

Standards and regulations

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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Mounting

Mounting type	DIN rail mounting
Mounting position	any (no temperature derating)

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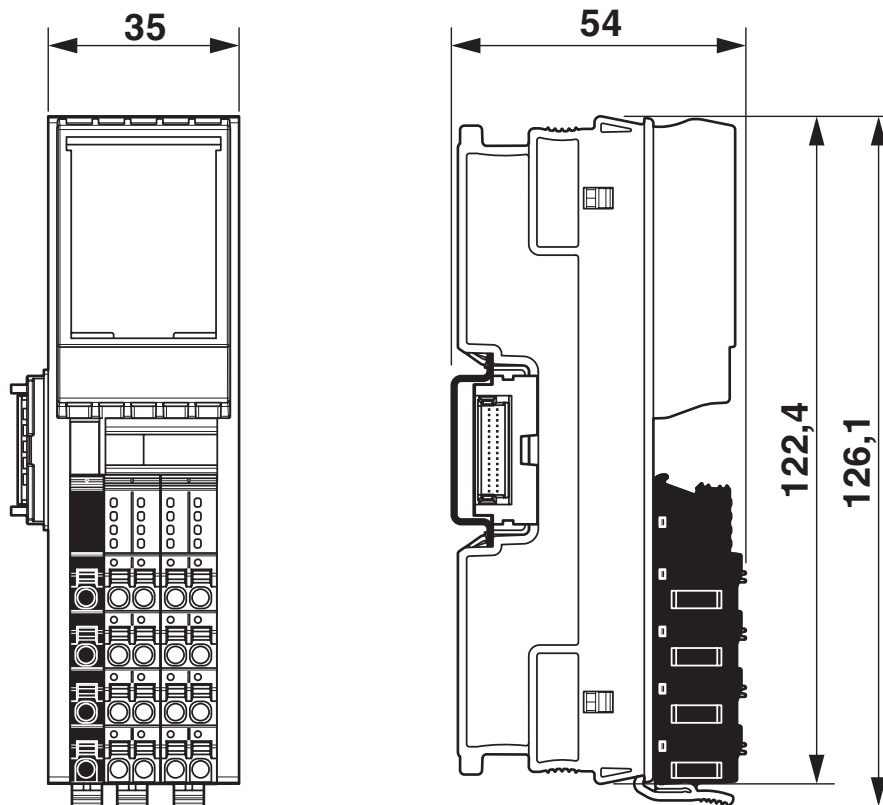
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Drawings

Dimensional drawing



Dimensions (in mm)

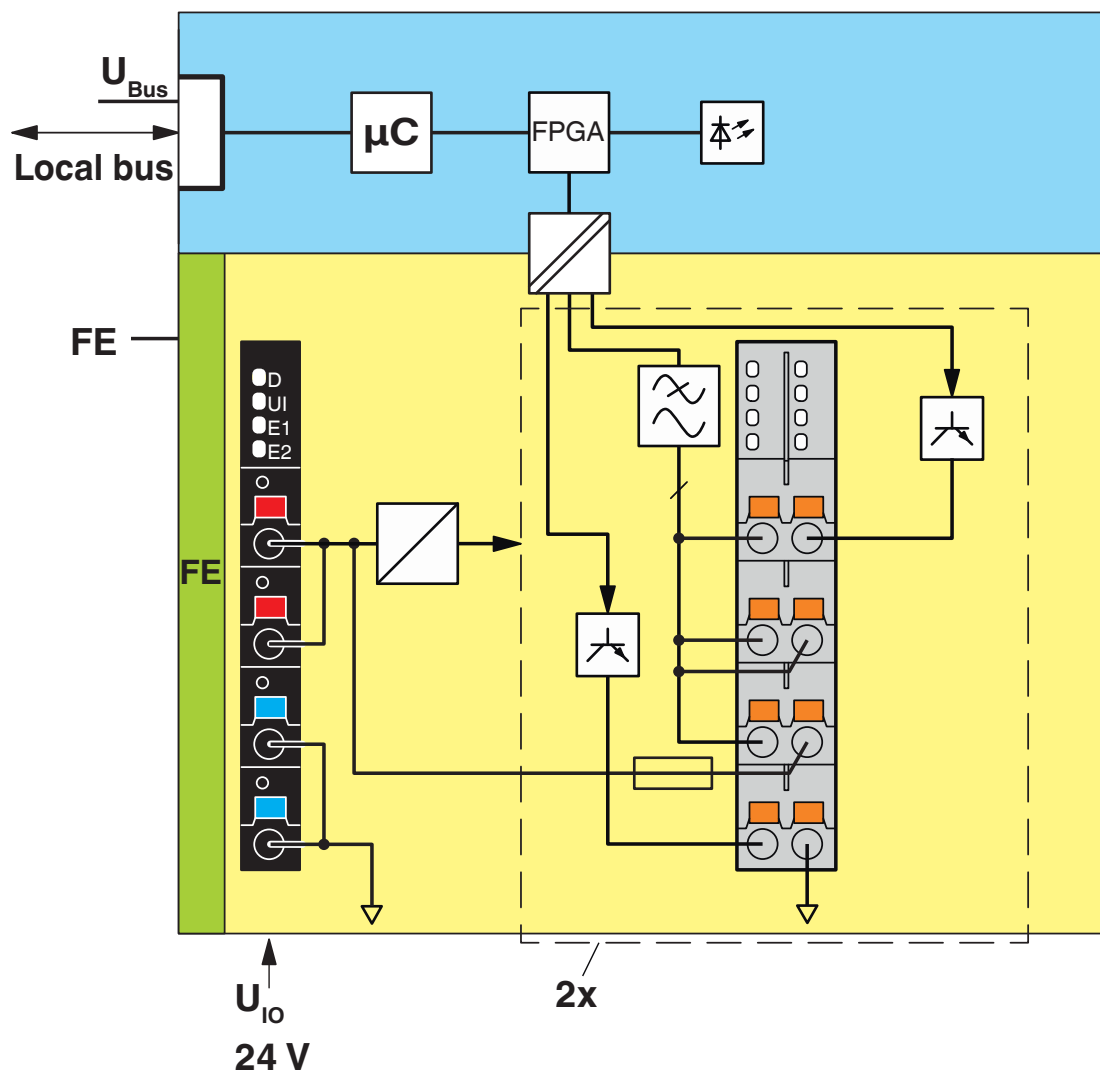
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Block diagram



Internal wiring of the terminal points

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Approvals

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cULus Listed

Approval ID: E238705

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Classifications

ECLASS

ECLASS-13.0	27242605
ECLASS-15.0	27242605

ETIM

ETIM 10.0	EC001601
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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)
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