AXL SE CNT1 - Function module

1088131

https://www.phoenixcontact.com/us/products/1088131

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 Smart Elements, Function module, Counter input; Counter input: 1; Control input: 1; Counting direction input: 1; Digital output: 1, 24 V DC (100 mA); degree of protection: IP20; The product is being prepared for compliance with the Cyber Resilience Act (CRA).

Product description

You can integrate Axioline Smart Elements into systems with the Smart Element interface. This Smart Element detects and processes fast pulse sequences from sensors. The Smart Element has a counter input (source), a control input (gate), a counting direction input (direction) and a configurable output (OUT).

Your advantages

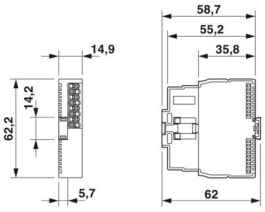
- 32-bit counter (up and down)
- Maximum input frequency: 150 kHz
- Activation of an output is based on a comparative value
- Counter control using a hardware or software gate
- Single or periodic count
- Protected 24 V sensor/actuator supply
- Device rating plate stored

Commercial data

Item number	1088131
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR05
Product key	DRIB63
GTIN	4055626887722
Weight per piece (including packing)	35.1 g
Weight per piece (excluding packing)	34.6 g
Customs tariff number	85389091
Country of origin	DE

Technical data

Dimensions

Dimensional drawing	
Width	14.9 mm
Height	62.2 mm
Depth	62 mm

Notes

Note on application	Only for industrial use
Note on application	As things stand now, we are preparing the product so that, as of December 11, 2027, it will comply with the requirements of the EU Cyber Resilience Act (CRA) based on the information currently available regarding the CRA.

Mounting

Mounting type	Plug-in mounting (Smart Element slot)
Mounting position	See the system in which the Smart Element is used.

Material specifications

Color (Housing)	gray (RAL 7042)

Interfaces

Smart Element interface

Number of interfaces	1
Connection method	Card edge connector
Start time until ready to operate	< 500 ms

System properties

Programming data

Process data channel	48 bit
Input address area	6 Byte
Output address area	6 Byte

Fieldbus data telegram (PROFIBUS)

Required parameter data	20 Byte
Required configuration data	7 Byte

Input data

Counter:

Input name	Counter input
Description of the input	EN 61131-2 type 1
Connection method	Push-in connection
Number of inputs	1 (Source)
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. 150 kHz
Input current	typ. 2.3 mA
Resolution	32 bits

Output data

Digital:

Output name	Digital output
Output description	Push-pull output (switches to GND at level 0)
Connection method	Push-in connection
Number of outputs	1 (OUT)
Protective circuit	Short-circuit and overload protection; electronic
	Surge protection; Suppressor diode
Output voltage	24 V DC

Product properties

Product type	I/O component
Product family	Axioline Smart Elements
Type	modular
Mounting position	See the system in which the Smart Element is used.
Special properties	The product is being prepared for compliance with the Cyber Resilience Act (CRA)

Insulation characteristics

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

Electrical properties

Maximum power dissipation for nominal condition	1.42 W

Potentials: Communications power supply of the Smart Elements (U_{SE})

Supply voltage	using card edge connectors

Potentials: I/O supply (U_P)

Supply voltage	24 V DC (using card edge connectors)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current draw	max. 700 mA
	typ. 620 mA

Current consumption	min. 20 mA (without connected peripherals)
Protective circuit	Surge protection; See the system in which the Smart Element is used.
	Reverse polarity protection; Polarity protection diode
Protection	See the system in which the Smart Element is used.

Supply:

Designation	Sensor/actuator supply U_S
Supply voltage	24 V DC

Electrical isolation/isolation of the voltage ranges

Test voltage: Communications supply / 24 V supply (I/O)	500 V AC, 50 Hz, 1 min
Test voltage: Communications supply / 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	I/O
Note on the connection method	Please observe the information provided on conductor cross-sections in the “Axioline Smart Elements” user manual.

I/O

Connection method	Push-in connection
Note on the connection method	Please observe the information provided on conductor cross-sections in the “Axioline Smart Elements” user manual.
Conductor cross-section, rigid	0.25 mm² ... 1.5 mm²
Conductor cross-section, flexible	0.25 mm² ... 1.5 mm²
Conductor cross-section AWG	24 ... 16
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 1.5 mm²
Conductor cross-section, flexible, with ferrule, without plastic sleeve	0.25 mm² ... 1.5 mm²
	0.25 mm² ... 1.5 mm²
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 1.5 mm²
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)

Mechanical test

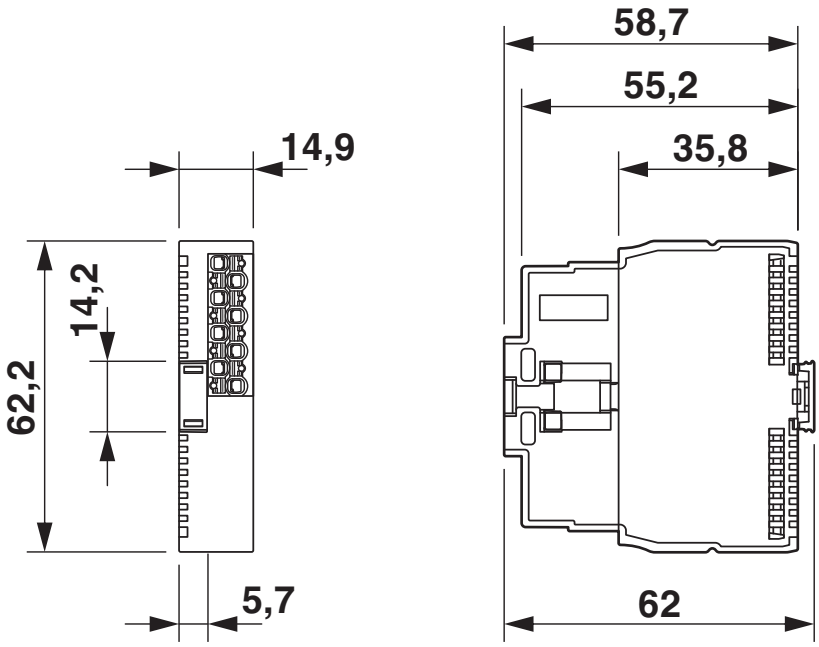
Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6	5g
Shock in accordance with EN 60068-2-27/IEC 60068-2-27	30g
Continuous shock in accordance with EN 60068-2-27/IEC 60068-2-27	10g

Standards and regulations

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

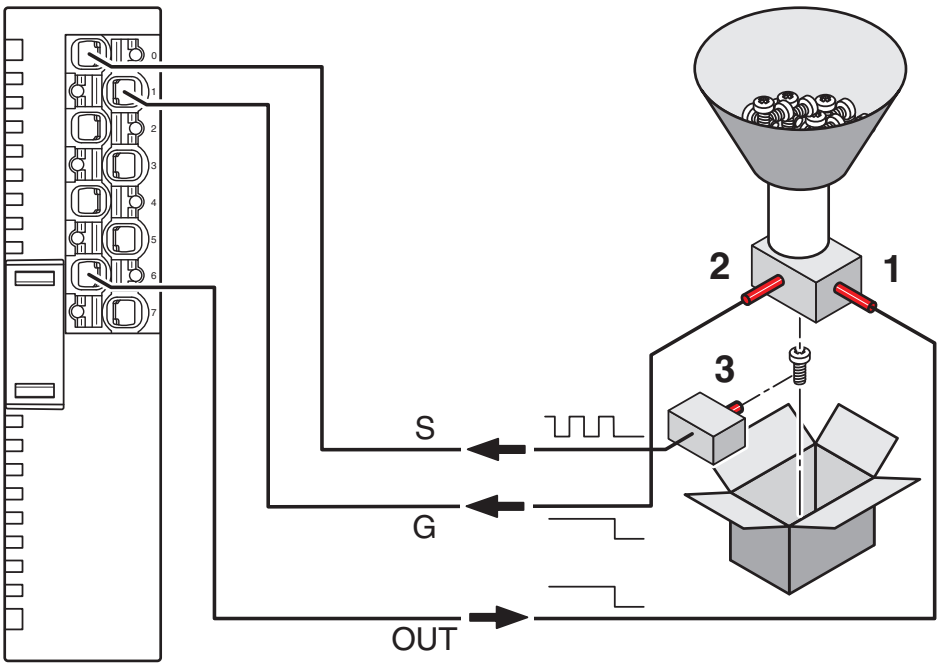
Drawings

Dimensional drawing



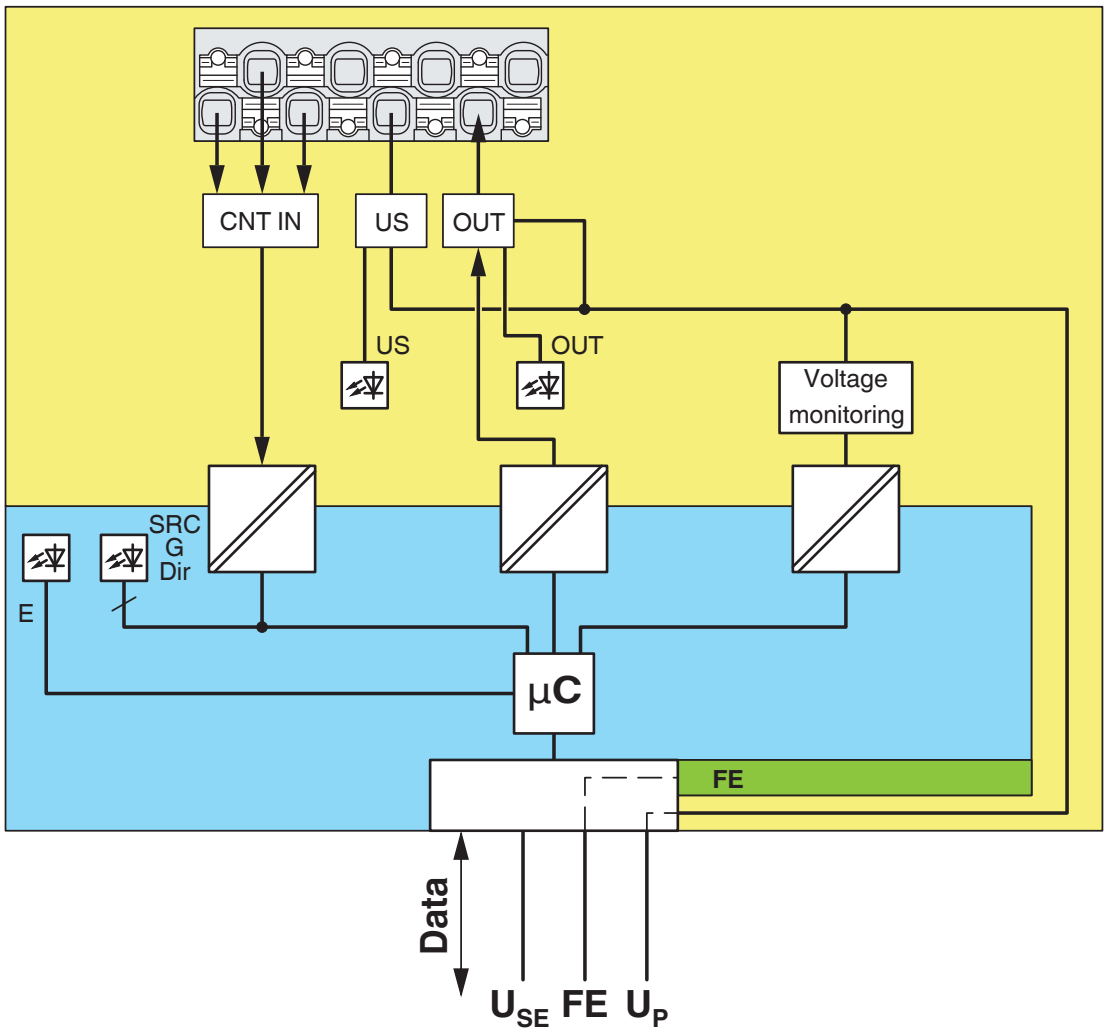
Dimensions

Connection diagram



Connection example

Block diagram



Internal wiring of the terminal points

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1088131

cULus Listed
Approval ID: E238705

Classifications

ECLASS

ECLASS-13.0	27242605
ECLASS-15.0	27242605

ETIM

ETIM 10.0	EC001601

UNSPSC

UNSPSC 21.0	32151600

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	468fdef8-cfcd-458e-a095-dae07f558968

EF3.1 Climate Change

CO2e kg	2.461 kg CO2e

Phoenix Contact 2026 © - 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