

AXL SE DI8/2 48 - Digital module



1438680

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Axioline Smart Elements, Digital input module, Digital inputs: 8 (floating), 48 V DC, connection technology: 2-conductor, degree of protection: IP20

Product description

You can integrate Axioline Smart Elements into systems with the Smart Element interface. This Smart Element detects digital signals.

Your advantages

- 8 digital inputs in accordance with EN 61131-2 type 1 and type 3 for 48 V DC inputs
- Nominal voltage: 48 V DC
- Nominal current: 2.4 mA
- Connection of sensors in floating 2-conductor technology
- Filter time of < 1 ms
- Device rating plate stored

Commercial data

Item number	1438680
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR05
Product key	DRIB31
GTIN	4063151816759
Weight per piece (including packing)	37.5 g
Weight per piece (excluding packing)	35 g
Customs tariff number	85389091
Country of origin	DE

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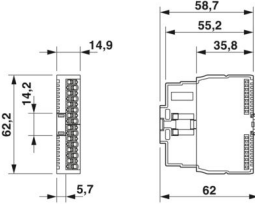
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Technical data

Dimensions

Dimensional drawing		
Width		14.9 mm
Height		62.2 mm
Depth		62 mm

Notes

Note on application

Note on application	Only for industrial use
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Interfaces

Smart Element interface

Number of interfaces	1
Connection method	Card edge connector
Transmission speed	See system in which you use the Smart Element.
Start time until ready to operate	< 500 ms

System properties

Module

ID code (hex)	none
Process data channel	8 bit
Input address area	1 Byte
Output address area	0 Byte
Required parameter data	1 Byte
Required configuration data	6 Byte

Input data

Digital:

Input name	Digital inputs
Description of the input	EN 61131-2 types 1 and 3
Number of inputs	8 (floating)
Connection method	Push-in connection
Connection technology	2-conductor
Input voltage range	-60 V DC ... 60 V DC

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Input voltage range "0" signal	-10 V DC ... 10 V DC
Input voltage range "1" signal	15 V DC ... 60 V DC
	-60 V DC ... -15 V DC
Nominal input voltage U_{IN}	48 V DC
Nominal input current at U_{IN}	± 2.4 mA
Input filter time	< 1 ms

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.

Insulation characteristics

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

Electrical properties

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

Supply voltage	using card edge connectors
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Electrical isolation/isolation of the voltage ranges

Test voltage: Communications power supply / 24 V supply U_P	500 V AC, 50 Hz, 1 min
Test voltage: 24 V supply U_P / functional ground	500 V AC, 50 Hz, 1 min
Test voltage: Communications supply / functional ground	500 V AC, 50 Hz, 1 min
Test voltage: I/O channel / supply logic	500 V AC, 50 Hz, 1 min
Test voltage: I/O channel / 24 V supply U_P	100 V AC, 50 Hz, 1 min
Test voltage: I/O channel / functional ground	500 V AC, 50 Hz, 1 min
Test voltage: I/O channel / I/O channel	100 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.

Conductor connection

Connection method	Push-in connection
Conductor cross-section rigid	0.25 mm ² ... 1.5 mm ²
Conductor cross-section flexible	0.25 mm ² ... 1.5 mm ²
Conductor cross-section AWG	24 ... 16
Conductor cross-section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1.5 mm ²
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 1.5 mm ²
Stripping length	8 mm

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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.
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Conductor cross-section, flexible	0.25 mm ² ... 1.5 mm ²
Conductor cross-section AWG	24 ... 16
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 1.5 mm ²
Conductor cross-section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1.5 mm ²
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

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

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

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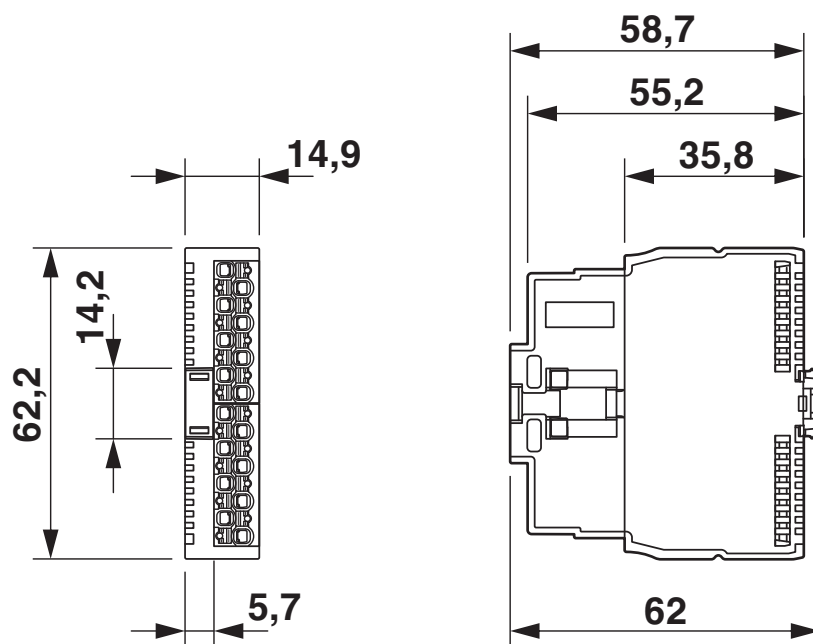
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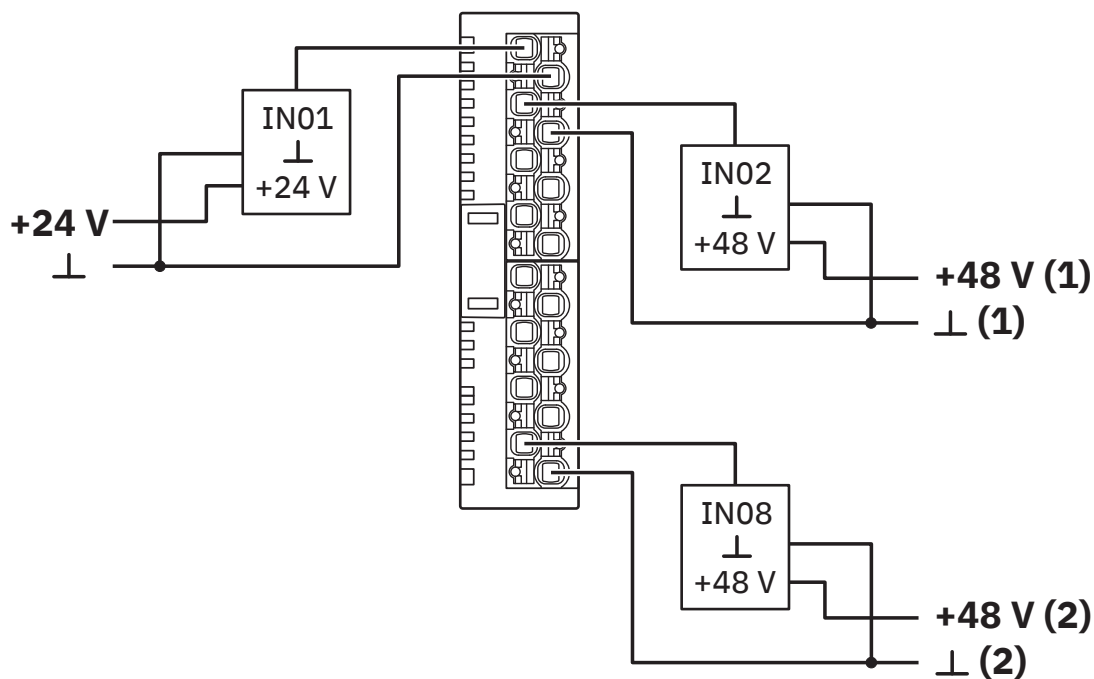
Drawings

Dimensional drawing



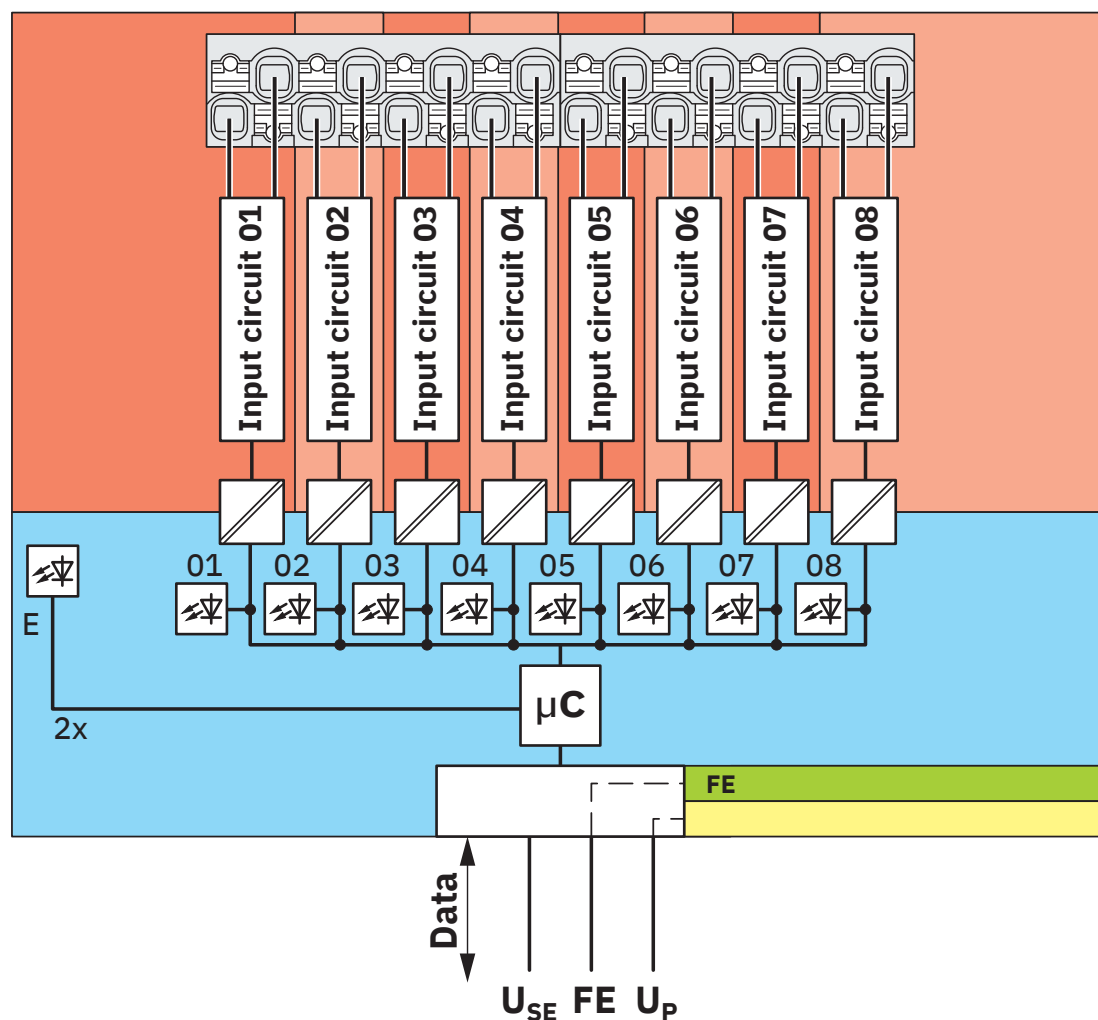
Dimensions

Connection diagram



Connection example

Block diagram



Internal wiring of the terminal points

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Approvals

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Classifications

ECLASS

ECLASS-13.0	27242604
ECLASS-15.0	27242604

ETIM

ETIM 9.0	EC001599
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UNSPSC

UNSPSC 21.0	32151600
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes
Exemption	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.)	No substance above 0.1 wt%