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AXL E IOL TC4/K M12 - Analog module

2702983

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Axioline E IO-Link/analog converter with 4 analog TC inputs (type K/J), 2-conductor connection technology, 1 IO-Link A port, 24 V DC, IP65 degree of protection

Product description

The Axioline E IO-Link/analog converter is an IO-Link device that transfers analog signals from thermocouples (TCs) via the IO-Link protocol. The device offers you the option of using an IO-Link master to record the analog signals of conventional type K/J thermocouples (TC). It supports type K/J thermocouples in accordance with DIN EN 60584-1. The measured values are depicted in standardized representation format. The device is connected to an IO-Link master via an IO-Link A port. Use within different networks is possible via the IO-Link master.

Your advantages

- Connection to an IO-Link master with M12 connector (A-coded, 4-pos.)
- IO-Link A port
- IO-Link specification V1.1.2
- Status indicators
- 4 differential inputs for thermocouples
- Measuring range type K: -270°C ... +1,372°C
- Measuring range type J: -210 °C ... +1200 °C
- Selectable resolution 0.1 K/0.01 K
- Connection of sensors in 2-conductor technology
- M12 cable gland, Push-in Technology
- Diagnostic information in the process data word
- Supply of the module electronics via the IO-Link interface of the master
- Degree of protection IP65

Commercial data

Item number	2702983
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	DRI7Z5
Catalog page	Page 181 (C-6-2019)
GTIN	4055626447261
Weight per piece (including packing)	384.3 g
Weight per piece (excluding packing)	384.3 g
Customs tariff number	85176200
Country of origin	DE

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Technical data

Notes

Note on application

Note on application	Only for industrial use

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area

Product properties

Product type	Interface converter
Product family	Axioline E
Type	Stand-Alone
Special properties	Plastic housing

Insulation characteristics

Pollution degree	2 (EN 60664-1)

Electrical properties

Supply: IO-Link

Designation	IO-Link port supply (L+)
Nominal voltage for I/O supply	24 V DC (Provided via the IO-Link interface of the IO-Link master.)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Nominal current per device	typ. 35 mA (±15% (at 24 V DC), max. 70 mA)
Protective circuit	Reverse polarity protection; yes
	Short-circuit protection; yes
	Overload protection; yes

Electrical isolation/isolation of the voltage ranges

Test voltage: IO-Link bus logic	500 V AC, 50 Hz, 1 min
Test voltage: Thermocouple I/O devices	500 V AC, 50 Hz, 1 min
Test voltage: Functional ground	500 V AC, 50 Hz, 1 min

Input data

IO-Link

Number of ports	1
Connection method	M12 connector, A-coded
Connection technology	3-conductor
Port type	Class A
Specification	V1.1.2
Reverse polarity protection	yes
Transmission speed	230.4 kbps (COM3)

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Amount of process data	64 bit (4x 16-bit input data)

Analog

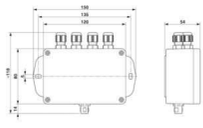
Input name	Analog TC inputs
Description of the input	Differential inputs
Number of inputs	4
Connection method	Push-in technology
Connection technology	2-conductor
A/D conversion time	typ. 40 ms
A/D converter resolution	24 bit
Sensor types that can be used (TC)	K/J
Measuring principle	Sigma/Delta process
Measured value representation	16 bits
Protective circuit	Transient protection of inputs
	Overload protection
	Wire-break detection

Connection data

Thermocouples

Connection method	Push-in technology
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

Dimensions

Dimensional drawing	
Width	150 mm
Height	54 mm
Depth	118 mm
Note on dimensions	When installing, note the length of the M12 connector for the IO-Link cable and the bending radii of the TC cables.

Material specifications

Color	light grey RAL 7035
Housing material	PC

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Degree of protection	IP65 (not UL-tested)

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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)	-25 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 %
Permissible humidity (storage/transport)	5 % ... 95 %

Standards and regulations

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

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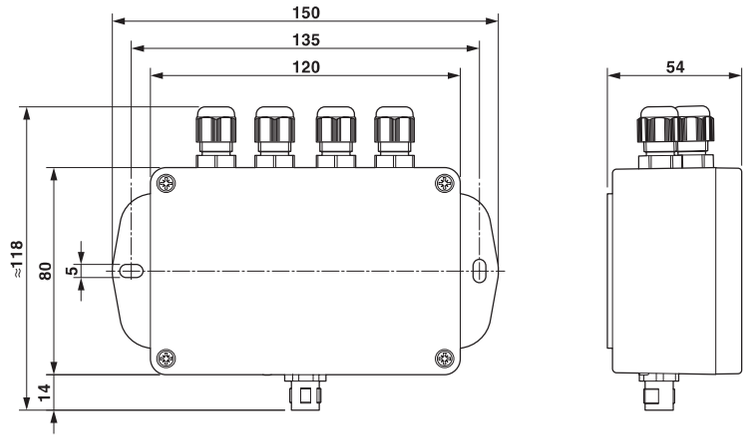
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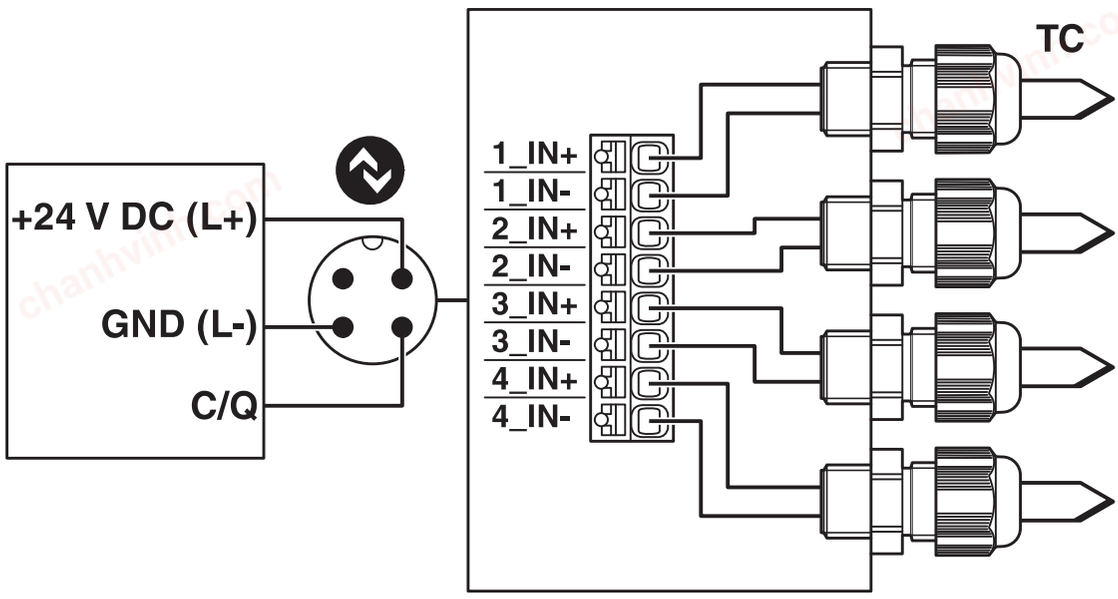
Drawings

Dimensional drawing



Dimensions (in mm)

Connection diagram



Connection example

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Approvals

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cULus Listed
Approval ID: E238705

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Classifications

ECLASS

ECLASS-11.0	27242601
ECLASS-12.0	27242601
ECLASS-13.0	27242601

ETIM

ETIM 9.0	EC001596

UNSPSC

UNSPSC 21.0	32151600

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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c), 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	26d555e4-3514-41b0-9dde-cd8953e32142

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