

Temperature module - AXL SE RTD4 PT1000



1182190

<https://www.phoenixcontact.com/pc/products/1182190>

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, Temperature recording module, Analog RTD inputs: 4 (Pt 1000), connection technology: 3-conductor, degree of protection: IP20

Product Description

You can integrate Axioline Smart Elements into systems with the Smart Element interface. This Smart Element detects the signals of resistive temperature sensors.

Your advantages

- 4 analog input channels for the connection of resistance temperature detectors (Pt 1000)
- Connection of sensors in 3-conductor technology
- 2- and 4-conductor sensors can also be connected
- Data format: standardized representation
- Resolution: 16 bits
- Wire-break detection
- Substitute value behavior can be parameterized for each input
- Device rating plate stored

Commercial Data

Item number	1182190
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	DRIB43
GTIN	4063151219215
Weight per Piece (including packing)	39.82 g
Weight per Piece (excluding packing)	35 g
Customs tariff number	85437090
Country of origin	DE

Temperature module - AXL SE RTD4 PT1000

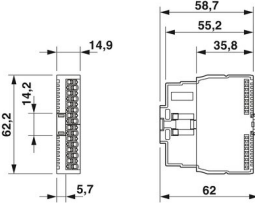


1182190

<https://www.phoenixcontact.com/pc/products/1182190>

Technical Data

Dimensions

Dimensional drawing	
Width	14.9 mm
Height	62.2 mm
Depth	62 mm

Notes

Utilization restriction

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

Material specifications

Color	traffic grey A RAL 7042
-------	-------------------------

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	< 1000 ms

System properties

Module

ID code (hex)	none
Process data channel	64 Bit
Input address area	8 Byte
Output address area	8 Byte
Required parameter data	24 Byte
Required configuration data	6 Byte

Input data

Analog

Input name	Analog RTD inputs
Description of the input	Inputs for resistive temperature sensors

Temperature module - AXL SE RTD4 PT1000



1182190

<https://www.phoenixcontact.com/pc/products/1182190>

Number of inputs	4 (Pt 1000)
Connection method	Push-in connection
Connection technology	3-conductor
Note regarding the connection technology	shielded, 2-, 3-, and 4-conductor sensors can be connected
A/D converter resolution	16 bit
Sensor types (RTD) that can be used	Pt 1000 (IEC 60751/EN 60751)
Data formats	Standardized representation
Measured value representation	16 bits (15 bits + sign bit)
Nominal value of the current sources	1 mA (pulsed current, the data is valid during the sampling phase)
Process data update	typ. 1 ms
Protective circuit	Overload protection; max. ± 40 V DC, 1 min. Transient protection

Product properties

Type	modular
Product type	I/O component
Mounting position	See the system in which the Smart Element is used.

Insulation characteristics

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

Electrical properties

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. 12 mA typ. 8 mA
Current consumption	min. 5 mA
Power consumption	max. 290 mW min. 120 mW
Protective circuit	Surge protection; See the system in which the Smart Element is used. Reverse polarity protection; Polarity protection diode

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

Temperature module - AXL SE RTD4 PT1000



1182190

<https://www.phoenixcontact.com/pc/products/1182190>

Connection method	Push-in connection
Conductor cross section solid	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

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 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, 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

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)
------------------	---------------------------------------

Mounting

Mounting type	Smart Element slot
Mounting position	See the system in which the Smart Element is used.

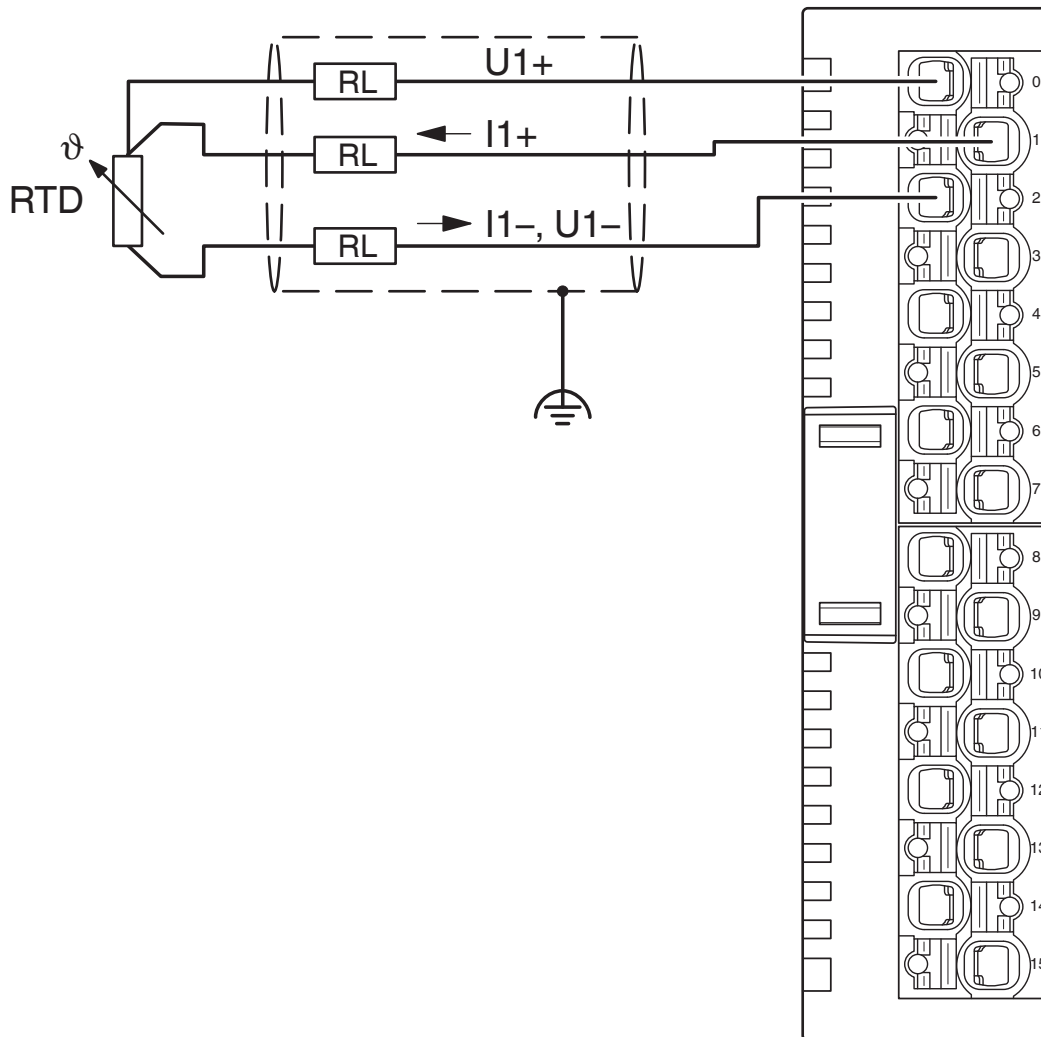
Temperature module - AXL SE RTD4 PT1000

1182190

<https://www.phoenixcontact.com/pc/products/1182190>

Drawings

Connection diagram



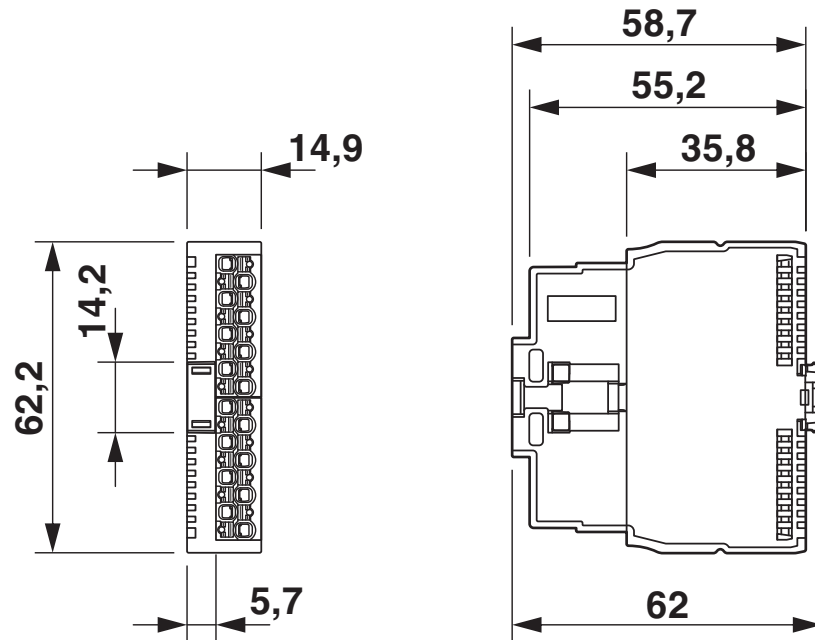
Connection example

Temperature module - AXL SE RTD4 PT1000

1182190

<https://www.phoenixcontact.com/pc/products/1182190>

Dimensional drawing



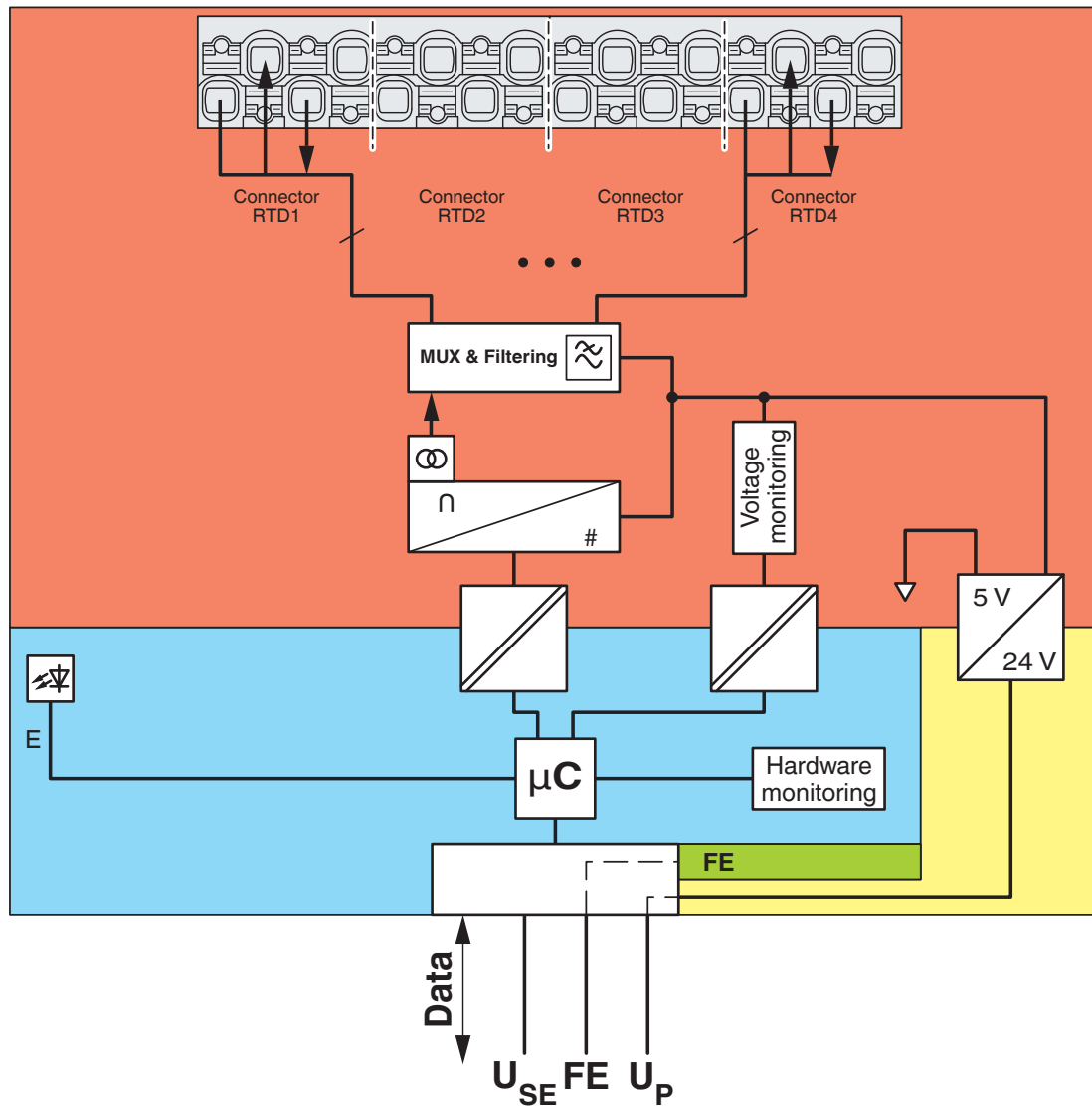
Dimensions

Temperature module - AXL SE RTD4 PT1000

1182190

<https://www.phoenixcontact.com/pc/products/1182190>

Block diagram



Internal wiring of the terminal points

Temperature module - AXL SE RTD4 PT1000



1182190

<https://www.phoenixcontact.com/pc/products/1182190>

Approvals



UL Listed

Approval ID: FILE E 238705

Temperature module - AXL SE RTD4 PT1000



1182190

<https://www.phoenixcontact.com/pc/products/1182190>

Classifications

ECLASS

ECLASS-9.0	27242604
ECLASS-10.0.1	27242604
ECLASS-11.0	27242601
ECLASS-12.0	27242601

ETIM

ETIM 8.0	EC001596
----------	----------

UNSPSC

UNSPSC 21.0	32151600
-------------	----------

Temperature module - AXL SE RTD4 PT1000



1182190

<https://www.phoenixcontact.com/pc/products/1182190>

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

Temperature module - AXL SE RTD4 PT1000



1182190

<https://www.phoenixcontact.com/pc/products/1182190>

Mandatory Accessories

Module carrier

Module carrier - AXL F BP SE4 - 1088135

<https://www.phoenixcontact.com/pc/products/1088135>

Axioline F, Backplane, 4 slots for Axioline Smart Elements, transmission speed in the local bus: 100 Mbps, degree of protection: IP20



Module carrier

Module carrier - AXL F BP SE6 - 1088136

<https://www.phoenixcontact.com/pc/products/1088136>

Axioline F, Backplane, 6 slots for Axioline Smart Elements, transmission speed in the local bus: 100 Mbps, degree of protection: IP20



Accessories

Temperature module - AXL SE RTD4 PT1000

1182190

<https://www.phoenixcontact.com/pc/products/1182190>

Screwdriver

Screwdriver - SZS 0,4X2,5 VDE - 1205037

<https://www.phoenixcontact.com/pc/products/1205037>



Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

Crimping pliers

Crimping pliers - CRIMPFOX 6 - 1212034

<https://www.phoenixcontact.com/pc/products/1212034>



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

Temperature module - AXL SE RTD4 PT1000

1182190

<https://www.phoenixcontact.com/pc/products/1182190>

Crimping pliers

Crimping pliers - CRIMPFOX DUO 10 - 1031721

<https://www.phoenixcontact.com/pc/products/1031721>



Crimping pliers, type of contact: Insulated and uninsulated ferrules, min. cross section: 0.14 mm², max. cross section: 10 mm², for TWIN ferrules up to 2 x 4 mm², automatic cross section adjustment, rotating die, lateral and frontal insertion, compression: Trapezoidal crimp, black/green

Crimping pliers

Crimping pliers - CRIMPFOX 10T-F - 1134913

<https://www.phoenixcontact.com/pc/products/1134913>



Crimping pliers, type of contact: Insulated and uninsulated ferrules, standards/specifications: DIN 46228-1, DIN 46228-4, min. cross section: 0.14 mm², max. cross section: 10 mm², For TWIN ferrules up to 2 x 4 mm², automatic cross section adjustment, frontal insertion, compression: Trapezoidal crimp, black

Temperature module - AXL SE RTD4 PT1000



1182190

<https://www.phoenixcontact.com/pc/products/1182190>

Label

Label - MM-TML (EX4,2)R C1 TR/BK - 0803979

<https://www.phoenixcontact.com/pc/products/0803979>



Label, Roll, transparent, unlabeled, can be labeled with: THERMOFOX, THERMOMARK GO, THERMOMARK GO.K, mounting type: adhesive, for terminal block width: 8000 mm, lettering field size: continuous x 3.2 mm

Marker strip

Marker strip - SK 5,0 WH:REEL - 0805221

<https://www.phoenixcontact.com/pc/products/0805221>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: continuous x 5 mm, Number of individual labels: 90000

Temperature module - AXL SE RTD4 PT1000



1182190

<https://www.phoenixcontact.com/pc/products/1182190>

Marker for terminal blocks

Marker for terminal blocks - UM6M-TM (5X12) - 0830928

<https://www.phoenixcontact.com/pc/products/0830928>

Markers for marking terminal blocks from ABB/Entelec, 24-section, unmarked, can be marked with THERMOMARK CARD and BLUEMARK, color: white



Marker for terminal blocks from the SNK series from ABB

Marker for terminal blocks from the SNK series from ABB - UCT6M-TM 5 - 0830756

<https://www.phoenixcontact.com/pc/products/0830756>

Marker for terminal blocks from the SNK series from ABB, Sheet, white, unlabeled, can be labeled with: THERMOMARK CARD, THERMOMARK CARD 2.0, THERMOMARK PRIME, BLUEMARK ID, BLUEMARK ID COLOR, TOPMARK LASER, TOPMARK NEO, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 4.17 x 11.3 mm



Phoenix Contact 2022 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG

Flachsmarktstraße 8

D-32825 Blomberg

+49 (0) 5235-3 00

info@phoenixcontact.com