

Inline terminal - IB IL SGI 1/CAL - 2700064

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Inline analog strain gauge input terminal, without accessories, evaluating electronics with EC type approval

Why buy this product

- 1 input for strain gauge
- Electronic evaluating device to set up non-automatic weighing instruments (NAWI)
- Serial interface for external weight displays
- Zero point, tare, and standstill display
- Up to 3000 pitch values
- Alibi memory for up to 65,536 measurement protocols
- Parameterization and calibration using FDT/DTM technology
- Various filter settings
- Can be calibrated by EC type approval according to standards EN 45501 and OIML R76



Key commercial data

Packing unit	1 pc
GTIN	 4 046356 484022
Weight per Piece (excluding packing)	160.0 g
Custom tariff number	85389091
Country of origin	Germany
Note	Made to Order (non-returnable)

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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Dimensions

Width	48.8 mm
Height	120 mm
Depth	71.5 mm

Inline terminal - IB IL SGI 1/CAL - 2700064

Technical data

Dimensions

Note on dimensions	Dimensions with covering hood
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Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C (Type approval according to DIN EN 45501 and OIML R76: -10°C ... 40°C)
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (according to DIN EN 61131-2)
Permissible humidity (storage/transport)	10 % ... 95 % (according to DIN EN 61131-2)
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)
Degree of protection	IP20

General

Weight	160 g
Mounting type	DIN rail
Operating mode	Process data operation with 2 words, PCP with 2 words
Protection class	III, IEC 61140, EN 61140, VDE 0140-1
Test section	Logic/analog I/O (digital isolator) 500 V AC 50 Hz 1 min
	24 V supply (U _{ANA})/analog I/O (DC/DC converter) 500 V AC 50 Hz 1 min
	RS-485/analog I/O (isolating distance) 500 V AC 50 Hz 1 min
	Contacts PS _a - PS _b /analog I/O (isolating distance) 500 V AC 50 Hz 1 min
	Functional earth ground/analog I/O (isolating distance) 500 V AC 50 Hz 1 min
	Logic/24 V supply (U _{ANA}) (DC/DC converter) 500 V AC 50 Hz 1 min
	RS-485/24 V supply (U _{ANA}) (DC/DC converter) 500 V AC 50 Hz 1 min
	Functional earth ground/24 V supply (U _{ANA}) (isolating distance) 500 V AC 50 Hz 1 min
	Logic/RS-485 (digital isolator) 500 V AC 50 Hz 1 min
	Functional earth ground/RS-485 (isolating distance) 500 V AC 50 Hz 1 min
	Logic/contacts PS _a - PS _b (optocoupler) 500 V AC 50 Hz 1 min
	Functional earth ground/contacts PS _a - PS _b (isolating distance) 500 V AC 50 Hz 1 min
	Logic/functional earth ground (isolating distance) 500 V AC 50 Hz 1 min
Diagnostics messages	Failure of the power supply at U _{ANA} Error message in the process data
	Failure of or insufficient communications power U _L I/O error message sent to the bus coupler
	Peripheral fault Error message in the process data
	User error Error message in the process data

Interfaces

Fieldbus system	Lokalbus
Designation	Inline local bus
Connection method	Inline data jumper

Inline terminal - IB IL SGI 1/CAL - 2700064

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Interfaces

Transmission speed	500 kBit/s
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Serial interface

Designation	RS-485
Network	Yes
Addressing	Address 0 = Broadcast, alternating display of measured gross/net value and measured tare value
	Address 1 = Measured gross/net value
	Address 2 = Measured tare value
	Address 3 ... 9 = reserved
Termination resistor	120 Ω
Transmission protocol	STX/ETX

Inline potentials

Communications power U_L	7.5 V DC
Current consumption from U_L	typ. 80 mA
	max. 100 mA
I/O supply voltage U_{ANA}	24 V DC
Current consumption from U_{ANA}	max. 50 mA
	12 mA (For a typical load of 350 Ω and display)
	43 mA (For a maximum load of 55 Ω and display)
Power consumption	typ. 1 W (Device in nominal operation)
	max. 2 W (Device with maximum load)

Contacts

Description	Lock of parameters
Quantity	1 (PS_a - PS_b)
Logic	PS_a - PS_b connected = Parameter locked
Typical response time	< 100 ms

Analog inputs

Description of the input	Input channel for strain gauge
Number of inputs	1
Connection method	6-wire, twisted pair shielded cable
Bridge difference U_d	Measuring range specified by selecting the characteristic
Bridge voltage U_0	5 V
Characteristics	± 1 mV/V, ± 2 mV/V, ± 3 mV/V, ± 3.33 mV/V, ± 4 mV/V, ± 5 mV/V
Measured value representation	Process data: status bits and measured value including decimal places of the gross/net display
Process data update	typ. 100 ms

Analog outputs

Type of protection	Short-circuit protection of the voltage outputs
Protective circuit/component	Yes, at least 1 minute through temperature monitoring

Inline terminal - IB IL SGI 1/CAL - 2700064

Technical data

Analog outputs

Output description	Voltage output
Number of outputs	1
Impedance	> 55 Ω
Output voltage	typ. 5 V \pm 2 %
	max. 5 V \pm 5 %
Output current	max. 90 mA
Maximum output current	max. 90 mA

Classifications

eCl@ss

eCl@ss 4.0	27240405
eCl@ss 4.1	27240405
eCl@ss 5.0	27242201
eCl@ss 5.1	27242601
eCl@ss 6.0	27242602
eCl@ss 7.0	27242602

ETIM

ETIM 3.0	EC001599
ETIM 4.0	EC001599
ETIM 5.0	EC001596

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	43201404

Approvals

Approvals

Approvals

PTB-BG / PTB-BG

Ex Approvals

Inline terminal - IB IL SGI 1/CAL - 2700064

Approvals

Approvals submitted

Approval details

PTB-BG

PTB-BG

Accessories

Accessories

Device parameterization

Software - AX+ BASIC - 2985068



Software CD for FDT container for integrating device DTMs (free download)

Software - AX DTM LIB - 2988065



DTM library

Plug

Calibration set - IB IL SGI EU CALSET - 2700165



Calibration set, required for approval, consisting of a covering hood to protect against manipulation, markers, connector-in PCB with SMKDS terminals, shield fast connections, marker pen

Inline connector - IB IL SCN-8 - 2726337



Connector, for digital 1, 2 or 8-channel Inline terminals

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Accessories

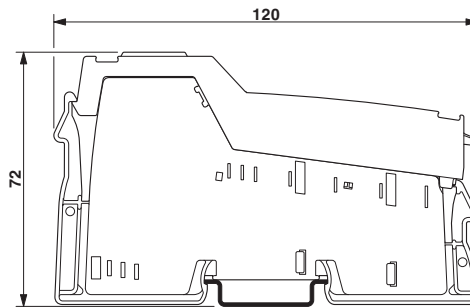
Inline shield connector - IB IL SCN-6 SHIELD - 2726353



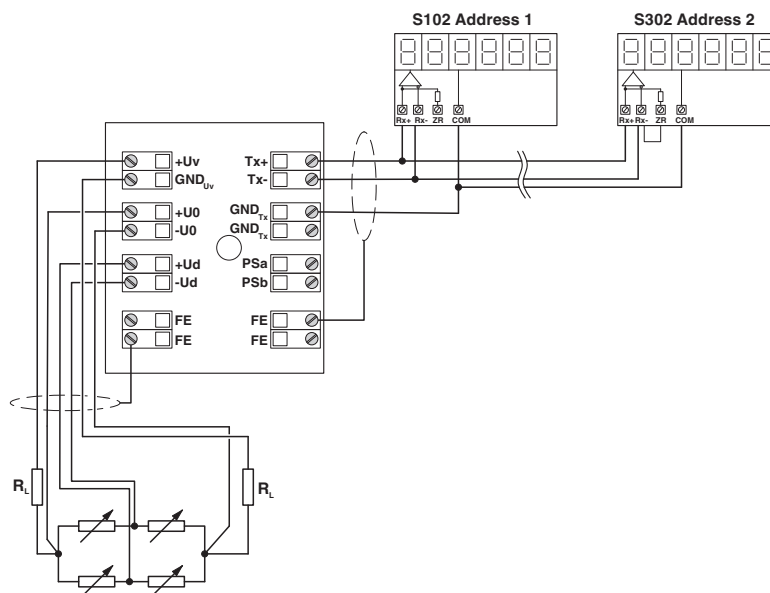
Inline shield connector

Drawings

Dimensioned drawing



Connection diagram



Connection of strain gauges in 6-wire technology (calibration set)

