

# FICHA TÉCNICA DE PRODUTO

# PRODUCT DATASHEET

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ABB MEASUREMENT & ANALYTICS | DATA SHEET

# TEIP11-PS

# I/P signal converter for standard signals



# Proven and reliable concept

# Integral mount design

Small dimensions, low weight

# Sturdy construction and solid functionality

• Influence of shock and vibration < 1 % at 10 g

# Variety of signal ranges

- Input e.g. 0 to 20 mA or 4 to 20 mA
- Output 0.2 to 1 bar (3 to 15 psi)

# Complies with the following directives

- EMC directive 2014/30/EU
- EC directive for CE declaration of conformity

# Wide temperature range

 From –40° (optional –55°) to 85 °C (–40° [optional –67°] to 185 °F

# Approvals for explosion protection

 ATEX, FM / CSA, EACEx for intrinsically safe and pressure-resistant operation

### Concept

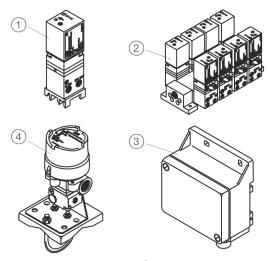
The TEIP11-PS signal converter converts standard electrical signals, e.g. 4 to 20 mA to 0.2 to 1 bar (3 to 15 psi). It is therefore a connecting link between electrical/electronic and pneumatic systems. The signal conversion process is similar to the patented force balance method.

Special features of the TEIP11-PS signal converter are its relatively small dimensions and outstanding operational stability when subject to shock and vibration. The converter can be subjected to loads up to 10 g with less than 1% effect on function.

The housing units are available in a variety of models to meet your installation requirements. For potentially explosive conditions, units that offer intrinsically safe operation or pressure-resistant encapsulation are available with international approval certificates for use worldwide. Various ranges can be supplied on the input side and the output side for signal conversion (see **Specification** on page 4).

The device requires only compressed air 1.4 bar (20 psi) for the power supply.

### **Designs**



- Control room housing for rail mounting
- Control room housing unit for block mounting
- 3 Plastic field mount housing
- 4) Aluminum or stainless steel field mount housing

Figure 1: TEIP11-PS designs

#### Control room housing unit for rail mounting

The control room housing for rail mounting is the simplest and lowest priced version of the I/P signal converter.

A mounting base that is compatible with all commercially

A mounting base that is compatible with all commercially available EN rails is used for installation.

The housing unit with plastic cap has an IP 20 protection rating.

# Control room housing unit for block mounting

The control room housing unit for block mounting enables you to install a number of converters in a small space. This design features central air supply via connection block and stop valves in the air connectors of the integrated signal converter.

A maximum of 4 signal converters can be fitted on the connection blocks required for block mounting. If necessary, 2 or 3 (or max. 4) connection blocks can be connected to each other to create block units of 4-8-12-16 signal converters. Stop valves allow you to mount or remove individual converters during operation.

#### ... Designs

#### Field mount housing

The field mount housing is suited for installation on-site or in open areas. The housing can be made from plastic with IP rating IP 54, from aluminum with IP rating IP 65 and from stainless steel with IP rating IP 65. The housing is suited for wall mounting and for 2 in pipe mounting.

A specially designed signal converter in a plastic housing unit enables the use of combustible gas as a power supply instead of the standard compressed air.

#### **Specification**

#### Input (electric)

#### Signal range

0 to 20 mA or 4 to 20 mA 0 to 10 mA or 10 to 20 mA 4 to 12 mA or 12 to 20 mA (additional ranges available upon request)

#### Input resistance

Ri = 260  $\Omega$  at 20 °C (68 °F), Tk + 0.4 %/K

#### Overpressure limit

30 mA (for Ex devices see **Ex relevant specifications** on page 8).

#### Capacitance / inductance

Negligible

#### **Output (pneumatic)**

#### Signal range

0.2 to 1 bar (3 to 15 psi)

#### Air capacity

 $\geq$  5 kg/h = 4.1 Nm<sup>3</sup>/h = 2.4 scfm

#### Load power in accordance with VDE / VDI 3520

 $\geq$  0.95 kg/h = 0.9 Nm<sup>3</sup>/h = 0.5 scfm

#### Power supply (pneumatic)

#### Instrument air

Free of oil, water, and dust acc. to DIN/ISO 8573-1 Pollution and oil content according to Class 3 Pressure dew point 10 K below operating temperature

#### Supply pressure

1.4 bar (20 psi) 2.5 bar (36 psi)\*

#### Output signal

0.2 to 1 bar (3 to 15 psi) 0.4 to 2 bar (6 to 30 psi)\*

\* Valid for Option 509 only – increased input signal.

#### Air consumption

 $\leq$  0.2 kg/h = 0.16 Nm<sup>3</sup>/h = 0.1 scfm

#### Transmission data and contributing factors

#### Characteristic curve

Linear, direct, or reverse action

#### Characteristic curve deviation

≤ 0.5 %

#### Hysteresis

≤ 0.3 %

#### Dead band

≤ 0.1 %

#### Temperature

 $\leq$  1 % / 10 K within –20 to 85 °C (–4 to 185 °F)  $\leq$  2 % / 10 K within –55 to –20 °C (–67 to –4 °F)

#### Power supply

 $\leq$  0.3 % / 0.1 bar (1.5 psi) change in pressure

#### Mechanical vibration

 $\leq$  1 % to 10 g and 20 to 80 Hz

#### Seismic vibration

Meets the requirements of DIN IEC 68-3-3 Class III for strong and strongest earthquakes.

#### Mounting orientation

Zero point≤ 0.4 % at 90° change of position

#### Step response

10 to 90 % and 90 to 10 % 0.6 s 5 to 15 % and 15 to 5 % 0.25 s 45 to 55 % and 55 to 45 % 0.2 s 85 to 95 % and 95 to 85 % 0.15 s

#### EMC

Meets the requirements of EMC Directive 2014/30/EU (increased interference immunity as per EN 50082-2 PR)

#### **CE Marking**

Complies with the EC directive for CE conformity

#### Operating conditions at installation site

#### Ambient temperature

Depending on the ordered model:

-40 to 85 °C (-40 to 185 °F)

-55 to 85 °C (-67 to 185 °F)

For Ex d:

-40 to 85 °C (-40 to 185 °F)

#### Mounting position

Any

#### **Environmental capabilities**

#### Climate class

GPF or FPF acc. to DIN 40040

Temperature:

-55 to 85 °C (-67 to 185 °F),

-45 to 85 °C (-49 to 185 °F)

Relative humidity for operation, storage, or transport:

75 % average, 95 % short-term, no condensation

#### **Expected service life of the device**

With proper use and consideration of relevant environmental conditions, the service life of the TEIP11-PS can reach approx. 10 years.

Regular maintenance work and / or proper repairs by ABB Service, along with the use of ABB spare parts, can extend the service life of the TEIP11-PS.

#### ... Specification

#### Design for rail mounting

#### Material / IP rating

IP 20 aluminum housing unit, with plastic cover

#### Mounting

#### Rail mounting:

EN 50022 - 35 × 7.5 EN 50035 - G 32

EN 50045 - 15 × 5

#### **Electrical connection**

2-pole screw terminal for 2.5 mm<sup>2</sup> (14 AWG)

#### Pneumatic connection

1/8 NPT threaded hole for supply air and output

#### Weight

0.25 kg (0.55 lb)

#### **Dimensions**

Refer to **Dimensions** on page 11.

#### Design for block mounting

#### Material / IP rating

IP 20 aluminum housing unit, with plastic cover

#### Mounting

In block format with special connection block (accessory), max. 4 connection blocks each with 4 signal converters

#### Electrical connection

2-pole screw terminal for 2.5 mm<sup>2</sup> (14 AWG)

#### Pneumatic connection

3/8 NPT threaded hole for supply air (main connection to connection block) 1/8 NPT threaded hole for output (on each individual signal converter)

#### Mounting position

Any

#### Weight

0.3 kg (0.66 lb)

#### **Dimensions**

Refer to 'Dimensions'.

#### Design for field mount housing (plastic)

#### Material / IP rating

Polyester housing unit, black, IP 54

#### Mounting

Wall or 2 in pipe mounting (2 in pipe mounting for vertical pipes only)

#### **Electrical connection**

2-pole screw terminal for 2.5 mm<sup>2</sup> (14 AWG) in housing PG 11 cable gland for cable entry

#### Pneumatic connection

1/8 NPT-threaded hole for supply air and output

#### Air outlet

For gas exhaust with 6 mm (0.24 in) cut or crimp connection

#### Mounting position

Any

#### Weight

1.0 kg (2.20 lb)

#### **Dimensions**

Refer to **Dimensions** on page 11.

# Design for field housing unit (aluminum/stainless steel)

#### Material / IP rating

IP 65 aluminum or stainless steel housing unit

#### Surface

Aluminum housing, painted with dual component coating, lower section, black, RAL 9005, screw-on cover, Pantone 420, stainless steel housing unit, electrolytically polished

#### Mounting

Wall or 2 in pipe mounting With stainless steel mounting bracket (accessory)

#### **Electrical connection**

2-pole screw terminal for 2.5 mm<sup>2</sup> (14 AWG) in the housing, screw connection NPT ½ in for the cable entry.

#### For ATEX 'intrinsically safe':

Threaded hole NPT 1/2 in for the cable entry

#### For ATEX 'Ex d':

M20  $\times$  1.5 threaded hole for cable entry at FM/CSA (Cable gland with Ex d approval available as an accessory on request)

#### Pneumatic connection

1/4 in NPT threaded hole for supply air and output

#### Weight

0.62 kg (1.37 lb) with aluminum housing unit 1.20 kg (2.65 lb) for stainless steel housings.

#### **Dimensions**

Refer to **Dimensions** on page 11.

#### **Accessories**

'Ex d' cable gland

Brass, with M20 × 1.5 thread

# Stainless steel mounting bracket for wall mounting or 2 in pipe mounting

For aluminum or stainless steel field housing unit

#### Material for block mounting

Connection block for 4 signal converters, End panel with central supply air connection 3/4 NPT, dummy panel

### Ex relevant specifications

#### **ATEX**

#### ATEX - 'Ex d' flameproof enclosure type of protection

Marking	II 2G Ex d IIC T4/T5/T6 Gb
Type Examination Test Certificate	DMT 02 ATEX E 121 X
Type	DOC. 900771
Device class	II 2G
	<del>``</del>
Standards	EN IEC 60079-0: 2018
	(General requirements)
	EN 60079-1: 2014
	(Flameproof enclosure 'd')

System bus, computer interfaces	
Current	≤ 50 mA

1.4 bar (20 psi) /
2.5 bar (37 psi)*
0.2 to 1 bar (3 to 15 psi) /
0.4 to 2 bar (6 to 30 psi) *

<sup>\*</sup> Valid for Option 509 only - increased input signal.

Thermal data	T4: -40 °C < Tamb < 85 °C
	T5: -40 °C < Tamb < 70 °C
	T6: -40 °C < Tamb < 55 °C

#### Special conditions

The I/P signal converter may not be installed in areas in which processes with very high electrostatic charges may occur. Versions with an intrinsically safe control head may no longer be operated as intrinsically safe if they have been previously operated with the 'flameproof enclosure' type of protection with a non-intrinsically safe power supply. The Ex designation of the device should be updated accordingly.

The I/P signal converter is suited for use in an ambient temperature range of  $-40\,^{\circ}\text{C}$  to maximum 85 °C. If the I/P signal converter is used at an ambient temperature above 60 °C or below  $-20\,^{\circ}\text{C}$ , use cable entries and cables suited to an operating temperature that corresponds to the maximum ambient temperature plus 10 K or that corresponds to the minimum ambient temperature.

#### ATEX - 'Ex ia' instrinsic safety type of protection

Marking	II 2G Ex ia IIC T6 resp. T4 Gb
Type Examination Test Certificate	TÜV 99 ATEX 1487 X
Туре	TEIP11,
	Doc. 901068-SMDxxxx
	TEIP11-PS,
	Doc. 901068-SMDxxxx
	TEIP11-PS,
	Doc. 901069-SMDxxxx
Device class	II 2G
Standards	EN 60079-0:2009
	EN 60079-11:2012

#### Temperature classes for the following versions:

TEIP11 Doc. 901068-SMD and TEIP11-PS Doc. 901068-SMD and TEIP11-PS Doc. 901069-SMD

Temperature class	Input current	Ambient temperature
		range
T4	120 mA	−55 to 60 °C
T4	100 mA	−55 to 85 °C
T6	60 mA	–55 to 40 °C

TEIP11 Doc. 901068 and TEIP11-PS Doc. 901068 and TEIP11-PS Doc. 901069

Temperature class	Input current	Ambient temperature
		range
T6	50 mA	−55 to 60 °C
Т6	60 mA	−55 to 55 °C
T5	60 mA	−55 to 70 °C
T4	60 mA	–55 to 85 °C
T5	100 mA	−55 to 55 °C
T4	100 mA	–55 to 85 °C
T5	120 mA	−55 to 45 °C
T4	120 mA	−55 to 80 °C
T4	150 mA	–55 to 70 °C

#### Ex limit values

Li	U <sub>i</sub>	Pi
50 mA	42.5 V	2.125 W
60 mA	38.8 V	2.328 W
100 mA	30 V	3.0 W
120 mA	28 V	3.36 W
150 mA	25.5 V	3.825 W

#### Special conditions

The I/P signal converter TEIP11-PS Doc. 901068 or TEIP11-PS Doc. 901069 must be set up outdoors as a pneumatic power supply when used with combustible gases.

The supplied gas must be kept sufficiently free of air and oxygen to prevent a potentially explosive atmosphere from forming.

The gas must always be routed to the outside.

#### FM / CSA

#### Intrinsically safe FM

FM 'intrinsically safe' (not for metal field housing units) I.S.: CL I / Div 1 / Grp A B C D

FM 'intrinsically safe' (only for metal field housing units) I.S.: CL I-II-II / Div 1 / Grp A B C D E F G S.: CL II / Div 2 / Grp G S.: CL III / Div 2

#### **Non-incendive FM**

N.I.: CL I / Div 2 / Grp A B C D (not for metal field housing units)

N.I.: CL I / Div 2 / Grp A B C (only for metal field housing units)

#### Intrinsically safe CSA

CSA 'intrinsically safe' (not for metal field housing units)
I.S.: CL I / Div 1 / Grp A B C D
CL I / Div 2 / Grp A B C D

CSA 'intrinsically safe' (only for metal field housing units)
I.S.: CL I / Div 1 / Grp A B C D
CL II / Div 1 / Grp E F G
CL III
CL I / Div 2 / Grp A B C D
CL II / Div 2 / Grp E F G

#### Non-incendive CSA

FM 'explosion proof' (only for metal field housing units) X.P.: CL I / Div 1 / Grp B C D D.I.P.: CL II III / Div 2 / Grp E F G

CSA 'explosion proof' (only for metal field housing units) X.P.: CL I / Div 1 / Grp B C D

#### **EAC TR-CU-012**

Designation of the device	Constructional design	Explosion protection marking according to
	_	GOST 31610.0-2014
		(IEC 60079-0:2011)
Power/pressure transducer	Doc. 901068,	1Ex ia IIC T6T4 Gb X
of TEIP types TEIP 11 and	Doc. 901069	
TEIP 11-PS	Doc. 900771	1Ex d IIC T6T4 Gb X

#### Flameproof (enclosure) 'Ex d'

System bus, computer interfaces

Output signal

Marking	II 2G Ex d IIC T4/T5/T6 Gb
Type Examination Test Certificate	DMT 02 ATEX E 121 X
Туре	DOC. 900771
Device class	II 2G
Standards	EN 60079-0: 2012
	(General requirements)
	EN 60079-1: 2007
	(Flameproof enclosure 'd')

Current	≤ 50 mA
Pneumatic data TEIP11	
Supply pressure	1.4 to 10 bar (20 to 150 psi)

0.2 to 1 bar (3 to 15 psi)

Pneumatic data TEIP11-PS	
Supply pressure	1.4 bar (20 psi) /
	2.5 bar (37 psi)*
Output signal	0.2 to 1 bar (3 to 15 psi) /
	0.4 to 2 bar (6 to 30 psi)*

<sup>\*</sup> Valid for Option 509 only – increased input signal.

#### ... Ex relevant specifications

#### ... EAC TR-CU-012

#### Special conditions

The I/P signal converter is suited for use in an ambient temperature range of  $-40\,^{\circ}\text{C}$  to maximum of 85 °C. If the I/P signal converter is used at an ambient temperature above 60 °C or below  $-20\,^{\circ}\text{C}$ , use cable entries and cables suited to an operating temperature that corresponds to the maximum ambient temperature plus 10 K or that corresponds to the minimum ambient temperature.

Versions with an intrinsically safe control head may no longer be operated as intrinsically safe if they have been previously operated with the 'flameproof (enclosure)' type of protection with a non-intrinsically safe power supply.

The I/P signal converter TEIP11-PS Doc. 901068 or TEIP11-PS Doc. 901069 must be set up outdoors as a pneumatic power supply when used with combustible gases.

The supplied gas must be kept sufficiently free of air and oxygen to prevent a potentially explosive atmosphere from forming.

The gas must always be routed to the outside.

#### Temperature characteristic curves

Intrinsically safe circuit according to ATEX, IECEx and EAEU / TR CU 012/2011

Device category 1: Use in Zone 0 Device category 2: Use in Zone 1 Device category 3: Use in Zone 2

#### Temperature classes for the following versions:

TEIP11 Doc. 901068-SMD and TEIP11-PS Doc. 901068-SMD and TEIP11-PS Doc. 901069-SMD

Temperature class	erature class Input current		
		range	
T4	120 mA	−55 to 60 °C	
T4	100 mA	−55 to 85 °C	
T6	60 mA	–55 to 40 °C	

TEIP11 Doc. 901068 and TEIP11-PS Doc. 901068 and TEIP11-PS Doc. 901069

Temperature class	Input current	Ambient temperature
		range
Т6	50 mA	−55 to 60 °C
Т6	60 mA	−55 to 55 °C
T5	60 mA	–55 to 70 °C
T4	60 mA	–55 to 85 °C
T5	100 mA	−55 to 55 °C
T4	100 mA	–55 to 85 °C
T5	120 mA	–55 to 45 °C
T4	120 mA	–55 to 80 °C
T4	150 mA	–55 to 70 °C

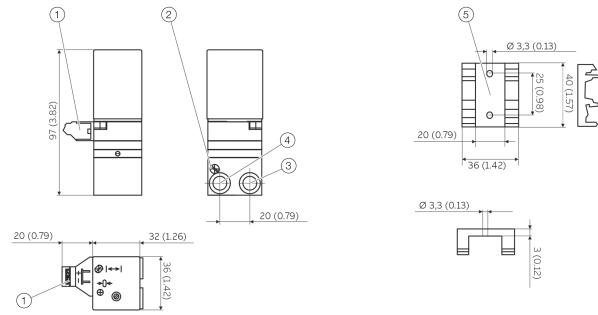
#### Ex limit values

L <sub>i</sub>	U <sub>i</sub>	P <sub>i</sub>
50 mA	42.5 V	2.125 W
60 mA	38.8 V	2.328 W
100 mA	30 V	3.0 W
120 mA	28 V	3.36 W
150 mA	25.5 V	3.825 W

## **Dimensions**

### Design for control room housing unit for rail mounting

Dimensions in mm (in)

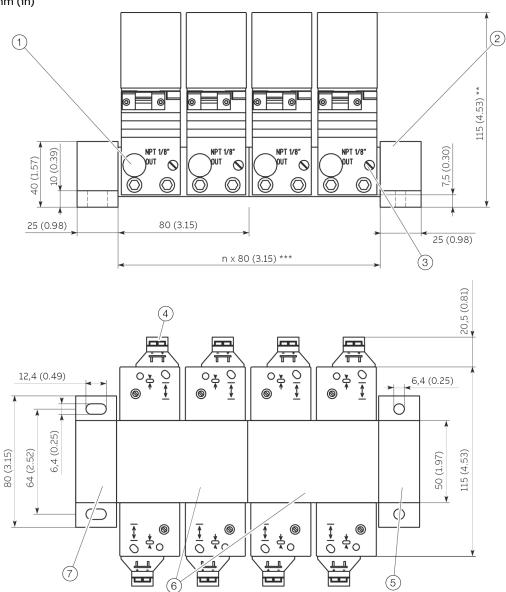


- 1 Electrical connections
- 2 Filter
- 3 Output
- Figure 2: Dimensions of control room housing design for rail mounting
- (4) Supply air
- (5) Mounting bracket for DIN rail mounting

#### ... Dimensions

#### Design for control room housing unit for block mounting

Dimensions in mm (in)



- 1 Output
- 2 Supply air
- (3) Filter
- (4) Electrical connections

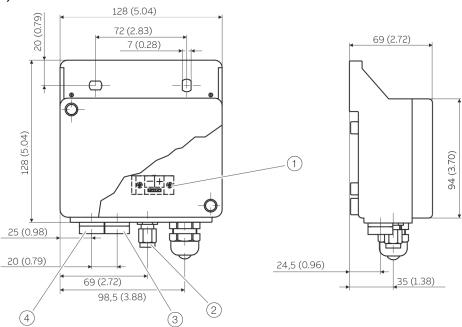
- 5 End panel with central supply air connection
- 6 Connection blocks
- (7) End panels, blank

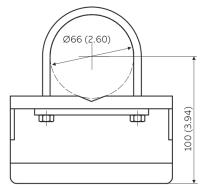
#### Figure 3: Dimensions of control room housing design for block mounting

- \* Version 0.2 to 1 bar (2.90 to 14.50 psi)
- \*\* Version 0.4 to 1 bar (5.80 to 14.50 psi)
- \*\*\* Length 80 mm (3.15 in) per connection block

# Design for plastic field housing unit

Dimensions in mm (in)





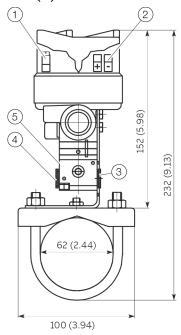
- 1 Electrical connections
- Connection only with version for operation with flammable gas for diverting the escaping gas / 6 mm (0.24 in) screw terminal connection
- ③ Supply air
- 4 Output
- 5 Cable gland

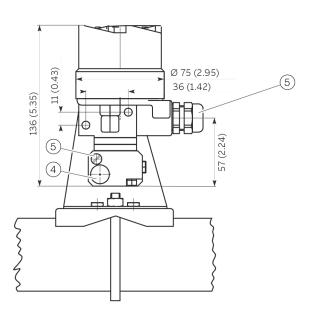
Figure 4: Dimensions of plastic field mount housing design

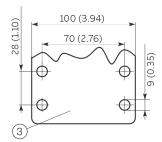
### ... Dimensions

### Design for aluminum or stainless steel field mount housing

Dimensions in mm (in)







- 1 Ground terminal
- (2) Electrical connections
- ③ Output
- 4 Supply air

5 Filter

- 6 Clamp sheet for wall mounting
- 7 Cable gland

Figure 5: Dimensions of design for aluminum or stainless steel field mount housing

# **Ordering Information**

# Main ordering information TEIP11-PS

TEIP11-PS I/P Converter, signal converter for standard signals, with power stage	V18311H	X	X	X	X	XX	X	0	
Explosion Protection									
Without explosion protection		1							
ATEX II 2 G Ex ia IIC T6 resp. T4 Gb		3							
ATEX II 2 G Ex d IIC T4/T5/T6 Gb		4 <sup>1)</sup>							
FM / CSA Intrinsically Safe		6 <sup>2)</sup>							
FM / CSA Intrinsically Safe and Explosion-proof		71)							
Design									
Control room housing IP 20, for rail mounting			1						
Control room housing IP 20, for block mounting			Α						
Field housing polyester, IP 54			6						
Field housing aluminium, IP 65			8						
Field housing stainless steel, IP 65			9						
Input Signal									
Input signal 0 20 mA				1					
Input signal 4 20 mA				2					
Airtight closed function 4 20 mA				8					
Other input signal				0					
Output Signal									
Output signal 0.2 1 bar					1				
Output signal 3 15 psi					2				
Other output signal					0				
Characteristic									
Direct action						10			
Reverse action						20			
Ambient Temperature									
–40 to 85 °C							1		
–55 to 85 °C							23)		
Colour									
White								5	
Red								8	
Standard								0	
OEM version									
Only for, Controls International									
Only for, Valtek									
ABB Sensycon									

- 1) Only with aluminium or stainless steel field housing
- 2) Not with field housing
- 3) Not with explosion protection  $\operatorname{Ex}\operatorname{d}\operatorname{or}\operatorname{FM}/\operatorname{CSA}\operatorname{explosion}\operatorname{proof}$

Continued on next page

# ... Ordering Information

# Additional ordering information TEIP11-PS

TEIP11-PS I/P Converter, signal converter for standard signals, with power stage	XXX	XXX	XXX	XXX	XXX	XXX	XXX	X
Certificate of Compliance								
Certificate of compliance with the order acc. EN 10204-2.1 (DIN 50049-2.1) with item								
description	CF2							
Test report 2.2 acc. EN 10204 (DIN 50049-2.2)	CF3							
Inspection Certificate								
Inspection certificate 3.1 acc. EN 10204		CBA						
Handling of Certificates								
Send via e-mail			GHE					
Send via mail			GHP					
Send via mail express			GHD					
Send with instrument			GHA					
Only archived			GHS					
Certificate preparation								
per device				GPD				
per salesorder item				GPP				
Device Identification Label								
Stainless steel 18.5 x 65 mm (0.73 x 2.56 in.)					MK1 <sup>4)</sup>			
Sticker 11 x 25 mm (0.43 x 0.98 in.)					МКЗ			
Operation with Inflammable Gas								
Increased climate stability						300		
Operation with inflammable gas						4805)		
Special Input Signal								
0 to 10 mA							501	
10 to 20 mA							502	
4 to 12 mA							503	
12 to 20 mA							504	
Specify split-range							505	
Special input range							506	
No special input range							999	
Special Output Signal								
1 to 18 psi								5
20 to 100 kPa								5
0,2 to 1 kg/cm <sup>2</sup>								5
0,2 to 1,8 bar								51
3 to 27 psi								51
0,4 to 2 bar								50
6 to 30 psi								50
Special output signal								9

- 4) Plain text, max. 16 letters
- 5) Only for signal converter EEx ia IIC with polyester field housing
- 6) Supply pressure 2.5 bar
- 7) Supply pressure 37 psi

#### Accessories

Accessories	Ordering number
TEIP11-PS cable gland EEx d, made of brass, with M20 x 1.5 thread	319343
TEIP11-PS mounting bracket made of stainless steel, for wall mounting	319344
TEIP11-PS mounting bracket made of stainless steel, for wall mounting or 2-in. pipe mounting	319345
TEIP11-PS / EDP300 / TZIDC cable gland NPT1/2" plastic, non-Ex (available Q2-Q3 2023)	3KXE001070U0100
TEIP11-PS/EDP300/TZIDC cable gland M20x1.5 plastic, non-Ex (available Q2-Q3 2023)	3KXE001071U0100
TEIP11-PS / EDP300 / TZIDC cable gland M20x1.5-EMV, brass, nickel-plated for Ex eb IIC Gb,	3KXE001072U0100
Ex ta IIIC Da, Ex i (IP68) ambient temperature -20 °C to 95 °C (available Q2-Q3 2023)	
TEIP11-PS / EDP300 / TZIDC cable gland NPT1/2" EMC, brass, nickel-plated for Ex eb IIC Gb,	3KXE001073U0100
Ex ta IIIC Da, Ex i (IP68) ambient temperature -20 °C to 95 °C (available Q2-Q3 2023)	
TEIP11-PS / EDP300 / TZIDC cable gland M20x1.5 INOX / stainless steel for Ex db IIC Gb,	3KXE001074U0100
Ex ta IIIC Da, Ex i (IP68) ambient temperature -60 °C to 105 °C (available Q2-Q3 2023)	
TEIP11-PS / EDP300 / TZIDC cable gland NPT1/2" INOX / stainless steel for Ex db IIC Gb,	3KXE001075U0100
Ex ta IIIC Da, Ex i (IP68) ambient temperature -60 °C to 105 °C (available Q2-Q3 2023)	
TEIP11-PS / EDP300 / TZIDC cable gland PG11, brass, nickel-plated for Ex eb IIC Gb, Ex ta IIIC Da,	3KXE001076U0100
Ex i (IP68) ambient temperature -60 °C to 95 °C (available Q2-Q3 2023)	
TEIP11-PS / EDP300 / TZIDC screw plug M20x1.5 black plastic for Ex eb IIC Gb, Ex tb IIIC Db,	3KXE001077U0100
Ex i ( IP66 ) ambient temperature -55 °C to 95 °C (available Q2-Q3 2023)	
TEIP11-PS / EDP300 / TZIDC screw plug M20x1.5 INOX/ stainless steel for Ex db eb IIC Gb,	3KXE001078U0100
Ex ta IIIC Da, Ex i ( IP68 ) ambient temperature -60 °C to 180 °C (available Q2-Q3 2023)	
TEIP11-PS / EDP300 / TZIDC screw plug NPT 1/2 INOX/ stainless steel for Ex db eb IIC Gb,	3KXE001079U0100
Ex ta IIIC Da, Ex i ( IP68 ) ambient temperature -60 °C to 180 °C (available Q2-Q3 2023)	
TEIP11-PS connection block for 4 converters	7958243
TEIP11-PS dummy panel	7958245
TEIP11-PS panel with 3/8-in. central air connector NPT	7958251

#### **Notes**







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