- Temperature transmitter, can be configured for virtually any common sensor type
- Broad range, including variants with signal conversion and trip amplifier function
- Can be used up to SIL 2 (IEC/EN 61508)

WebCode 9182B

9182 series temperature transmitters for field circuits can be used to connect temperature sensors and potentiometers. They are easy to configure for virtually any sensor type by means of software or a DIP switch. These sensor types include Pt100 sensors, thermocouples and potentiometers. Variants with a trip amplifier function allow the input signal to be analyzed using two independent contacts.

IECEx / ATEX						
Zone	0	1	2	20	21	22
Installation in			•			

NEC® 500 CE Code Appendix J					
	Class I		Class II		Class III
Division	1	2	1	2	1	2
Installation in		•				

CE Code Section 18 NEC® 505 / NEC® 506						
	Class I					
Zone	0	1	2	20	21	22
Installation in			•			

Selection Table

Number of channels					1			
Output	Limit contact (per channel)	SIL		Connection type	Product Type	Art. No.	Weight
0/4 to 20 mA active/source	2 NO/NC	2		Screw terminal	9182/10-51-64s	201684	170 g
		2		Spring clamp terminal	9182/10-51-64k	201685	170 g

Signal duplication due to parallel connection of inputs (dual channel). Further information see operating instruction.

Parameterisation ex works optionally available for all variants. Art. No. 270433

Technical Data

Explosion Protection	
IECEx gas explosion protection	Ex ec nC IIC T4 Gc
ATEX gas explosion protection	⟨Ex⟩ II 3 G Ex ec nC IIC T4 Gc
Certificates	ATEX (BVS), Brazil (ULB), Canada (FM), China (NEPSI), IECEx (BVS), India (PESO), Korea (KTL), SIL (exida), USA (FM)
Ship approval	CCS, EU RO MR (DNV)
Auxiliary Power	
Auxiliary power	24 V DC
Nominal current	70 mA
Input	
Input potentiometer	up to 100 kΩ
Input resistance temperature detector (RTD)	Types Pt 100, Pt 500, Pt 1000, Ni 100, Ni 500, Ni 1000
Input resistance temperature detector (RTD) Connection type	2-, 3-, 4-wire circuit
Input thermocouple	Types B, E, J, K, N, R, S, T, L, U, XK

1

A3

Technical Data

Output	
Output signal	0/4 to 20 mA (configurable)
Max. load resistance R_L	750 Ω
Switching voltage limiting values	≤ ± 30 V
Switching current limiting values	≤ 100 mA
Ambient Conditions	
Ambient temperature	-20 °C ... +70 °C (Single device) -20 °C ... +60 °C (Group assembly)
Storage temperature	-40 °C ... +80 °C
Mounting / Installation	
Mounting type	DIN rail NS35/15, NS35/7.5

Technical Drawings – Subject to Alterations

Safe area

Division 2
Zone 2
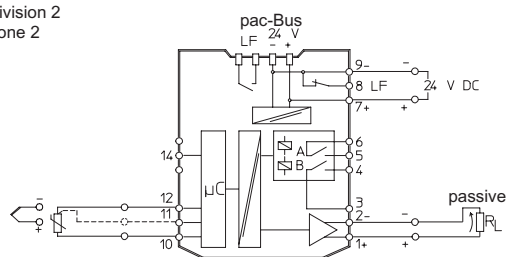
Field device   ISpac Isolator   Control system

Connection diagram 9182/10-51-64

Accessories

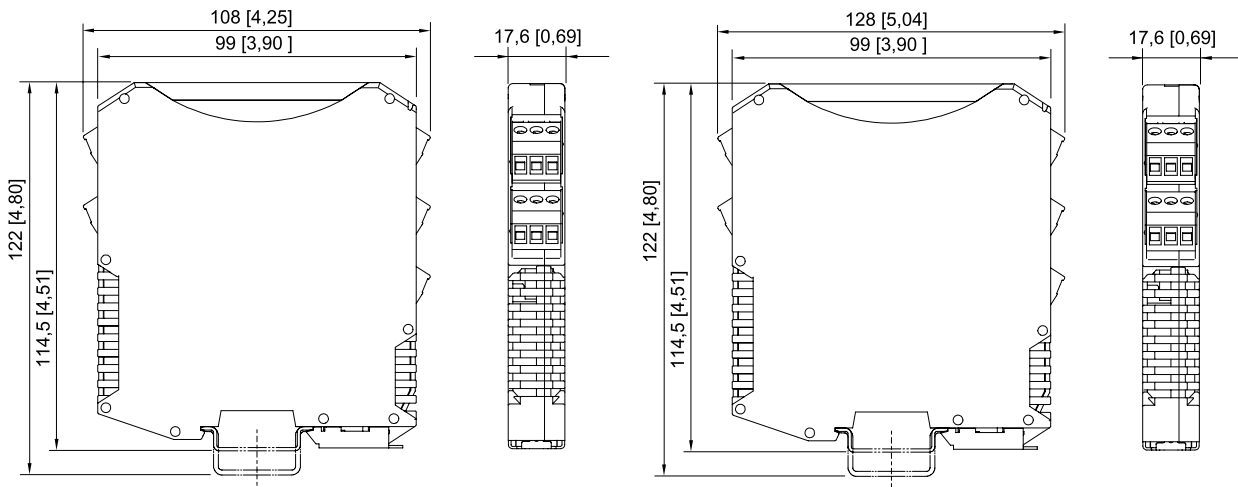| Figure	Description	Art. No.	Weight
9182 Parameterisation			
	Parameterisation ex works optionally available for all variants.	270433	-
Parameterising set ISpac - Wizard			
	The software serves for commissioning, configuring and diagnosing the ISpac isolators Series 9146, 9162 and 9182. For further information, see operating instructions. Form of delivery: USB stick; parameterising software incl. parameterising cable / adaptor System requirements: IBM compatible PC with MS XP, Vista, Windows 7, 10 RS 232 C interface RS 232 / USB adaptor	202595	235 g
Front cover			
	for ISpac modules 91xx yellow, transparent Clear marking of the device for SIL applications. (Packaging unit: 10 pieces)	200914	20 g
External reference junction			
	External reference junction for 2 x thermocouple (1 x Pt100 for 2-, 3- or 4-conductor connection) integrated into the 4-pin terminal block. Mounted on a DIN rail.	160675	30 g

A3

Accessories

Figure	Description	Art. No.	Weight
External reference junction			
	External reference junction for 1 x thermocouple (Pt100 in 2 wire connection) integrated into the pluggable terminal (3-pole). Installation takes place in the ISpac device instead of the standard terminal.	160676	30 g

Spare Parts

Figure	Description	Art. No.	Weight
Screw terminal			
	3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: green	112817	5 g
	3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: black	112816	4 g
	3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: blue	112818	5 g
Screw terminal with test tap			
	3-pole plug with test tap, screw connector thread: M3 stripping length: 7 mm colour: black	113005	1 g
	3-pole plug with test tap, screw connector thread: M3 stripping length: 7 mm colour: blue	113004	1 g
Spring clamp terminal			
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm colour: green	112825	5 g
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm colour: black	112824	5 g
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm colour: blue	112826	5 g

3

A3 | **Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations**

108 [4,25]
99 [3,90]
17,6 [0,69]
122 [4,80]
114,5 [4,51]

ISpac Series 9143, 9146, 9147, 9160, 9162, 9163,
9165, 9167, 9170, 9172, 9175, 9176, 9180, 9182,
9193, ISbus Series 9412 with screw terminal

128 [5,04]
99 [3,90]
17,6 [0,69]
122 [4,80]
114,5 [4,51]

ISpac Series 9146, 9147, 9160, 9162, 9163, 9165,
9167, 9170, 9172, 9175, 9176, 9180, 9182, 9193,
ISbus Series 9412 with spring clamp terminal