



- Temperature transmitter, can be configured for virtually any common sensor type
- Broad range, including variants with signal conversion and trip amplifier function
- Variants for SIL 2 applications available

A3

WebCode **9182A**



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 electronic contacts.

	IEEx / ATEX					
Zone	0	1	2	20	21	22
Ex interface	•	•	•	•	•	•
Installation in			•			

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

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

Selection Table							
Output		0/4 to 20 mA active/source					
Number of channels	Limit contact (per channel)	Max. load resistance R _L	SIL	Connection type	Product Type	Art. No.	Weight
1	2 NO/NC	750 Ω	2	Screw terminal	9182/10-51-14s	201682	170 g
		750 Ω	2	Spring clamp terminal	9182/10-51-14k	201683	170 g
	without	750 Ω	–	Screw terminal	9182/10-51-11s	160546	195 g
		750 Ω	–	Spring clamp terminal	9182/10-51-11k	160547	195 g
2	without	600 Ω	–	Screw terminal	9182/20-51-11s	160541	195 g
		600 Ω	–	Spring clamp terminal	9182/20-51-11k	160544	195 g
Output		without					
Number of channels	Limit contact (per channel)	Max. load resistance R _L	SIL	Connection type	Product Type	Art. No.	Weight
2	2 NO/NC	–	–	Screw terminal	9182/20-50-12s	160552	195 g
		–	–	Spring clamp terminal	9182/20-50-12k	160553	195 g

Signal duplication due to parallel connection of inputs (dual-channel version 9182/2). Further information see operating instruction.
 Parameterisation ex works optionally available for all variants. Art. No. 270433

Technical Data	
Explosion Protection	
IEEx gas explosion protection	Ex ec nC [ja Ga] IIC T4 Gc

Technical Data
Explosion Protection

IECEX dust explosion protection	[Ex ia Da] IIIC
ATEX gas explosion protection	Ⓔ II 3 (1) G Ex ec nC [ia Ga] IIC T4 Gc
ATEX dust explosion protection	Ⓔ II (1) D [Ex ia Da] IIIC
Certificates	ATEX (BVS), Brazil (ULB), Canada (FM), China (NEPSI), IECEX (BVS), India (PESO), Korea (KTL), USA (FM), USA (UL)
Ship approval	CCS, EU RO MR (DNV)
Declaration of Conformity	ATEX (EUK), China (CCC)

Safety Data

Max. voltage U_o	6.5 V
Max. current I_o	19.7 mA
Max. power P_o	32 mW
Safety-related max. voltage	253 V

Auxiliary Power

Auxiliary power	24 V DC
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Input

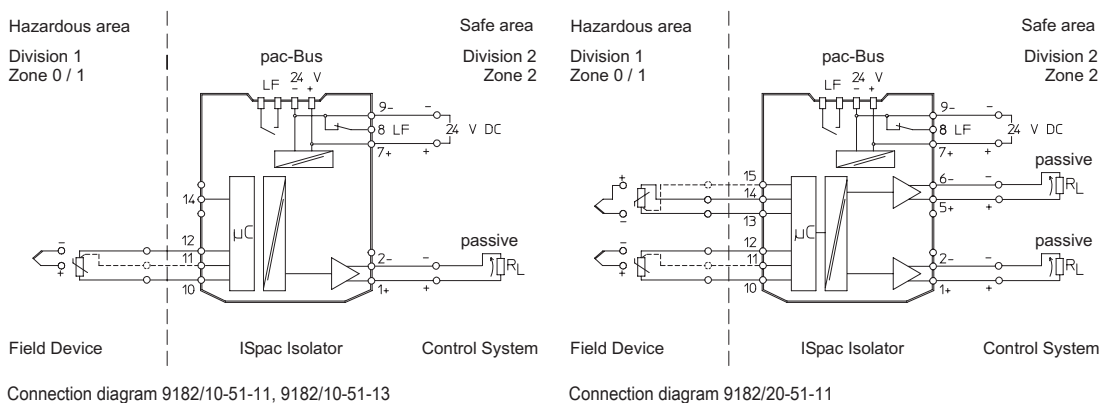
Input potentiometer	up to 100 k Ω
Input resistance temperature detector (RTD)	Types Pt 100, Pt 500, Pt 1000, Ni 100, Ni 500, Ni 1000
Input resistance temperature detector (RTD) Connection type	2-, 3-, 4-wire circuit
Input thermocouple	Types B, E, J, K, N, R, S, T, L, U, XK
Line fault and loss of power signalisation	- Contact (30 V / 100 mA) closed to ground in case of fault - pac-Bus, floating contact (30 V / 100 mA)

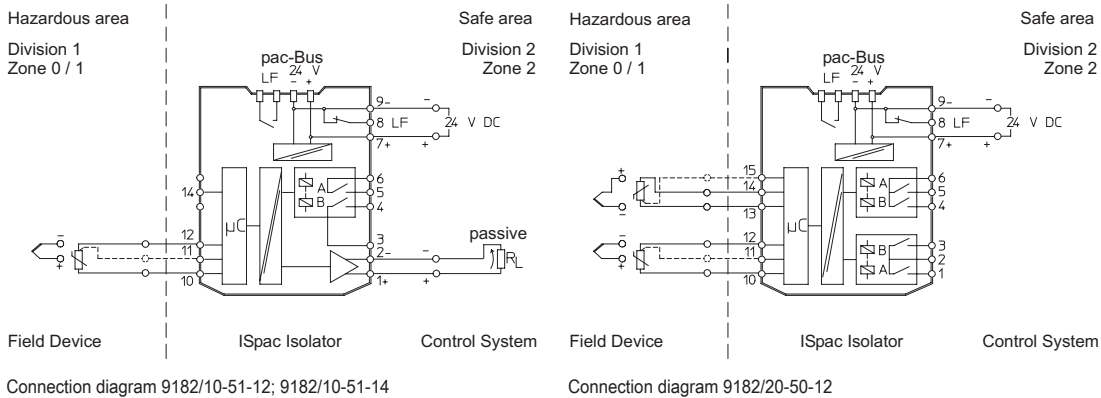
Ambient Conditions

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
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Technical Drawings – Subject to Alterations




Accessories

Figure	Description	Art. No.	Weight
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
	Parameterisation ex works optionally available for all variants.	270433	-
Resistance coupling element			
	The 0/4 to 20 mA signal of channel 1 is converted to a 0/2 to 10 V signal. The resistive coupling element replaces the available connection terminal. (Set with 5 pieces)	273968	60 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
	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

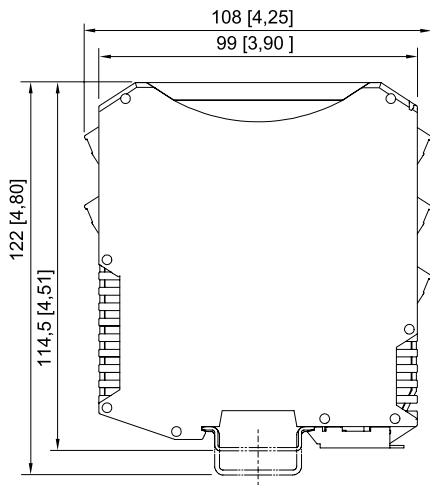
Spare Parts

Figure	Description	Art. No.	Weight
Screw terminal			
	3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: green	112817	5 g

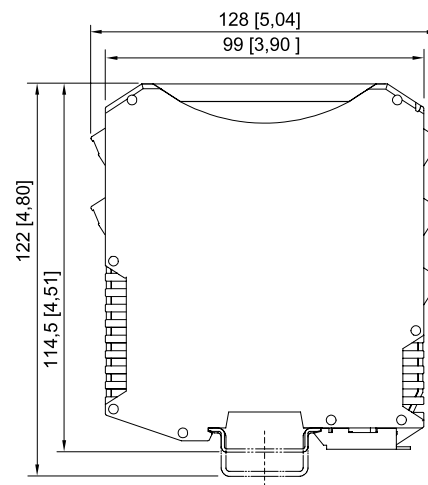
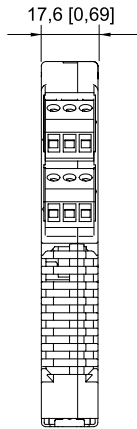
Spare Parts				
Figure	Description	Art. No.	Weight	
Screw terminal				
	3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: black	112816	4 g	
	3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: blue	112818	5 g	
Screw terminal with test tap				
	3-pole plug with 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	

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

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



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

