



- 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

MY R. STAHL 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.

	IECEX / 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			•			

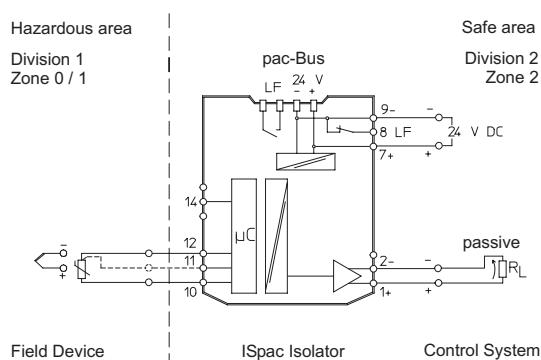
Selection Table							
Output		0/4 to 20 mA active/source					
Number of channels	Limit contact (per channel)	Load resistance R _L	SIL	Connection type	Product Type	Art. No.	Weight
1	2 NO/NC	0 ... 750 Ω	2	Screw terminal	9182/10-51-14s	201682	170 g
		0 ... 750 Ω	2	Spring clamp terminal	9182/10-51-14k	201683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

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

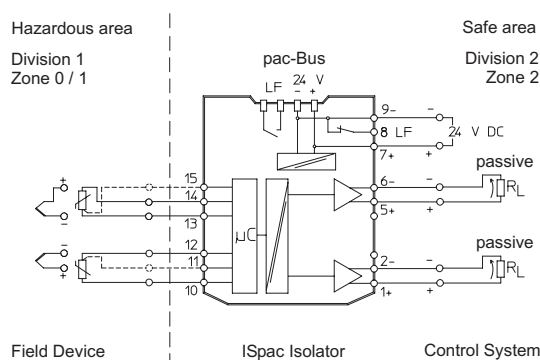
Technical Data		
Variant	9182/0-51-1.	9182/20-50-12
Explosion Protection		
IECEX gas explosion protection	Ex ec nC [ia Ga] IIC T4 Gc	Ex ec nC [ia Ga] IIC T4 Gc

Technical Data

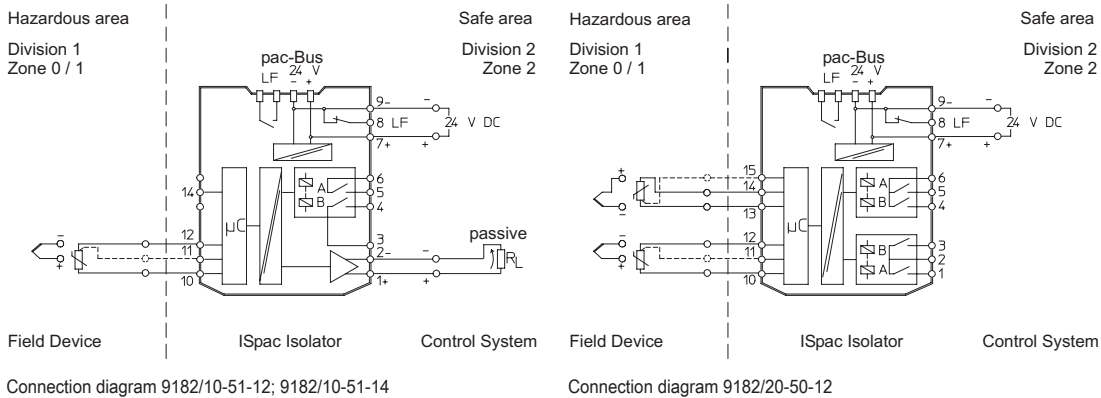
Variant	9182/0-51-1	9182/20-50-12
Explosion Protection		
IECEx dust explosion protection	[Ex ia Da] IIIC	[Ex ia Da] IIIC
ATEX gas explosion protection	Ⓜ II 3 (1) G Ex ec nC [ia Ga] IIC T4 Gc	Ⓜ II 3 (1) G Ex ec nC [ia Ga] IIC T4 Gc
ATEX dust explosion protection	Ⓜ II (1) D [Ex ia Da] IIIC	Ⓜ II (1) D [Ex ia Da] IIIC
Certificates	ATEX (BVS), Brazil (ULB), Canada (FM), China (NEPSI), IECEx (BVS), India (PESO), Korea (KTL), USA (FM), USA (UL)	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)	CCS, EU RO MR (DNV)
Declaration of Conformity	ATEX (EUK), China (CCC)	ATEX (EUK), China (CCC)
Safety Data		
Max. voltage U_o	6.5 V	6.5 V
Max. current I_o	19.7 mA	19.7 mA
Max. power P_o	32 mW	32 mW
Safety-related max. voltage	253 V	253 V
Auxiliary Power		
Auxiliary power	24 V DC	24 V DC
Input		
Potentiometer input	Up to 100 k Ω	
Input RTD	Types Pt 100, Pt 500, Pt 1000, Ni 100, Ni 500, Ni 1000	
Input resistance temperature detector (RTD) Connection type	2-, 3- and 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 against earth in case of error - pac-Bus, potential-free contact (30 V/100 mA)	- Contact (30 V/100 mA), closed against earth in case of error - pac-Bus, potential-free contact (30 V/100 mA)
Output		
Switching voltage limiting values		$\leq \pm 30$ V
Switching current limiting values		≤ 100 mA
Ambient Conditions		
Ambient temperature	-20 °C ... +70 °C (Single device) -20 °C ... +60 °C (Group assembly)	-20 °C ... +70 °C (Single device) -20 °C ... +60 °C (Group assembly)
Storage temperature	-40 °C ... +80 °C	-40 °C ... +80 °C
Mounting / Installation		
Mounting type	DIN rail NS35/15, NS35/7.5	DIN rail NS35/15, NS35/7.5

Technical Drawings – Subject to Alterations


Connection diagram 9182/10-51-11, 9182/10-51-13



Connection diagram 9182/20-51-11



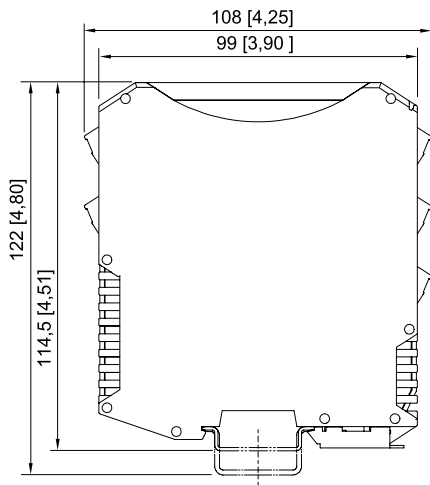
Accessories			
Figure	Description	Art. No.	Weight
ISpac Wizard parameterising set			
	The software is used to commission, configure and diagnose Series 9146, 9162 and 9182 ISpac isolators. For further information, see the operating instructions. Delivery form: USB stick; parameterising software incl. 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	-
Resistive 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 existing 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-wire 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-pin). Mounted in the ISpac device instead of the standard connection 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

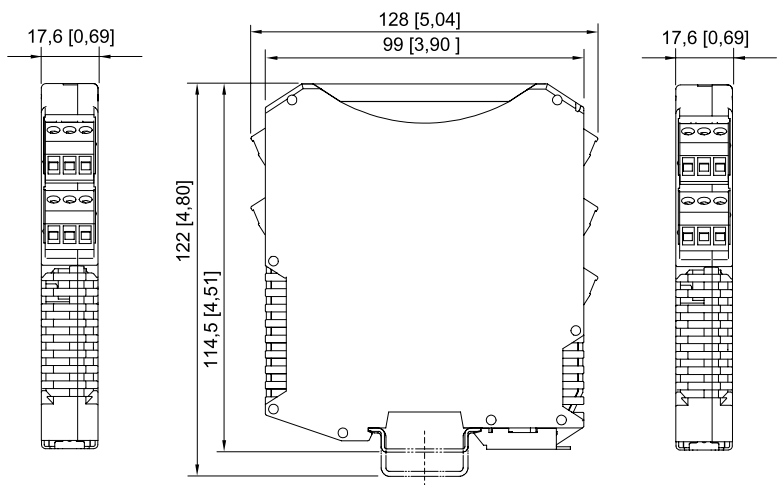
Spare Parts				
Figure	Description	Art. No.	Weight	
Screw terminal				
	3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: black	112816	4 g	
	3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: blue	112818	5 g	
Screw terminal with test tap				
	3-pole plug with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