- Universal Ex i output isolating repeater
- Extremely short settling time
- Wire breakage and short-circuit monitoring
- Transparent for HART signals

MY R. STAHL **9165A**

The Series 9165 Ex i isolating repeaters are used for the intrinsically safe operation of control valves, I/P converters and indicators. They transmit superimposed HART communication signals in both directions. The input, output and auxiliary power are galvanically separated from one another. The two channels in the two-channel variants are galvanically separated from one another.

	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

Number of channels		1				
Input signal	Output signal	LFD relay	Connection type	Product Type	Art. No.	Weight
0/4 to 20 mA with HART	0/4 to 20 mA with HART	Yes	Screw terminal	9165/16-11-11s	201270	180 g
		Yes	Spring clamp terminal	9165/16-11-11k	201271	180 g
Number of channels		2				
Input signal	Output signal	LFD relay	Connection type	Product Type	Art. No.	Weight
0/4 to 20 mA with HART	0/4 to 20 mA with HART	Yes	Screw terminal	9165/26-11-11s	201272	190 g
		Yes	Spring clamp terminal	9165/26-11-11k	201273	190 g

LFD – line fault diagnostics
Yes – device transmits field-side line faults via a 4 to 20 mA signal by means of LED and relay contact.

Technical Data

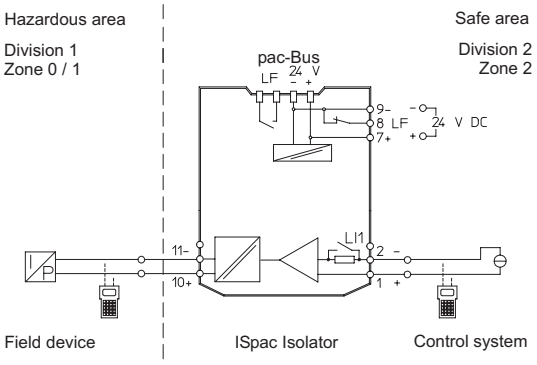
Explosion Protection	
IECEx gas explosion protection	Ex nA nC [ia Ga] IIC T4 Gc
IECEx dust explosion protection	[Ex ia Da] IIIC
ATEX gas explosion protection	⟨Ex⟩ II 3 (1) G Ex nA nC [ia Ga] IIC T4 Gc
ATEX dust explosion protection	⟨Ex⟩ II (1) D [Ex ia Da] IIIC
Certificates	ATEX (BVS), Canada (FM), China (NEPSI), IECEx (BVS), Korea (KTL), SIL (exida), USA (FM)
Ship approval	CCS, EU RO MR (DNV)
Declaration of conformity	ATEX (EUK), China (CCC)

Isolating repeater
Series 9165

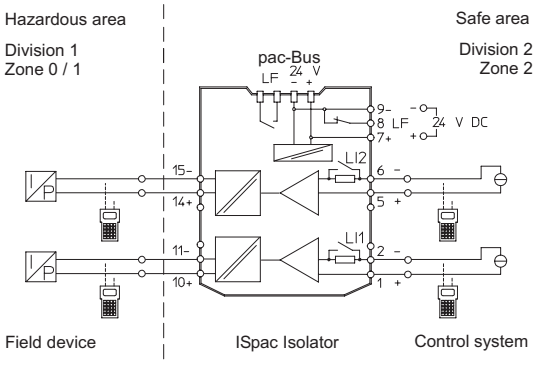
Technical Data

Safety Data	
Max. voltage U_o	25.6 V
Max. current I_o	96 mA
Max. power P_o	605 mW
Safety-related max. voltage	253 V
Output	
Load resistance R_L	0 ... 800 Ω
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



Connection diagram 9165/16-11-11

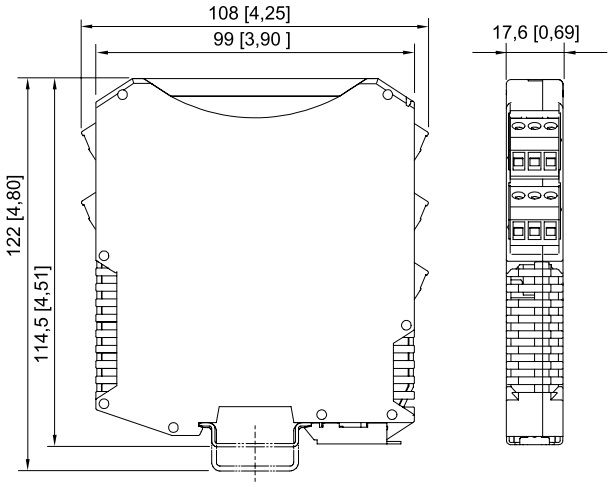


Connection diagram 9165/26-11-11

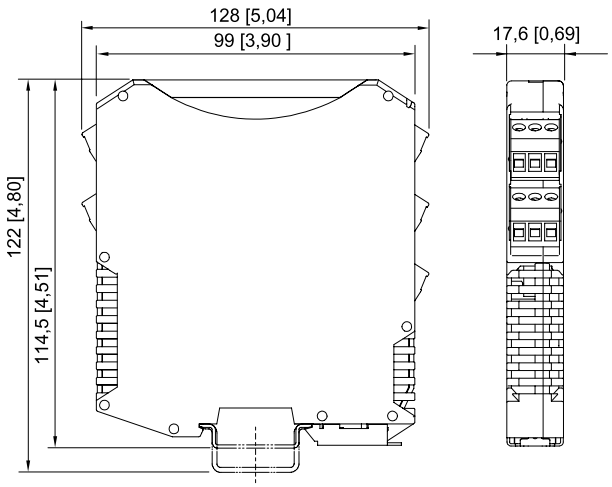
Accessories

Figure	Description	Art. No.	Weight
Transparent cover			
	For 91xx ISpac modules Yellow, transparent Clear identification of the device for SIL applications. (Packaging unit: 10 pieces)	200914	20 g

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



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