

- Loop-powered Ex i output isolating repeater
- Suitable for fire and gas detectors
- Suitable for loads of up to 800 Ω

A3

MY R. STAHL **9167A**

The Series 9167 Ex i isolating repeaters for field circuits operate without auxiliary power and can be used for the intrinsically safe operation of control valves, I/P converters, analogue indicators and fire or gas detectors, for example. The devices have one or two channels and transmit HART signals (0/4 to 20 mA) via the analogue output. The devices transmit superimposed HART communication signals in both directions.

	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				
Product variant	Loop-powered isolating repeater			
Number of channels	Connection type	Product Type	Art. No.	Weight
1	Screw terminal	9167/13-11-00s	160244	161 g
	Spring clamp terminal	9167/13-11-00k	160245	161 g
2	Screw terminal	9167/23-11-00s	160247	182 g
	Spring clamp terminal	9167/23-11-00k	160248	182 g

Technical Data	
Explosion Protection	
IECEx gas explosion protection	Ex nA [ia Ga] IIC T4 Gc
IECEx dust explosion protection	[Ex ia Da] IIIC
ATEX gas explosion protection	⟨Ex⟩ II 3 (1) G Ex nA [ia Ga] IIC T4 Gc
ATEX dust explosion protection	⟨Ex⟩ II (1) D [Ex ia Da] IIIC
Certificates	ATEX (BVS), Canada (FM), IECEx (BVS), SIL (exida), USA (FM), USA (UL)
Ship approval	CCS, EU RO MR (DNV)
Declaration of conformity	ATEX (EUK)
Safety Data	
Max. voltage U_o	25 V
Max. current I_o	99 mA
Max. power P_o	613 mW
Auxiliary Power	
Auxiliary power	without

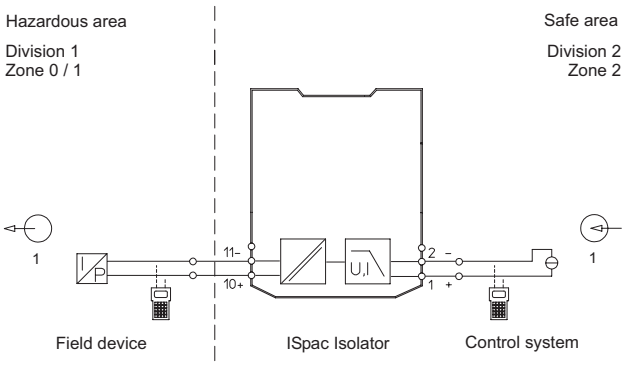
Loop-powered isolating repeater
Series 9167

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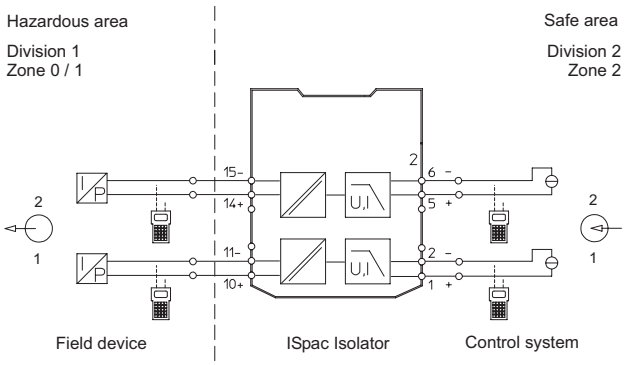
Technical Data

Input	
Input signal	0/4 to 20 mA with HART
Function range input	0 – 40 mA
Internal resistance R_i at 20 mA	380 Ω
Internal resistance R_i at 40 mA	330 Ω
Additional voltage drop	1 V
Output	
Output signal	0/4 to 20 mA with HART
Function range output	0 – 40 mA
Load resistance R_L	0 ... 800 Ω
Open-circuit voltage U_o	25 V
Output short-circuit current	≤ 60 mA
Average measurement fault	0,35%
Temperature influence error limits	≤ 0.1%/10 K
Ambient Conditions	
Ambient temperature	-20 °C ... +70 °C (Single device) -20 °C ... +60 °C (Group assembly)
Ambient temperature	-4 °F ... +158 °F (Single device) -4 °F ... +140 °F (Group assembly)
Storage temperature	-40 °C ... +80 °C
Storage temperature	-40 °F ... +176 °F
Mounting / Installation	
Mounting type	DIN rail NS35/15, NS35/7.5

Technical Drawings – Subject to Alterations

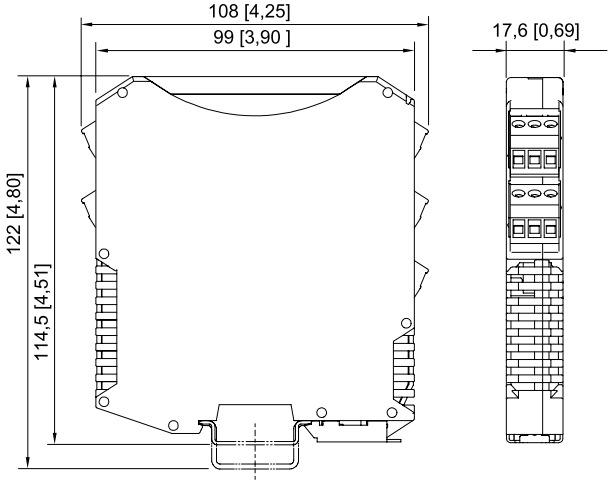


Connection diagram 9167/1

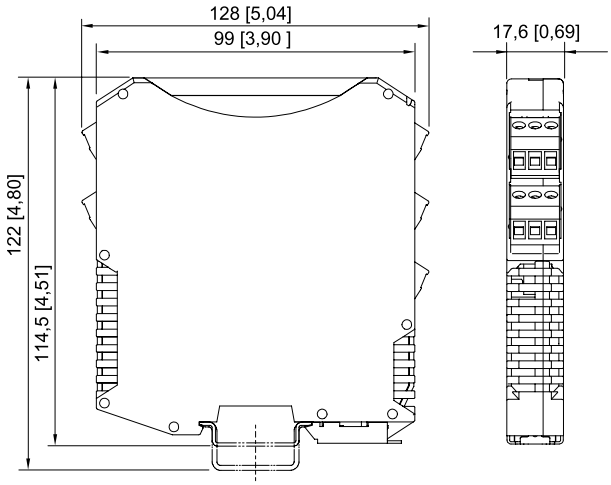


Connection diagram 9167/2

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