- Compact, loop-powered one- and two- channel Ex i output isolating repeater
- Suitable for fire and gas detectors
- Can be used up to SIL 3 (IEC 61508)

WebCode 9167A

9167 series Ex i isolating repeaters operate without auxiliary power and can be used for the intrinsically safe operation of control valves, I/P transducers, analogue indicators and fire or gas detectors, for example. They have one or two channels. They transmit superimposed HART communication signals in both directions.

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

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

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

Selection Table

Product variant	Isolating Repeater Loop Powered			
Number of channels	Connection type	Product Type	Art. No.	Weight lb
1	Screw terminal	**9167/13-11-00s**	160244 ▲	0.35
	Spring clamp terminal	**9167/13-11-00k**	160245	0.35
2	Screw terminal	**9167/23-11-00s**	160247 ▲	0.4
	Spring clamp terminal	**9167/23-11-00k**	160248	0.4

Technical Data

Variant	**9167/.3-11-00**
Explosion Protection	
FMus certificate	FM16US0122X
cFM certificate	FM16CA0067X
Marking cFMus	Class I, Div. 2, Groups A,B,C,D; Class I, Zone 2, Group IIC AIS Class I,II,III, Div. 1, Groups A,B,C,D,E,F,G; Class I, Zone 0, [AEx ia]/[Ex ia] IIC T4 at Ta = 70°C See Doc. 91 676 01 31 1
IECEx gas explosion protection	Ex nA [ia Ga] IIC T4 Gc
IECEx dust explosion protection	[Ex ia Da] IIIC
Certificates	ATEX (BVS), Canada (FM), EAC (ENDCE), IECEx (BVS), India (PESO), Russia (Meteorological certificate), SIL (exida), USA (FM), USA (UL)
Ship approval	CCS, EU RO MR (DNV GL)

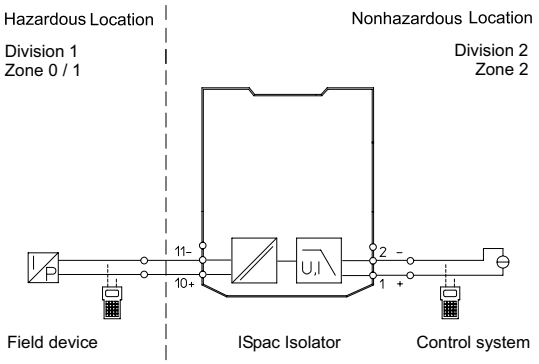
Isolating Repeater Loop Powered
Series 9167

07 b

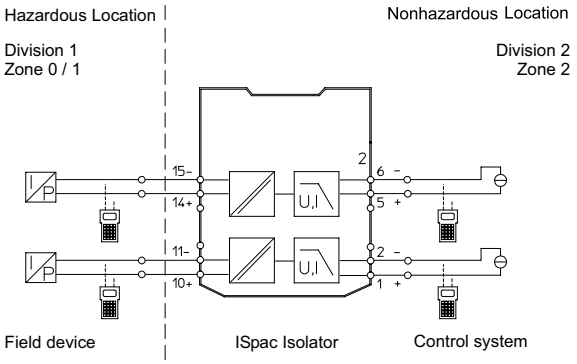
Technical Data

Variant	9167/.3-11-00
Safety Data	
Max. voltage U_o/V_{oc}	25 V
Max. current I_o/I_{sc}	99 mA
Max. power P_o	613 mW
Auxiliary Power	
Auxiliary power	without
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
Max. load resistance R_L	800 Ω
Open-circuit voltage U_s	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 °F	-4 °F ... +158 °F (Single device) -4 °F ... +140 °F (Group assembly)
Ambient temperature °C	-20 °C ... +70 °C (Single device) -20 °C ... +60 °C (Group assembly)
Storage temperature °F	-40 °F ... +176 °F
Storage temperature °C	-40 °C ... +80 °C
Mounting / Installation	
Mounting type	DIN rail NS35/15, NS35/7.5

Technical Drawings – Subject to Alterations



Connection diagram 9167/1

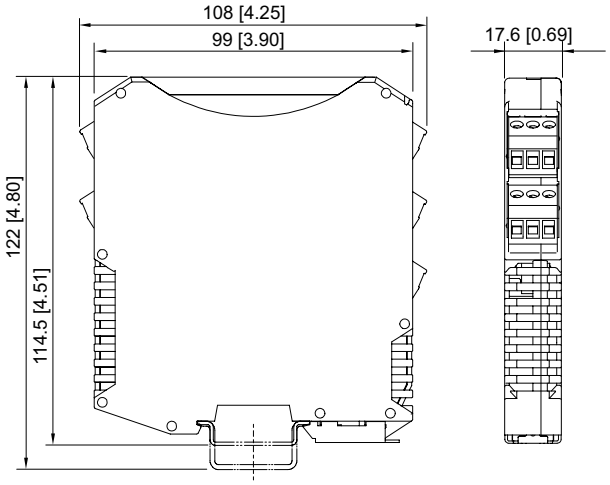


Connection diagram 9167/2

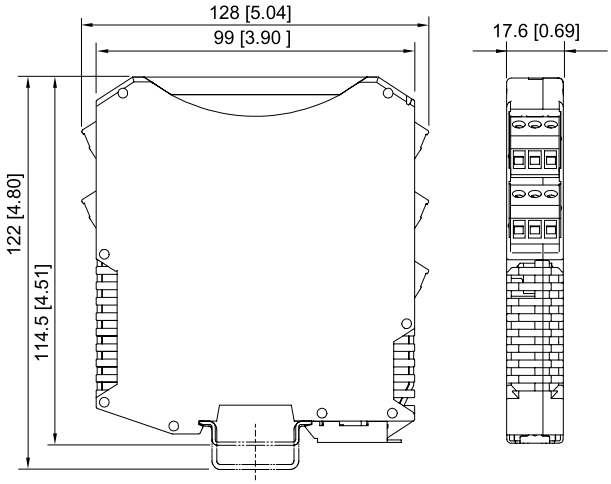
Accessories

Figure	Description	Art. No.	Weight lb
Front cover			
	for ISpac modules 91xx yellow, transparent Clear marking of the device for SIL applications. (Packaging unit: 10 pieces)	200914	0.04

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



ISpac Series 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, Fieldbus Power Supply Series 9412 with spring clamp terminal