



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

A3

WebCode **9167A**



9167 series isolating repeaters are loop-powered and can be used for the intrinsically safe operation of control valves, I/P transducers, analogue indicators and fire or gas detectors, for example. Offered in single or dual channels. They transmit superimposed HART communication signals in both directions.

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

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

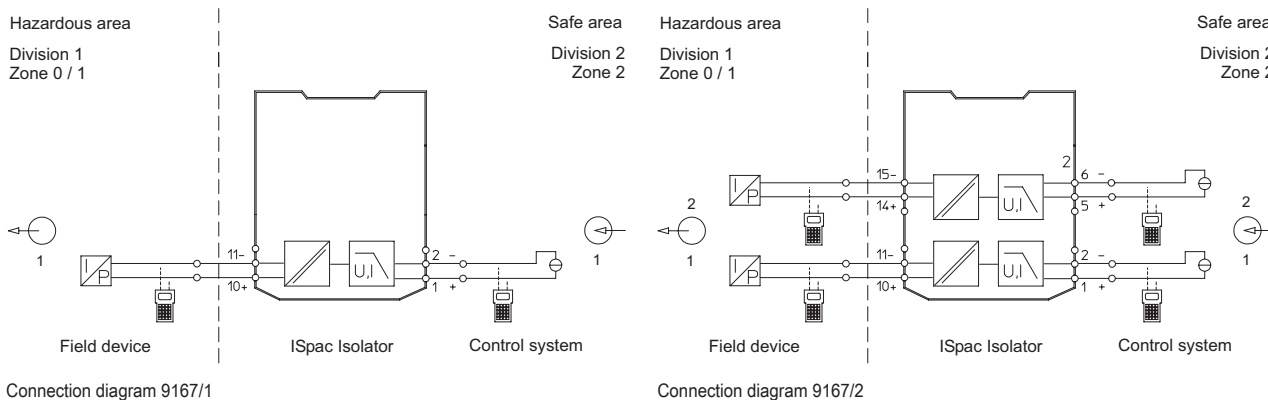
	CEC Section 18					
	NEC® 505 Class I			NEC® 506		
Zone	0	1	2	20	21	22
Ex interface	•	•	•			
Installation in			•			

Selection Table					
Product variant					
Isolating Repeater Loop Powered					
Number of channels	Connection type	Product Type	Art. No.	Weight kg	
1	Screw terminal	9167/13-11-00s	160244	0.161	
	Spring clamp terminal	9167/13-11-00k	160245	0.161	
2	Screw terminal	9167/23-11-00s	160247	0.182	
	Spring clamp terminal	9167/23-11-00k	160248	0.182	

Technical Data	
Explosion Protection	
IECEX gas explosion protection	Ex nA [ja Ga] IIC T4 Gc
IECEX dust explosion protection	[Ex ia Da] IIIC
ATEX gas explosion protection	⊕ II 3 (1) G Ex nA [ja Ga] IIC T4 Gc
ATEX dust explosion protection	⊕ II (1) D [Ex ia Da] IIIC
EAC gas explosion protection	⊕ 2 Ex nA [ja Ga] IIC T4 Gc X
EAC 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)
Notes	CCC, UKCA certificate available from 2022 onward
Ship approval	CCS, EU RO MR (DNV GL)
Safety Data	
Max. voltage U <sub>o</sub>	25 V
Max. current I <sub>o</sub>	99 mA

Technical Data	
<b>Safety Data</b>	
Max. power $P_o$	613 mW
<b>Auxiliary Power</b>	
Auxiliary power	without
<b>Input</b>	
Input signal	0/4 to 20 mA with HART
Function range input	0 – 40 mA
Internal resistance $R_i$ at 20 mA	380 $\Omega$
Internal resistance $R_i$ at 40 mA	330 $\Omega$
Additional voltage drop	1 V
<b>Output</b>	
Output signal	0/4 to 20 mA with HART
Function range output	0 – 40 mA
Max. load resistance $R_L$	800 $\Omega$
Open-circuit voltage $U_o$	25 V
Output short-circuit current	$\leq 60$ mA
Average measurement fault	0,35%
Temperature influence error limits	$\leq 0.1\%/10$ K
<b>Ambient Conditions</b>	
Ambient temperature	-20 °C ... +70 °C (Single device) -20 °C ... +60 °C (Group assembly)
Storage temperature	-40 °C ... +80 °C
<b>Mounting / Installation</b>	
Mounting type	DIN rail NS35/15, NS35/7.5

### Technical Drawings – Subject to Alterations

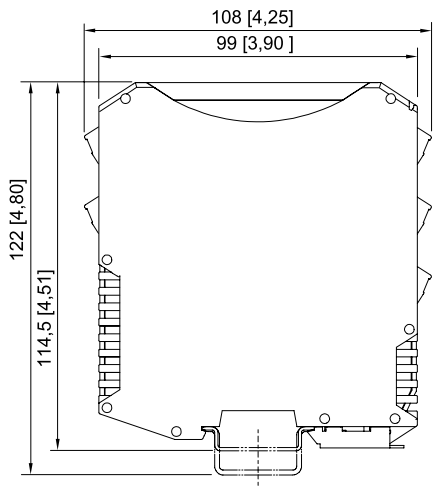


### Accessories

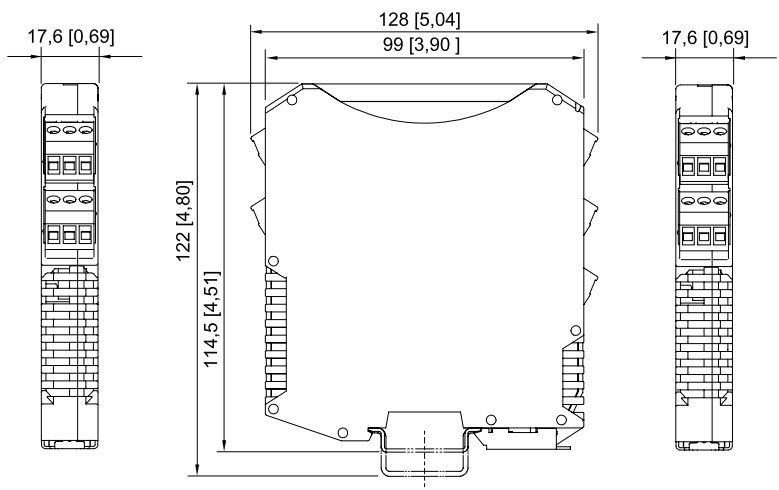
Figure	Description	Art. No.	Weight kg
	for ISpac modules 91xx yellow, transparent Clear marking of the device for SIL applications. (Packaging unit: 10 pieces)	200914	0.020

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

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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, ISbus Series 9412 with spring clamp terminal