



- Compact single- and dual-channel Ex i output isolating repeater
- Variants with wire-breakage and short-circuit monitoring system, which can be disabled and features a signalling contact
- Can be used up to SIL 2 (IEC/EN 61508)

A3

WebCode **9165A**



9165 series isolating repeaters can be used for the intrinsically safe operation of control valves, I/P transducers or indicators. They transmit superimposed HART communication signals in both directions. The input, output and auxiliary power are galvanically separated from one another. The 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 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			NEC® 506		
Zone	Class I			20	21	22
Ex interface	0	1	2			
Ex interface	•	•	•			
Installation in			•			

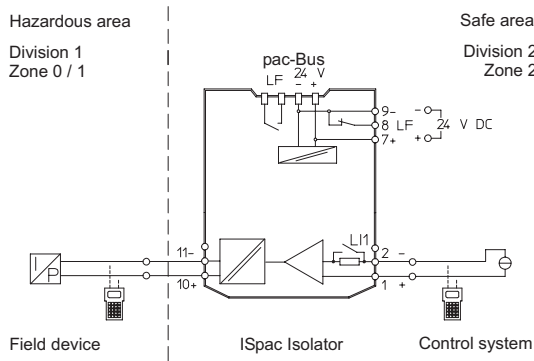
Selection Table						
Number of channels		1				
Input signal	Output signal	LFD relay	Connection type	Product Type	Art. No.	Weight kg
0/4 to 20 mA with HART	0/4 to 20 mA with HART	Yes	Screw terminal	9165/16-11-11s	201270 ▲	0.180
		Yes	Spring clamp terminal	9165/16-11-11k	201271	0.180
4 to 20 mA with HART	4 to 20 mA with HART	No	Screw terminal	9165/16-11-10s	207909	0.180
Number of channels		2				
Input signal	Output signal	LFD relay	Connection type	Product Type	Art. No.	Weight kg
0/4 to 20 mA with HART	0/4 to 20 mA with HART	Yes	Screw terminal	9165/26-11-11s	201272 ▲	0.190
		Yes	Spring clamp terminal	9165/26-11-11k	201273	0.190

LFD - line fault diagnosis  
yes - device transmits field-side line fault via 4 to 20 mA signal via LED and relay contact.

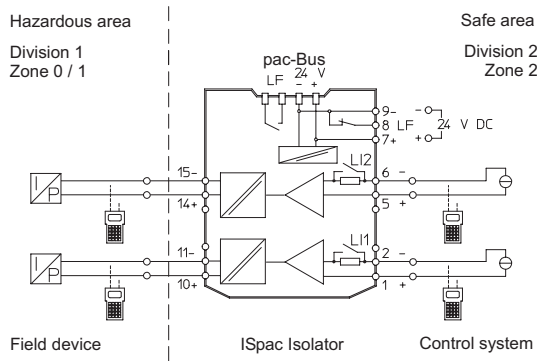
Technical Data	
Explosion Protection	
IECEX gas explosion protection	Ex nA nC [ia Ga] IIC T4 Gc
IECEX dust explosion protection	[Ex ia Da] IIIC
ATEX gas explosion protection	Ex II 3 (1) G Ex nA nC [ia Ga] IIC T4 Gc
ATEX dust explosion protection	Ex II (1) D [Ex ia Da] IIIC
EAC gas explosion protection	Ex 2 Ex nA nC [ia Ga] IIC T4 Gc X

Technical Data	
Explosion Protection	
EAC dust explosion protection	Ex ia Da IIC
Certificates	ATEX (BVS), Canada (FM), EAC (ENDCE), IECEx (BVS), India (PESO), Korea (KTL), Russia (Meteorological certificate), SIL (exida), USA (FM)
Notes	CCC, UKCA certificate available from 2022 onward
Ship approval	CCS, EU RO MR (DNV GL)
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	
Max. load resistance $R_L$	800 $\Omega$
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

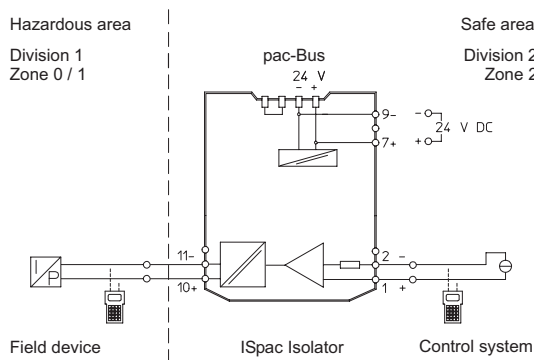
### Technical Drawings – Subject to Alterations



Connection diagram 9165/16-11-11



Connection diagram 9165/26-11-11

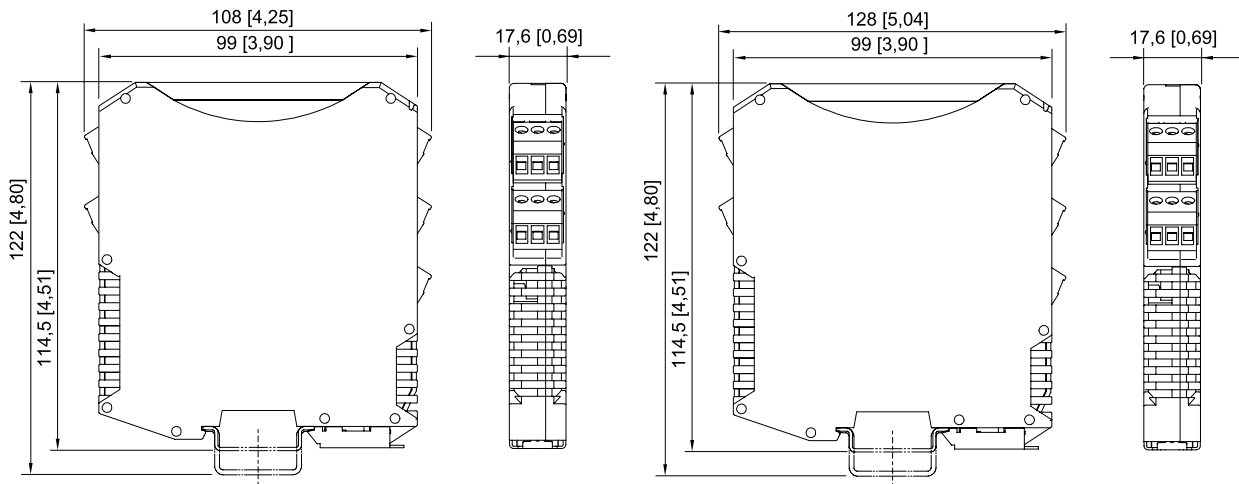


Connection diagram 9165/16-11-10

## Accessories

Figure	Description	Art. No.	Weight kg
Front cover	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



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