



- Compact one- and two-channel Ex i output isolating repeater
- Wire-breakage and short-circuit monitoring system, which can be disconnected and features a signalling contact
- Can be used up to SIL 2 (IEC/EN 61508)

A3

WebCode **9165A**



9165 series Ex i 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 two channels in the two-channel variants are galvanically separated from one another.

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

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




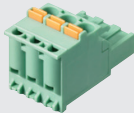


	NEC 500					
Division	Class I		Class II		Class III	
Division	1	2	1	2	1	2
Ex interface	•	•	•	•	•	•
Installation in		•		•		•

Selection Table						
Number of channels		1				
Input signal	Output signal	LFD relay	Product Type	Art. No.	PS	Weight kg
0/4 – 20 mA with HART	0/4 ... 20 mA with HART	Yes	9165/16-11-11s	201270 ▲	21	0.180
4 – 20 mA with HART	4 ... 20 mA with HART	No	9165/16-11-10s	207909 ▲	21	0.180
Number of channels		2				
Input signal	Output signal	LFD relay	Product Type	Art. No.	PS	Weight kg
0/4 – 20 mA with HART	0/4 ... 20 mA with HART	Yes	9165/26-11-11s	201272 ▲	21	0.190

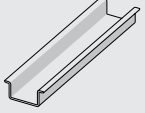
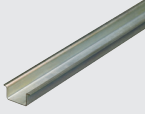

LFD - line fault diagnosis
 no - device transmits field-side line fault via 4 ... 20 mA signal and via LED. Function cannot be deactivated.
 yes - device transmits field-side line fault via 4 ... 20 mA signal via LED and relay contact.

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

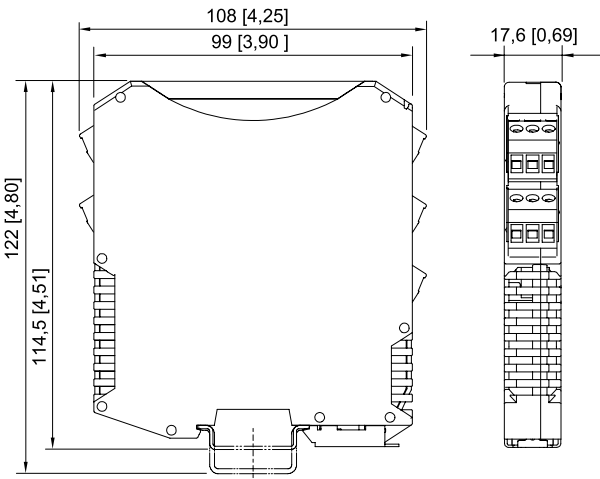
Technical Data	
Explosion Protection	
Certificates	ATEX (BVS), Canada (FM), EAC (STV), IECEx (BVS), India (PESO), Korea (KTL), Russia (Meteorological certificate), SIL (exida), USA (FM)
Ship approval	CCS, DNVGL
Safety Data	
Max. voltage U_o	25.6 V
Max. current I_o	96 mA
Max. power P_o	605 mW
Safety-related maximum 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)

Accessories and Spare Parts				
Figure	Description	Art. No.	Weight kg	
Screw terminal				
	3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: green	112817	0.005	
	3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: black	112816	0.004	
	3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: blue	112818	0.005	
Spring clamp terminal				
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm colour: green	112825	0.005	
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm colour: black	112824	0.005	
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm colour: blue	112826	0.005	

Accessories and Spare Parts

Figure	Description	Art. No.	Weight kg
DIN rail			
	NS 35 / 15 (available by the metre)	103714 ▲	1.410
DIN rail			
	NS 35 / 7.5 (available by the metre)	103707	0.349
Front cover			
	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 with screw terminal