



- Binary input or output with two channels
- For separating intrinsically safe and non-intrinsically safe signal and control circuits
- Can be used up to SIL 2 (IEC/EN 61508)

A3

WebCode 9172A



The 9172 series relay module separates intrinsically safe and non-intrinsically safe binary signal and control circuits. To do this, it makes intrinsically safe inputs and outputs available with two channels. Depending on the version, the device has either an intrinsically safe drive or an intrinsically safe output contact, and can therefore be used as an output or input isolator.

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




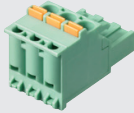

	NEC 505 Class I			NEC 506		
	0	1	2	20	21	22
Zone						
Ex interface	•	•	•			
Installation in			•			•

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



Selection Table					
Switching signal input	12 – 31.2 V				
Number of channels	Product Type		Art. No.	PS	Weight kg
2	9172/21-11-00s		160369 ▲	21	0.190
Input signal	Ex i				
Switching signal input	14 – 30 V				
Number of channels	Product Type		Art. No.	PS	Weight kg
2	9172/20-11-00s		160363	21	0.190
	9172/22-11-00s		169653	21	0.190

Technical Data		
Variant	Input signal: Ex i	Input signal
Explosion Protection		
Gas explosion protection IECEx	Ex nA nC [ia Ga] IIC T4 Gc	Ex nA nC [ia Ga] IIC T4 Gc
Gas explosion protection ATEX	⊕ II (1) G Ex nA nC [ia Ga] IIC T4 Gc	⊕ II 3 (1) G Ex nA nC [ia Ga] IIC T4 Gc
Gas explosion protection EAC	2Ex nA nC [ia Ga] IIC T4 Gc X	2 Ex nA nC [ia Ga] IIC T4 Gc X
Dust explosion protection IECEx	[Ex ia Da] IIIC	[Ex ia Da] IIIC
Dust explosion protection ATEX	⊕ II (1) D [Ex ia Da] IIIC	⊕ II (1) D [Ex ia Da] IIIC
Dust explosion protection EAC	[Ex ia Da] IIIC	[Ex ia Da] IIIC
Certificates	ATEX (BVS), Canada (FM), EAC (STV), IECEx (BVS), India (PESO), SIL (exida), USA (FM), USA (UL)	ATEX (BVS), Canada (FM), EAC (STV), IECEx (BVS), India (PESO), SIL (exida), USA (FM), USA (UL)

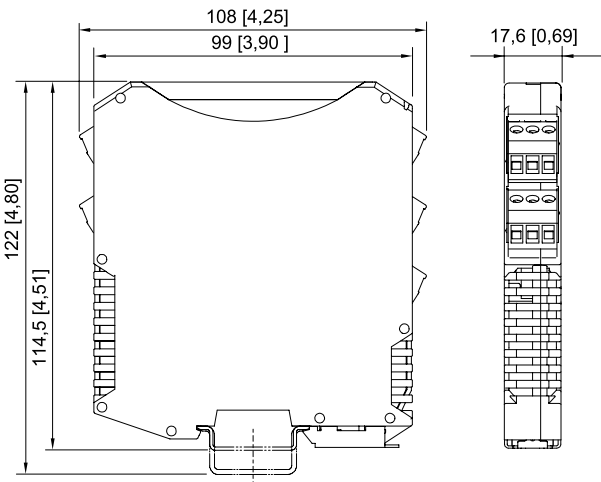
Technical Data		
Variant	Input signal: Ex i	Input signal
Explosion Protection		
Ship approval	CCS, DNVGL	CCS, DNVGL
Installation	in Zone 2, Division 2 and in the safe area	in Zone 2, Division 2 and in the safe area
Further information	see respective certificate and operating instructions	see respective certificate and operating instructions
Safety Data		
Max. voltage U_i	30 V	
Max. current I_i	150 mA	
Max. power P_i	1.3 W	
Internal capacitance C_i	Negligible	Negligible
Internal inductance L_i	Negligible	Negligible
Safety-related maximum voltage	253 V	253 V
Functional Safety		
SIL	2	2
Auxiliary Power		
Power dissipation max.	0.4 W	
Auxiliary power	Without	Without
Auxiliary power max. power dissipation		0.4 W
Ambient Conditions		
Ambient temperature	-20 °C ... +70 °C (Single device) -20 °C ... +60 °C (Group assembly)	-20 °C ... +70 °C (Single device) -20 °C ... +60 °C (Group assembly)
Storage temperature	-40 °C ... +80 °C	-40 °C ... +80 °C
Mounting / Installation		
Mounting type	NS35/15, NS35/7.5 DIN rail	NS35/15, NS35/7.5 DIN rail

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	

Accessories and Spare Parts

Figure	Description	Art. No.	Weight kg
Spring clamp terminal			
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm colour: blue	112826	0.005
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



I.Spac Series 9146, 9147, 9160, 9162, 9163, 9165, 9167, 9170, 9172, 9175, 9176, 9180, 9182, 9193 with screw terminal