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

MY R. STAHL **9172A**

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

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

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

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

Selection Table

Input signal Switching signal input	Ex i 14 – 30 V				
Number of channels	Output	Connection type	Product Type	Art. No.	Weight
2	Change-over contact - Ex i	Screw terminal	9172/22-11-00s	169653	190 g
	Change-over contact – power relay	Screw terminal	9172/20-11-00s	160363	190 g
		Spring clamp terminal	9172/20-11-00k	160364	190 g
Input Switching signal input	Non-Ex i signal 12 – 31.2 V				
Number of channels	Output	Connection type	Product Type	Art. No.	Weight
2	Change-over contact - Ex i	Screw terminal	9172/21-11-00s	160369	190 g
		Spring clamp terminal	9172/21-11-00k	160370	190 g

Technical Data

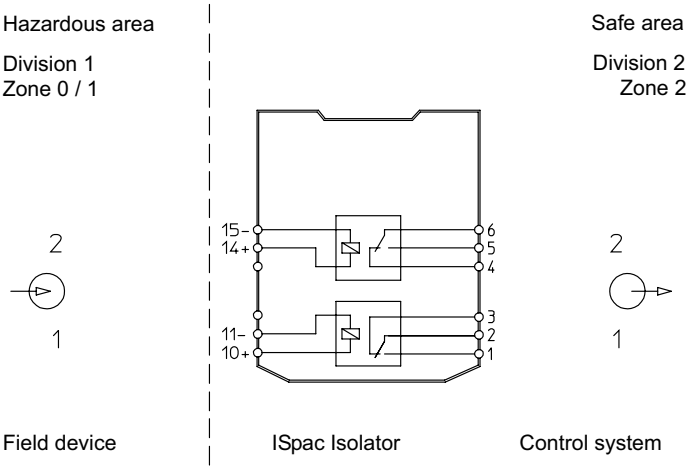
Variant	Input signal: Ex i	Input signal: Non-Ex i signal
Explosion Protection		
IECEx gas explosion protection	Ex ec nC [ia Ga] IIC T4 Gc	Ex ec nC [ia Ga] IIC T4 Gc
IECEx dust explosion protection	[Ex ia Da] IIIC	[Ex ia Da] IIIC
ATEX gas explosion protection	⟨Ex⟩ II (1) G Ex ec nC [ia Ga] IIC T4 Gc	⟨Ex⟩ II 3 (1) G Ex ec nC [ia Ga] IIC T4 Gc
ATEX dust explosion protection	⟨Ex⟩ II (1) D [Ex ia Da] IIIC	⟨Ex⟩ II (1) D [Ex ia Da] IIIC
Certificates	ATEX (BVS), Canada (FM), China (NEPSI), IECEx (BVS), India (PESO), SIL (exida), USA (FM)	ATEX (BVS), Canada (FM), China (NEPSI), IECEx (BVS), India (PESO), SIL (exida), USA (FM)
Ship approval	CCS, EU RO MR (DNV)	CCS, EU RO MR (DNV)

A3

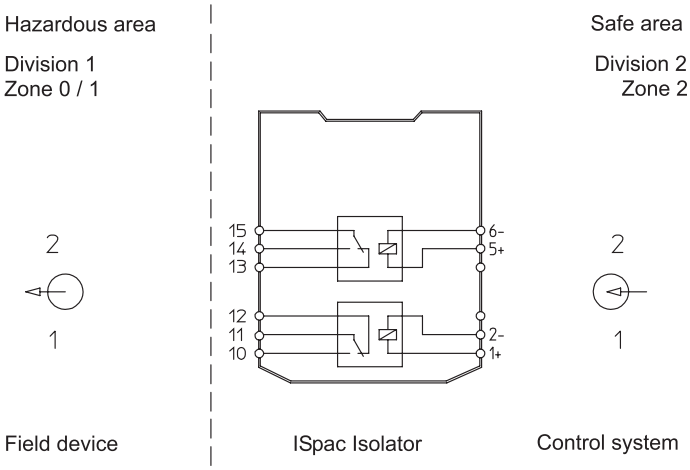
Technical Data

Variant	Input signal: Ex i	Input signal: Non-Ex i signal
Explosion Protection		
Declaration of Conformity	ATEX (EUK), China (CCC)	ATEX (EUK), China (CCC)
Installation	In Zone 2, Division 2 and safe areas	In Zone 2, Division 2 and safe areas
Further information	See relevant certificate and operating instructions	See relevant 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	Negligible	
Internal inductance	Negligible	
Safety-related max. voltage	253 V	253 V
Functional Safety		
SIL	2	2
Auxiliary Power		
Max. power dissipation	0.4 W	0.4 W
Auxiliary power	without	without
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	DIN rail NS35/15, NS35/7.5	DIN rail NS35/15, NS35/7.5

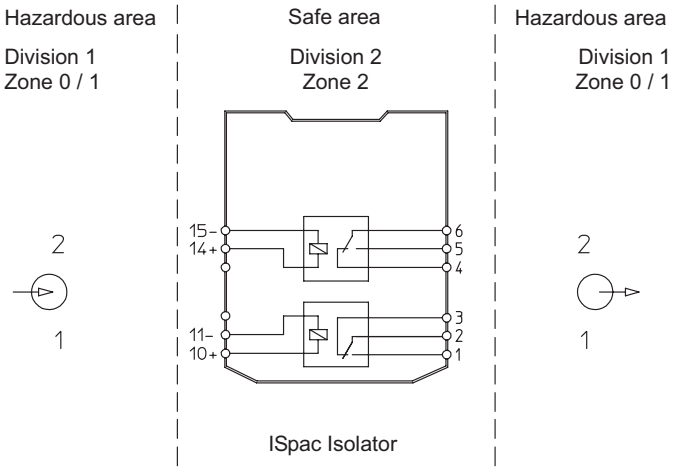
Technical Drawings – Subject to Alterations



Connection diagram 9172/20-11-00



Connection diagram 9172/21-11-00



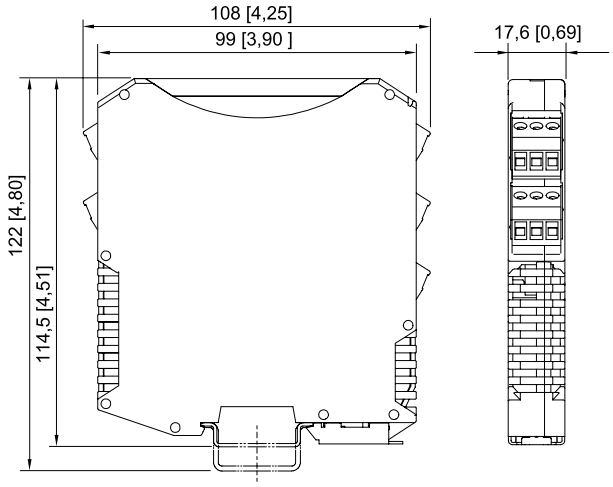
Connection diagram 9172/22-11-00

Accessories

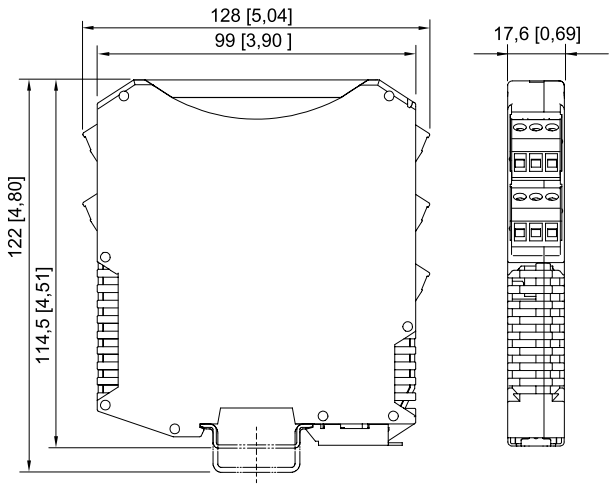
Figure	Description	Art. No.	Weight
Transparent cover			
	For 91xx ISpac modules Yellow, transparent Clear identification of the device for SIL applications. (Packaging unit: 10 pieces)	200914	20 g

A3

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



ISpac Series 9143, 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