



- Two-channel variants reduce the amount of space required
- For use up to SIL 3 (IEC/EN 61508)
- A wire breakage and short-circuit monitoring system, which can be disconnected and includes messages

A3

MY R. STAHL 9175A



The Series 9175 binary outputs transmit binary signals via one or two channels for the intrinsically safe operation of Ex i solenoid valves, indicator lamps and horns. The devices feature three-way galvanic separation. A wire-breakage and short-circuit monitoring system, which can be disconnected, directly monitors the status of the field circuit.

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

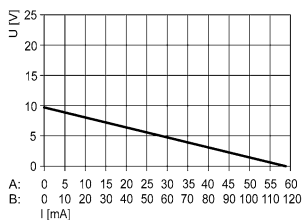
	NEC® 500 CE Code Appendix J					
	Class I		Class II		Class III	
Division	1	2	1	2	1	2
Ex interface	•	•	•	•	•	•
Installation in		•				

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

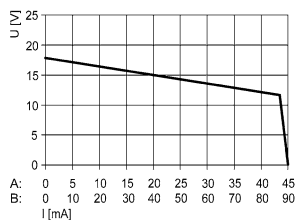
Selection Table						
Number of channels		1				
Nominal current		80 mA				
Output open-circuit voltage U_o	Max. output current $I_{o,max}$	Internal Resistance R_i	Connection type	Product Type	Art. No.	Weight
25 V	35 mA	250 Ω	Screw terminal	9175/10-16-11s	160416	175 g
	35 mA	250 Ω	Spring clamp terminal	9175/10-16-11k	160417	180 g
Number of channels		2				
Nominal current		140 mA				
Output open-circuit voltage U_o	Max. output current $I_{o,max}$	Internal Resistance R_i	Connection type	Product Type	Art. No.	Weight
10 V	60 mA / Parallel channels: 120 mA*	150 Ω / parallel: 75 Ω*	Screw terminal	9175/20-12-11s	160404	190 g
17.5 V	45 mA / Parallel channels: 90 mA*	130 Ω / parallel: 65 Ω*	Screw terminal	9175/20-14-11s	160413	190 g
	45 mA / Parallel channels: 90 mA*	130 Ω / parallel: 65 Ω*	Spring clamp terminal	9175/20-14-11k	160414	111 g
25 V	35 mA / Parallel channels: 70 mA*	250 Ω / parallel: 125 Ω*	Screw terminal	9175/20-16-11s	160419	190 g
	35 mA / Parallel channels: 70 mA*	250 Ω / parallel: 125 Ω*	Spring clamp terminal	9175/20-16-11k	160420	111 g

* Outputs can be connected in parallel, therefore doubling the output current.

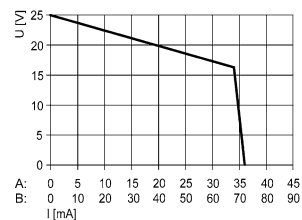
Technical Data			
Variant	Type 9175/20-12-11.	Type 9175/20-14-11.	Type 9175/0-16-11.
Explosion Protection			
IECEX gas explosion protection	Ex nA nC [ia Ga] IIC T4 Gc	Ex nA nC [ia Ga] IIC T4 Gc	Ex nA nC [ia Ga] IIC T4 Gc
IECEX dust explosion protection	[Ex ia Da] IIIC	[Ex ia Da] IIIC	[Ex ia Da] IIIC
ATEX gas explosion protection	⊕ II 3 (1) G Ex nA nC [ia Ga] IIC T4 Gc	⊕ II 3 (1) G Ex nA nC [ia Ga] IIC T4 Gc	⊕ II 3 (1) G Ex nA nC [ia Ga] IIC T4 Gc
ATEX dust explosion protection	⊕ II (1) D [Ex ia Da] IIIC	⊕ II (1) D [Ex ia Da] IIIC	⊕ II (1) D [Ex ia Da] IIIC
Certificates	ATEX (BVS), Brazil (ULB), Canada (FM), China (NEPSI), IECEx (BVS), Korea (KTL), SIL (exida), USA (FM), USA (UL)	ATEX (BVS), Brazil (ULB), Canada (FM), China (NEPSI), IECEx (BVS), Korea (KTL), SIL (exida), USA (FM), USA (UL)	ATEX (BVS), Brazil (ULB), Canada (FM), China (NEPSI), IECEx (BVS), Korea (KTL), SIL (exida), USA (FM), USA (UL)
Ship approval	CCS, EU RO MR (DNV)	CCS, EU RO MR (DNV)	CCS, EU RO MR (DNV)
Declaration of Conformity	ATEX (EUK), China (CCC)	ATEX (EUK), China (CCC)	ATEX (EUK), China (CCC)
Safety Data			
Max. voltage U_o	11.3 V	19.6 V	27.6 V
Max. current I_o (Ex ia)	75 mA	150 mA	110 mA
Max. current I_o (Ex ib)		60 mA	50 mA
Max. power P_o	210 mW	732 mW	760 mW
Safety-related max. voltage	253 V	253 V	253 V
Functional Safety			
SIL	3	3	3
Auxiliary Power			
Auxiliary power	24 V DC	24 V DC	24 V DC
Input			
Input voltage for ON	15 – 31.2 V	15 – 31.2 V	15 – 31.2 V
Input voltage for OFF	0 – 5 V	0 – 5 V	0 – 5 V
Output			
Line fault and loss of power signalisation	- Contact (30 V/100 mA), closed against earth in case of error - pac-Bus, potential-free contact (30 V/100 mA)	- Contact (30 V/100 mA), closed against earth in case of error - pac-Bus, potential-free contact (30 V/100 mA)	- Contact (30 V/100 mA), closed against earth in case of error - pac-Bus, potential-free contact (30 V/100 mA)
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)	-20 °C ... +70 °C (Single device) -20 °C ... +60 °C (Group assembly)
Storage temperature	-40 °C ... +80 °C	-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	DIN rail NS35/15, NS35/7.5

Technical Drawings – Subject to Alterations


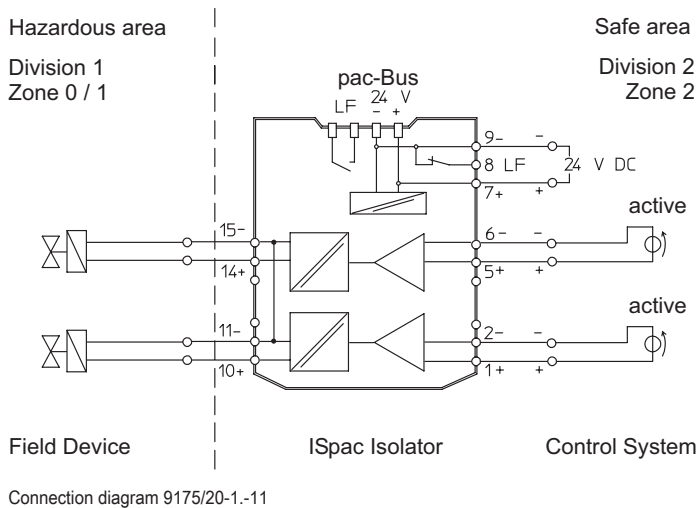
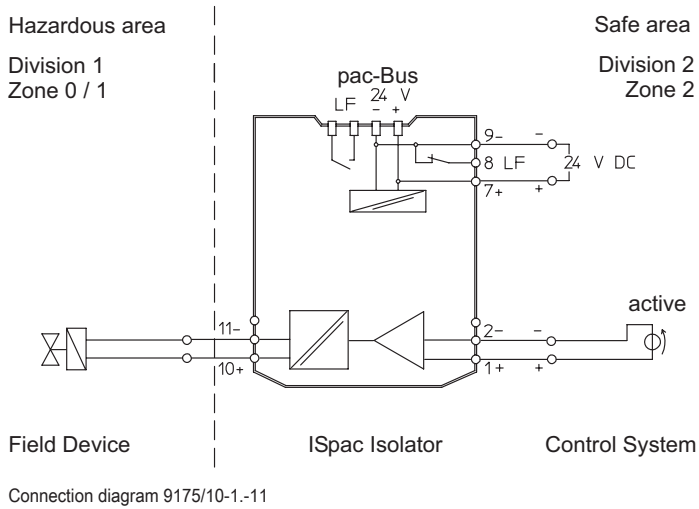
9175/0-12-11, 9176/0-12-00 output characteristic

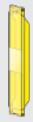
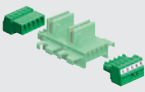


9175/0-14-11, 9176/0-14-00 output characteristic



9175/0-16-11; 9176/0-16-00 output characteristic

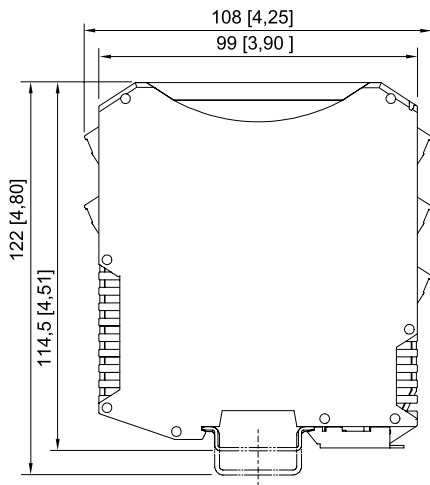


Accessories			
Figure	Description	Art. No.	Weight
Transparent cover			
	For 91xx ISpac modules Yellow, transparent Clear identification of the device for SIL applications. (Packaging unit: 10 pieces)	200914	20 g
Terminal set for pac-Bus			
	For the supply of 24 V DC auxiliary power via terminals (alternative to using the supply module 9193/21-11-11), with jumper for error message chain for ISpac module 91xx	160730	8 g

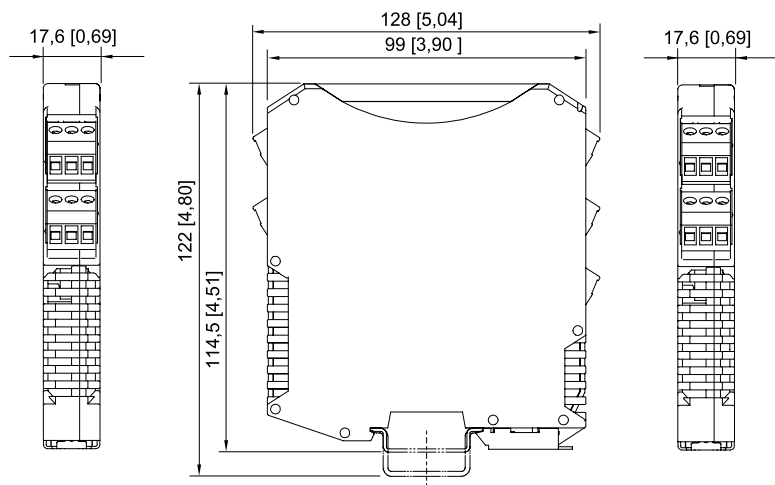
Spare Parts				
Figure	Description	Art. No.	Weight	
Screw terminal				
	3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: green	112817	5 g	
	3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: black	112816	4 g	
	3-pole plug, screw connector thread: M3 stripping length: 7 mm colour: blue	112818	5 g	
Screw terminal with test tap				
	3-pole plug with test tap, screw connector thread: M3 stripping length: 7 mm colour: black	113005	1 g	
	3-pole plug with test tap, screw connector thread: M3 stripping length: 7 mm colour: blue	113004	1 g	
Spring clamp terminal				
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm colour: green	112825	5 g	
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm colour: black	112824	5 g	
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm colour: blue	112826	5 g	

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

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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