



- Universal use for transmitters and mA sources (4-wire transmitters) with two configurable limit values and one 4 to 20 mA output
- Bidirectional HART transmission

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## MY R. STAHL 9162A



9162 series Ex i transmitter power supply units with limit values can be used for the intrinsically safe operation of two- and three-conductor transmitters or for connecting to intrinsically safe mA sources. Two limit values can be easily set using the "ISpac Wizard" software. If the value exceeds or falls below these limit values, these units will issue an alert. A wire-breakage and short-circuit monitoring system provides increased availability.

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

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

Selection Table						
Number of channels	1					
Input	Output	Limit contact (per channel)	Connection type	Product Type	Art. No.	Weight lb
4 to 20 mA with HART	4 to 20 mA with HART	2 NO	Screw terminal	9162/13-11-14s	238251	0.5 lb
		2 NO	Spring clamp terminal	9162/13-11-14k	238252	0.5 lb

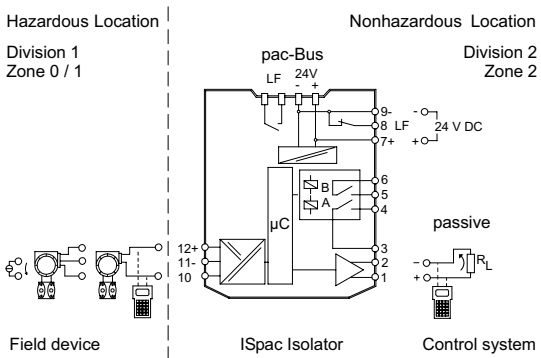
Parameterisation ex works optionally available for all variants. Art. No. 270538

Technical Data	
Explosion Protection	
FMus certificate	FM16US0122X
cFM certificate	FM16CA0067X
cFM certificate	FM16CA0067X
Marking cFMus	Class I, Div. 2, Groups A,B,C,D; Class I, Zone 2, nA nC Group IIC AIS Class I,II,III, Div. 1, Groups A,B,C,D,E,F,G; Class I, Zone 0, [AEx/Ex ia] IIC T4 at Ta = 70°C See Doc. 9162 6 031 001 1
IECEX gas explosion protection	Ex nA nC [ia Ga] IIC T4 Gc
IECEX dust explosion protection	[Ex ia Da] IIIC
Certificates	ATEX (BVS), Canada (FM), China (NEPSI), IECEX (BVS), SIL (exida), USA (FM)
Ship approval	CCS, EU RO MR (DNV)

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Technical Data	
<b>Safety Data</b>	
Max. voltage $U_d/V_{oc}$	27 V
Max. current $I_d/I_{sc}$	87.9 mA
Max. power $P_o$	574 mW
Safety-related max. voltage	253 V
<b>Electrical Data</b>	
Limiting values configuration	Using ISpac Wizard (V3.04 and more recent)
<b>Auxiliary Power</b>	
Auxiliary power	24 V DC
Nominal current	85 mA
<b>Input</b>	
Input	4 to 20 mA with HART
Supply voltage for transmitter	$\geq 16$ V at 20 mA
<b>Output</b>	
Output signal	4 to 20 mA with HART
Load resistance $R_L$	0 to 600 $\Omega$ (terminal 1+/2-)
Switching voltage limiting values	$\leq \pm 30$ V
Switching current limiting values	$\leq 170$ mA
Line fault and loss of power signalization	- Contact (30 V/100 mA), closed against earth in case of error - pac-Bus, potential-free contact (30 V/100 mA)
<b>Ambient Conditions</b>	
Ambient temperature °F	-40 °F ... +158 °F (Single device) -40 °F ... +140 °F (Group assembly)
Ambient temperature °C	-40 °C ... 70 °C (Single device) -40 °C ... 60 °C (Group assembly)
Storage temperature °F	-40 °F ... +176 °F
Storage temperature °C	-40 °C ... 80 °C
<b>Mounting / Installation</b>	
Mounting type	DIN rail NS35/15, NS35/7.5

**Technical Drawings – Subject to Alterations**



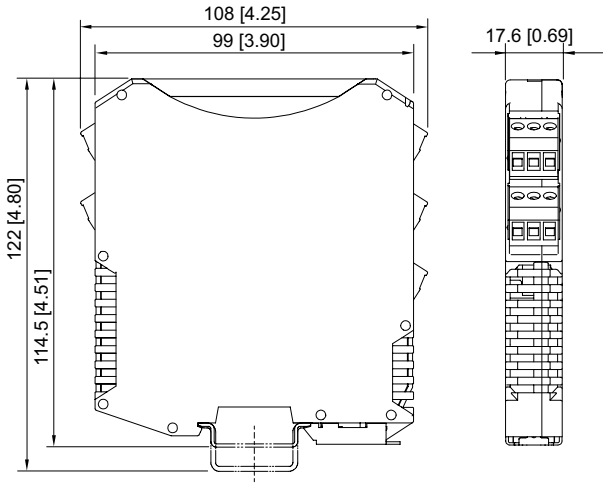
Connection diagram 9162/13-11-14

## Accessories

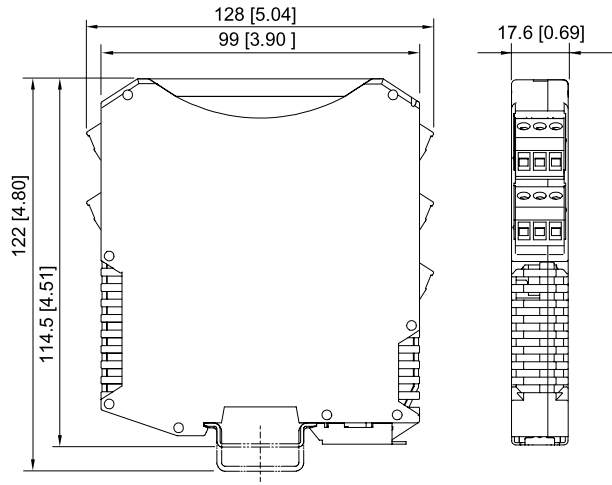
Figure	Description	Product Type	Art. No.	Weight lb
<b>Parameterization set ISpac - Wizard</b>				
	The software serves for commissioning, configuring and diagnosing the ISpac isolators Series 9146, 9162, 9182 and 9282. For further information, see operating instructions. Form of delivery: USB stick; parameterization software incl. parameterization cable / adaptor System requirements: IBM compatible PC with MS XP, Vista, Windows 7, 10 RS 232 C interface RS 232 / USB adaptor	9199/20-02 set for parameterization ispa	202595	0.52

## Spare Parts

Figure	Description	Product Type	Art. No.	Weight lb
<b>Screw terminal</b>				
	3-pole plug, screw connector thread: M3 stripping length: 7 mm color: green	Terminal block 3-pole green	112817	0.01
	3-pole plug, screw connector thread: M3 stripping length: 7 mm color: black	Terminal block 3-pole black	112816	0.01
	3-pole plug, screw connector thread: M3 stripping length: 7 mm color: blue	Terminal block 3-pole blue	112818	0.01
<b>Screw terminal with test tap</b>				
	3-pole plug with test tap, screw connector thread: M3 stripping length: 7 mm color: black	Terminal block 3-pole black Screwable co	113005	0.01
	3-pole plug with test tap, screw connector thread: M3 stripping length: 7 mm color: blue	Terminal block 3-pole blue Screwable con	113004	0.01
<b>Spring clamp terminal</b>				
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm color: green	terminal block 3-pole green spring force	112825	0.01
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm color: black	terminal block 3-pole black spring force	112824	0.01
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm color: blue	terminal block 3-pole blue spring force	112826	0.01



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, Fieldbus Power Supply Series 9412 with spring clamp terminal