

## Vibration Transducer Supply Unit Series 9147





- · Space-saving two-channel variant reduces installation costs
- · Easily accessible rotary switch makes adjustment simple
- Can be used up to SIL 2 (IEC 61508)

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### MY R. STAHL 9147A





9147 series vibration transducer power supply units connect vibration, acceleration and speed sensors to analytical systems. The measuring signals are galvanically separated when they are transmitted. They are transmitted at frequencies of up to 50 Hz. These units have already been tested with numerous sensors from well-known manufacturers such as Bently Nevada and are in use in systems across the globe.

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

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

Selection Table				
Product variant	Vibration transducer supply unit			
Number of channels	Connection type	Product Type	Art. No.	Weight
1	Screw terminal	9147/10-99-10s	212432	150 g
	Spring clamp terminal	9147/10-99-10k	213112	150 g
2	Screw terminal	9147/20-99-10s	212433	210 g
	Spring clamp terminal	9147/20-99-10k	213113	150 g

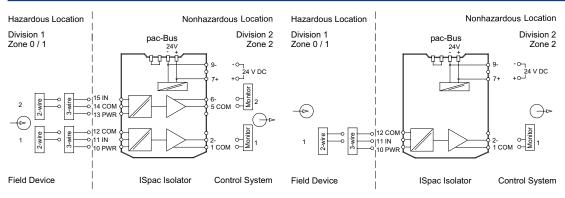
Technical Data	
Explosion Protection	
FMus certificate	FM16US0122X
cFM certificate	FM16CA0067X
Marking cFMus	Class I, Div. 2, Groups A,B,C,D; Class I, Zone 2, AEx/Ex nA Group IIC AIS Class I,II,III, Div. 1, Groups A,B,C,D,E,F,G; Class I, Zone 0, [AEx ia]/[Ex ia] IIC T4 at Ta = 70°C See Doc. 9147 6 031 001 1
IECEx gas explosion protection	Ex ec [ia Ga] IIC T4 Gc
IECEx dust explosion protection	[Ex ia Da] IIIC
IECEx firedamp protection	[Ex ia Ma] I
Installation	in Zone 2
Further information	see respective certificate and operating instructions
Certificates	ATEX (BVS), Canada (FM), China (NEPSI), IECEx (BVS), India (PESO), Korea (KTL), SIL (exida), USA (FM)



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Fechnical Data		
Explosion Protection		
Ship approval	CCS, EU RO MR (DNV)	
Safety Data		
Max. voltage U₀/V₀₀	26.3 V	
Max. current I <sub>o</sub> /I <sub>sc</sub>	88.3 mA	
Max. power P <sub>o</sub>	579 mW	
Safety-related max. voltage	253 V	
Functional Safety		
SIL	2	
Electrical Data		
Output current for 2-wire operation	2.6/4.3/7.9 mA at -10 V	
Output current for 3-wire operation	10 mA at -20 V; 20 mA at -17 V	
Auxiliary Power		
Auxiliary power	24 V DC	
Max. power dissipation	1.4 W	
Input		
Input signal	-20 to -0.5 V	
Function range input	-24 – 0 V	
nput resistance	10 kΩ	
Output		
Output signal	-20 to -0.5 V	
Signal transmission frequency range	0-50 kHz	
Ambient Conditions		
Ambient temperature °F	-4°F +158°F (Single device) -4°F +140°F (Group assembly)	
Ambient temperature °C	-20 °C +70 °C (Single device) -20 °C +60 °C (Group assembly)	
Storage temperature °F	-40°F +176°F	
Storage temperature °C	-40 °C +80 °C	
Mounting / Installation		
Mounting type	DIN rail NS35/15, NS35/7.5	

#### **Technical Drawings – Subject to Alterations**



Connection diagram 9147/20-99-10

Connection diagram 9147/10-99-10

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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

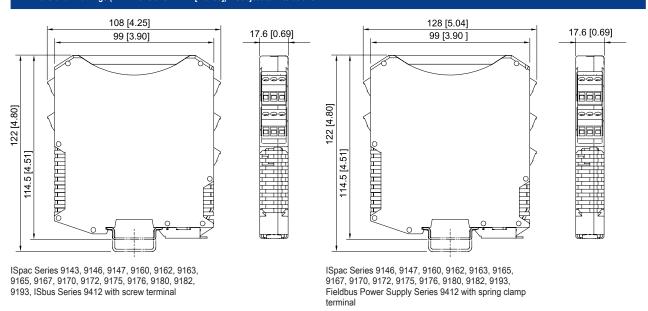
Spare Parts			
Figure	Description	Art. No.	Weight
Screw terminal			
	3-pole plug, screw connector thread: M3 stripping length: 7 mm color: green	112817	5 g
	3-pole plug, screw connector thread: M3 stripping length: 7 mm color: black	112816	4 g
	3-pole plug, screw connector thread: M3 stripping length: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

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



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