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## 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)

### WebCode 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 CEC Appendix J Class I Class II Class III					
Division	1	2	1	2	1	2
Ex interface	•	•	•	•	•	•
Installation in		•				

	CEC Section 18 NEC® 505 Class I			8 NEC® 506		
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 U	Init		
Number of channels	Connection type	Product Type	Art. No.	Weight lb
1	Screw terminal	9147/10-99-10s	212432	0.33
2	Screw terminal	9147/20-99-10s	212433	0.46

The order numbers listed in the table are for devices equipped with screw terminals. Variants with a spring clamp terminal are available. Further versions on the Internet r-stahl.com.

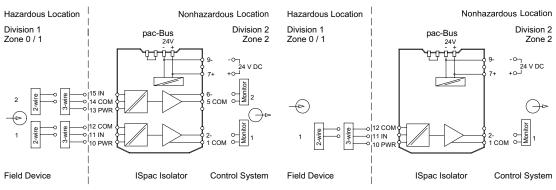
Technical Data	
Explosion Protection	
Certificate FMus	FM16US0122X
Certificate cFM	FM16CA0067X
Marking cFMus	Class I, Div. 2, Groups A,B,C,D; Class I, Zone 2, AEx/Ex nA Group IIC AIS Class I,II,III, Div. 1, Groups A,B,C,D,E,F,G; Class I, Zone 0, [AEx ia]/[Ex ia] IIC T4 at Ta = 70°C See Doc. 9147 6 031 001 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



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Technical Data	
Explosion Protection	
Certificates	ATEX (BVS), Canada (FM), EAC (ENDCE), IECEx (BVS), India (PESO), SIL (exida), USA (FM)
Ship approval	CCS, EU RO MR
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 maximum 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
Power dissipation max.	1.4 W
Input	
Input signal	-200.5 V
Input functional range	-24 – 0 V
Input resistance	10 kΩs
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 +158°F (Group assembly)
Ambient temperature °C	-20 °C +70 °C (Single device) -20 °C +70 °C (Group assembly)
Storage temperature °F	-40°F +176°F
Storage temperature °C	-40 °C +80 °C
Mounting / Installation	
Mounting type	NS35/15, NS35/7.5 DIN rail

#### Technical Drawings – Subject to Alterations



Connection diagram 9147/20-99-10

Connection diagram 9147/10-99-10

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# Vibration Transducer Supply Unit Series 9147



Accessories Weight lb Figure Description Art. No. Front cover for ISpac modules 91xx yellow, transparent Clear marking of the device for SIL applications. (Packaging unit: 10 pieces) 200914 0.04

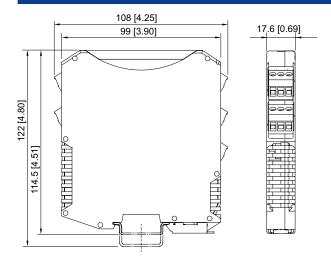
Spare Parts			
Figure	Description	Art. No.	Weight lb
Screw terminal			
	3-pole plug, screw connector thread: M3 stripping length: 7 mm color: green	112817	0.0
	3-pole plug, screw connector thread: M3 stripping length: 7 mm color: black	112816	0.01
	3-pole plug, screw connector thread: M3 stripping length: 7 mm color: blue	112818	0.01
Spring clamp terminal			
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm color: green	112825	0.0
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm color: black	112824	0.0
	3-pole plug with test tap, spring clamp connection stripping length: 10 mm color: blue	112826	0.0

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



ISpac Series 9146, 9147, 9160, 9162, 9163, 9165, 9167, 9170, 9172, 9175, 9176, 9180, 9182, 9193, ISbus Series 9412 with screw terminal

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