



mA-Isolating Repeater Series 9164







- For installation in Class I, Div. 1 hazardous areas
- · Intrinsically safe (Ex i) input
- · Space-saving, 12-mm wide design

MY R. STAHL 9164A







The 9164 series mA isolating repeater allows two 4 to 20 mA signal sources to be coupled. For example, it allows four-conductor transmitters to be connected to I/O cards designed to be operated with two conductors. The use of this device therefore saves costs by eliminating the need for additional I/O cards or can be used as the only solution for I/O cards that only operate with two conductors.

				endix s II	J Clas	s III
Division	1	2	1	2	1	2
Ex interface	•		•		•	
Installation in	•					

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

	IEC	Ex / <i>A</i>	ATEX			
Zone	0	1	2	20	21	22
Ex interface	•	•	•	•	•	•
Installation in		•	•			

Selection Table				
Number of channels	1			
Input	Output	Product Type	Art. No.	Weight
Ex i: 4 to 20 mA HART (sink)	Ex i: passive HART (sink)	9164/13-20-08	224364	90 g

The transmission of the HART signal can be deactivated by means of a DIP switch.

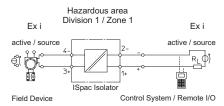
Technical Data	
Explosion Protection	
FMus certificate	FM16US0122X
cFM certificate	FM16CA0067X
Marking cFMus	IS, Class I,II,III, Div. 1, Groups A,B,C,D,E,F,G; T4, Class I, Zone 0, AEx/Ex ia Group IIC T4 with connections for Class I,II,III, Div. 1, Groups A,B,C,D,E,F,G; Class I, Zone 0, AEx/Ex [ia] IIC See Doc. 91 646 01 31 1
IECEx gas explosion protection	Ex ib [ia Ga] IIC T4 Gb
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)
Safety Data	
Max. voltage U _i	30 V
Max. current I _i	150 mA
Max. power P _i	1000 mW



07 b

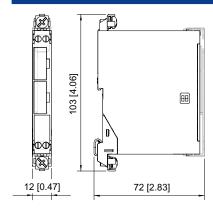
Functional Safety SIL 2 Auxiliary Power Auxiliary Power without Input Input signal 3.8 to 20.5 mA with HART Output Output signal 3.8 to 20.5 mA with HART Ambient Conditions Ambient temperature °F 40 °F +167 °F Ambient temperature °C 40 °F +176 °F Storage temperature °C 40 °C +75 °C Storage temperature °C 40 °C +80 °C Mounting / Installation Mounting type DIN rail NS35/15, NS35/7.5	Technical Data	
Auxiliary Power Auxiliary power without Input Input signal 3.8 to 20.5 mA with HART Output Output signal 3.8 to 20.5 mA with HART Ambient Conditions Ambient temperature °F -40 °F +167 °F Ambient temperature °C -40 °C +75 °C Storage temperature °C -40 °C +80 °C Mounting / Installation	Functional Safety	
Auxiliary power without Input Input signal 3.8 to 20.5 mA with HART Output Output signal 3.8 to 20.5 mA with HART Ambient Conditions Ambient temperature °F -40 °F +167 °F Ambient temperature °C -40 °C +75 °C Storage temperature °C -40 °C +80 °C Mounting / Installation	SIL	2
Input signal 3.8 to 20.5 mA with HART Output Output signal 3.8 to 20.5 mA with HART Ambient Conditions Ambient temperature °F -40 °F +167 °F Ambient temperature °C -40 °C +75 °C Storage temperature °F -40 °F +176 °F Storage temperature °C -40 °C +80 °C Mounting / Installation	Auxiliary Power	
Input signal 3.8 to 20.5 mA with HART Output Output signal 3.8 to 20.5 mA with HART Ambient Conditions Ambient temperature °F -40 °F +167 °F Ambient temperature °C -40 °C +75 °C Storage temperature °C -40 °F +176 °F Storage temperature °C -40 °C +80 °C Mounting / Installation	Auxiliary power	without
Output signal 3.8 to 20.5 mA with HART Ambient Conditions Ambient temperature °F -40 °F +167 °F Ambient temperature °C -40 °C +75 °C Storage temperature °F -40 °F +176 °F Storage temperature °C -40 °C +80 °C Mounting / Installation	Input	
Output signal 3.8 to 20.5 mA with HART Ambient Conditions -40 °F +167 °F Ambient temperature °C -40 °C +75 °C Storage temperature °F -40 °F +176 °F Storage temperature °C -40 °C +80 °C Mounting / Installation	Input signal	3.8 to 20.5 mA with HART
Ambient Conditions Ambient temperature °F -40 °F +167 °F Ambient temperature °C -40 °C +75 °C Storage temperature °F -40 °C +176 °F Storage temperature °C -40 °C +80 °C Mounting / Installation	Output	
Ambient temperature °F	Output signal	3.8 to 20.5 mA with HART
Ambient temperature °C -40 °C +75 °C Storage temperature °F -40 °F +176 °F Storage temperature °C -40 °C +80 °C Mounting / Installation	Ambient Conditions	
Storage temperature °F -40 °F +176 °F Storage temperature °C -40 °C +80 °C Mounting / Installation	Ambient temperature °F	-40 °F +167 °F
Storage temperature °C -40 °C +80 °C Mounting / Installation	Ambient temperature °C	-40 °C +75 °C
Mounting / Installation	Storage temperature °F	-40 °F +176 °F
	Storage temperature °C	-40 °C +80 °C
Mounting type DIN rail NS35/15, NS35/7.5	Mounting / Installation	
	Mounting type	DIN rail NS35/15, NS35/7.5

Technical Drawings – Subject to Alterations



Connection diagram 9164/13-20-08

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



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