

Isolator Barriers

HART termination board

ISpac

9196/16H-XX0-03c Art. No. 160891



- Cost- and space-saving system for HART communication
- Different variants available with or without signal conversion
- Easy to install on DIN rails

MY R. STAHL 9196A



Used in combination with the HART multiplexer (9192), the 9196 series HART termination board enables the transmission of data using the HART protocol between field devices and an asset management system. The boards are very easy to install on DIN rails and can process 4 to 20 mA signals with HART FSK. If Ex i separation is necessary, this will require separate Ex i isolators.

Technical Data

Explosion Protection	
Application range (zones)	2
IECEX gas certificate	IECEX BVS 10.0042 X
IECEX gas explosion protection	Ex ec IIC T4 Gc
ATEX gas certificate	BVS 03 ATEX E 213 X
ATEX gas explosion protection	Ex II 3 G Ex ec IIC T4 Gc
FMus certificate	FM16US0122X
cFM certificate	FM16CA0067X
Marking cFMus	Class I, Div. 2, Groups A,B,C,D; Class I, Zone 2, Group IIC T4 at Ta = 70°C See Doc. 91 926 01 31 1
Certificates	ATEX (BVS), Brazil (ULB), Canada (FM), China (NEPSI), IECEX (BVS), India (PESO), SIL (exida), USA (FM)
Ship approval	CCS, EU RO MR (DNV)
Declaration of Conformity	ATEX (EUK), China (CCC)
Installation	in Zone 2, Division 2 and in the safe area
Further information	see respective certificate and operating instructions
Functional Safety	
SIL	3
HFT	0
SFF	91,06%
PFD _{avg} at T _{proof} 1 year	2,04E-06
PFD _{avg} at T _{proof} 5 years	1,02E-05
PFDavg at Tproof 10 years	2,04E-05
Electrical Data	
Type of signal	AI, AO
Number of channels	16

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Electrical Data

HART-multiplexer connection	Yes
Connection isolators / Non-Ex field devices	Via pluggable terminal; connected to the field device/automation system in parallel; input or output

Auxiliary Power

Auxiliary power	24 V DC
Nominal voltage V_{nom}	24 V DC
Auxiliary power voltage range	19 ... 31.2 V
Residual ripple	< 3.6 Vss
Polarity reversal protection	Yes

Output

Application	2-, 3- or 4-conductor, Transmitter, positioner
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Ambient Conditions

Ambient temperature °C	-20 °C ... +70 °C
Ambient temperature °F	-4°F ... +158°F
Note	"The installation conditions affect the ambient temperature. Observe the "Cabinet installation guide"."
Storage temperature °C	-40 °C ... +80 °C
Storage temperature °F	-40°F ... +176°F
Max. relative humidity	95%
Use at the height of	< 2000 m
Electromagnetic compatibility	Tested to the following standards and regulations: EN 61326-1 For use in industrial areas; NAMUR NE 21

Mechanical Data

Degree of protection (IP)	IP00
Fire resistance (UL 94)	V0
Enclosure material	Polyamide
Width	80 mm
Width, inches	3.15 in
Height	70 mm
Height in inches	2.76 in
Length	125 mm
Length in inches	4.92 in
Weight	0.33 lb

Mounting / Installation

Mounting type	DIN rail
Mounting orientation	Vertical
Connection type	Screw terminal
Min. rigid conductor cross section	0.14 mm ²
Max. rigid conductor cross section	1.5 mm ²
Min. flex conductor cross section	0.14 mm ²
Max. flex conductor cross section	1.5 mm ²
Connection cross-section AWG	16 ... 26

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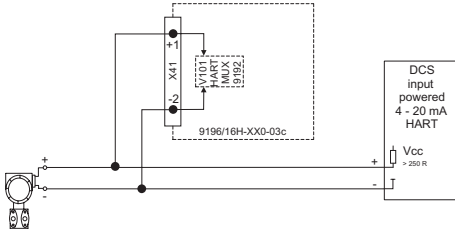
HART termination board

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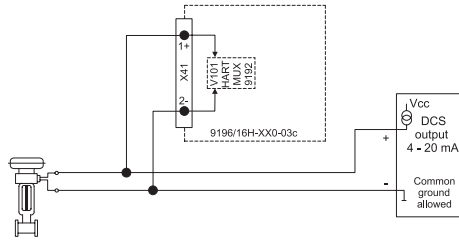
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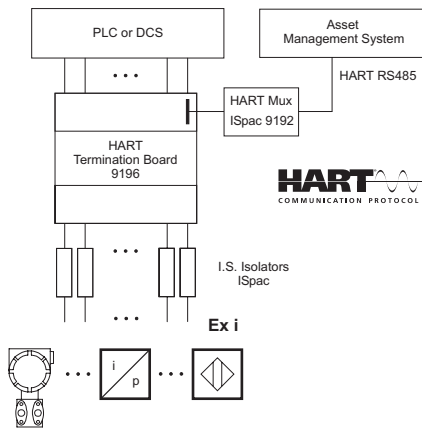
Technical Drawings – Subject to Alterations



Connection diagram 9196/...-03c

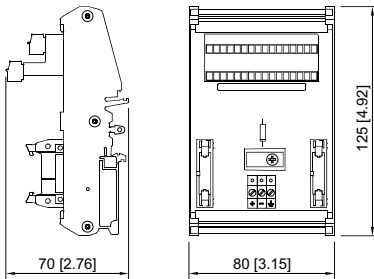


Connection diagram 9196/...-03c



System configuration

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



HART Termination board Type 9196/16H-XX0-03c

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.