

# Isolators

## Isolating repeater

### Ex i field circuit ISpac

9265/26-11-10s Art. No. 261404



- Compact one- and two-channel Ex i output isolating repeater
- Space savings due to a slim design – 12.5 mm wide
- Can be used up to SIL 2 (IEC/EN 61508)

WebCode 9265A



9265 series Ex i isolating repeaters can be used for the intrinsically safe operation of control valves, I/P transducers or indicators. They transmit superimposed HART communication signals in both directions. The input, output and auxiliary power are galvanically separated from one another. The two channels in the two-channel variants are galvanically separated from one another.

## Technical Data

### Explosion Protection

Application range (zones)	2
Ex interface zone	0 1 2 20 21 22
IECEX gas certificate	IECEX BVS 20.0035X
IECEX gas explosion protection	Ex ec [ia Ga] IIC T4 Gc
IECEX dust certificate	IECEX BVS 20.0035X
IECEX dust explosion protection	[Ex ia Da] IIIC
IECEX firedamp certificate	IECEX BVS 20.0035X
IECEX firedamp protection	Ex [Ex ia Ma] I
ATEX gas certificate	BVS 20 ATEX E 045 X
ATEX gas explosion protection	⊕ II 3 (1) G Ex ec [ia Ga] IIC T4 Gc
ATEX dust certificate	BVS 20 ATEX E 045 X
ATEX dust explosion protection	⊕ II (1) D [Ex ia Da] IIIC
ATEX firedamp certificate	BVS 20 ATEX E 045 X
ATEX firedamp protection	⊕ I (M1) Ex [Ex ia Ma] I
ATEX firedamp protection 2	⊕ I (M1) Ex I
cULus certificate	E81680
Marking cULus	Associat. apparatus for use in, Class I, Div. 2, Groups A,B,C,D; Class I, Zone 2, Group IIC prov. intr. safe circ. f.u.in Class I,II,III, Div. 1, Groups A,B,C,D,E,F,G; Class I, Zone 0, Group IIC See doc. 9265 6 031 001 3
Certificates	ATEX (BVS), Canada / USA (UL), IECEX (BVS), India (PESO), Korea (KTL), SIL (BVS)
Ship approval	DNV GL

#### Explosion Protection

Notes	CCC, UKCA and metrological certificate available from 2022 onward
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#### Safety Data

Max. voltage $U_o$	25.2 V
Max. current $I_o$	93 mA
Max. power $P_o$	587 mW
Max. permissible external capacity $C_o$ for IIC	0.107 $\mu$ F
Max. permissible external inductance $L_o$ for IIC	2 mH
Internal capacitance	Negligible
Internal inductance	Negligible
Safety-related max. voltage	253 V

#### Functional Safety

SIL	2
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#### Electrical Data

Number of channels	2
LFD relay	No
Communication signal	HART

#### Auxiliary Power

Auxiliary power	24 V DC
Nominal voltage	24 V DC
Auxiliary power voltage range	19.2 to 30 V
Nominal current	85 mA
Power consumption	2 W
Max. power dissipation	1.4 W
Polarity reversal protection	Yes
Operation indication	Green "PWR" LED

#### Galvanic Isolation

Test voltage as per standard	IEC EN 60079-11
Ex i output to auxiliary power	375 V AC peak value
Ex i output to input	375 V AC peak value
Ex i output to Ex i output	60 V
Test voltage as per standard	EN 61010/EN 50178
Input to auxiliary power	300 V <sub>eff</sub>

#### Input

Input	0/4 to 20 mA with HART
Input signal	0/4 to 20 mA with HART
Function range input	0 – 24 mA
Maximum input current	50 mA
LF response threshold	$I_E > 3.6$ mA
Behaviour of the input with LF	$RE \geq 1$ M $\Omega$

#### Output

Output	0/4 to 20 mA with HART
Output signal	0/4 to 20 mA with HART
Function range output	0 – 24 mA

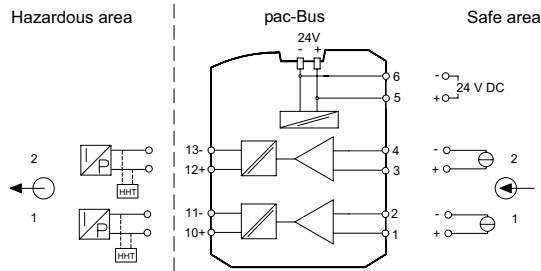
<b>Output</b>	
Max. load resistance $R_L$	700 $\Omega$
Output residual ripple	$\leq 20$ mV
Open-circuit voltage $U_a$	27 V
Settling time 10-90%	$\leq 140$ $\mu$ s
Settling time note	Valid for 4 to 20 mA
Average measurement fault	0,10%
Temperature influence error limits	$\leq 0.1\%/10$ K
Indication of line fault	Red "ERR" LED
Wire breakage error detection	$R_L > 10$ k $\Omega$
Short circuit error detection	$R_L < 50$ ohm

<b>Ambient Conditions</b>	
Ambient temperature	-40 °C ... +70 °C
Ambient temperature	-40 °F ... +158 °F
Storage temperature	-40 °C ... +85 °C
Storage temperature	-40 °F ... +185 °F
Maximum relative humidity	95%
Use at the height of	< 2000 m

<b>Mechanical Data</b>	
Degree of protection (IP)	IP30
Degree of protection (IP) terminals	IP20
Fire resistance (UL 94)	V0
Enclosure material	Polyamide
Grid dimension	12.5 mm
Width	12.5 mm
Width, inches	0.49 in
Height	114.5 mm
Height, inches	4.51 in
Length	116 mm
Length, inches	4.57 in
Weight	0.195 kg
Weight	0.43 lb

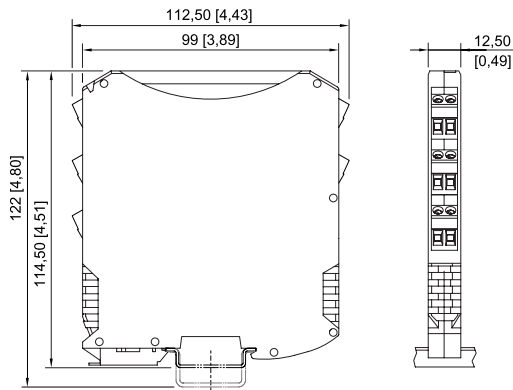
<b>Mounting / Installation</b>	
Mounting type	DIN rail NS35/15, NS35/7.5
Mounting orientation	Horizontal Vertical
Connection type	Screw terminal
Min. rigid conductor cross section	0.2 mm <sup>2</sup>
Max. rigid conductor cross section	2.5 mm <sup>2</sup>
Min. flex conductor cross section	0.2 mm <sup>2</sup>
Max. flex conductor cross section	2.5 mm <sup>2</sup>
Connection cross-section AWG	16 – 12

#### Technical Drawings – Subject to Alterations





Connection diagram 9265/26

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



ISpac Series 9260, 9265, 9270, 9275, 9276, 9282 with screw terminal

## Accessories

Supply module		Art. No.
	Redundant supply of 24 V DC auxiliary power (with fuse) and reading the collective error message for 92xx series ISpac modules which support this function. Connection screw terminal	268183
	Redundant supply of 24 V DC auxiliary power (with fuse) and reading the collective error message for 92xx series ISpac modules which support this function. Connection spring clamp terminal	268184
pac-Bus		Art. No.
	Wiring for power supply and common error messaging	262928

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.