

# Isolators

Transmitter supply unit

Field Circuit Ex i

9260/13-11-10s Art. No. 261384



- Universal use for 2-wire transmitters and mA sources (4-wire transmitter)
- Slim design – 12.5 mm wide – for one- and two-channel versions
- Can be used for safety levels up to SIL 2 (IEC/EN 61508)

WebCode 9260A



Series 9260 transmitter supply units can be used for the intrinsically safe operation of two-wire transmitters or intrinsically safe mA sources such as 4-wire transmitters. The device allows HART signals to be transmitted in both directions. The portfolio includes single- and dual-channel devices and a version for signal duplication.

## Technical Data

### Explosion Protection

Application range (zones)	2
Ex interface zone	0 1 2 20 21 22
IECEX gas certificate	IECEX BVS 17.0079X
IECEX gas explosion protection	Ex nA [ia Ga] IIC T4 Gc
IECEX dust certificate	IECEX BVS 17.0079X
IECEX dust explosion protection	[Ex ia Da] IIIC
IECEX firedamp certificate	IECEX BVS 17.0079X
IECEX firedamp protection	[Ex ia Ma] I
ATEX gas certificate	BVS 17 ATEX E 087 X
ATEX gas explosion protection	⊕ II 3 (1) G Ex nA [ia Ga] IIC T4 Gc
ATEX dust certificate	BVS 17 ATEX E 087 X
ATEX dust explosion protection	⊕ II (1) D [Ex ia Da] IIIC
ATEX firedamp certificate	BVS 17 ATEX E 087 X
ATEX firedamp protection	⊕ I (M1) [Ex ia Ma] I
Certificate cULus	E81680
Marking cULus	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, [Ex ia] IIC T4 any mounting pos. Ta = 60°C See Doc. 9260 6 031 001 3
Certificates	ATEX (BVS), Canada / USA (UL), IECEX (BVS), SIL (BVS)
Ship approval	DNV GL

#### Safety Data

Maximum voltage $U_o$	25.2 V
Maximum current $I_o$	93 mA
Maximum power $P_o$	587 mW
Max. permissible external capacitance $C_o$ for IIC	0.107 $\mu$ F
Max. permissible external capacitance $C_o$ for IIB	0.82 $\mu$ F
Max. permissible external inductance $L_o$ for IIC	2 mH
Max. permissible external inductance $L_o$ for IIB	4 mH
Max. voltage $U_i$	30 V
Max. current $I_i$	150 mA
Internal capacitance $C_i$	negligible
Internal capacitance $C_i$ isolating repeater	negligible
Internal inductance $L_i$	negligible
Internal inductance $L_i$ isolating repeater	negligible
Safety-related maximum voltage	253 V AC

#### Functional Safety

SIL	2
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#### Electrical Data

Number of channels	1
Transmitter supply mode	Yes
Isolating repeater mode	Yes
LFD relay	No
Communication signal	HART

#### Auxiliary Power

Auxiliary power	24 V DC
Auxiliary power nominal voltage	24 V DC
Auxiliary power voltage range	6
Nominal current	76 mA
Max. power dissipation	1.2 W
Power consumption	1.8 W
Polarity reversal protection	yes
Operation indication	LED green "PWR"

#### Galvanic Isolation

Test voltage according to standard	IEC EN 60079-11
Galvanic isolation Ex i input to output	375 V peak value
Galvanic isolation Ex i input to auxiliary power	375 V peak value
Test voltage according to standard 2	EN 61010 / EN 50178
Galvanic isolation output to auxiliary power	300 $V_{eff}$
Galvanic isolation output to output	300 $V_{eff}$

#### Input

Input function	Isolating repeater Transmitter supply
Input	0/4 – 20 mA
Input signal	0/4 ... 20 mA with HART
Input functional range	0 ... 24 mA
Short-circuit current	≥ 22,5 mA
Supply voltage for transmitter	≥ 16 V bei 20 mA
Voltage drop	< 3,5 V

#### Output

Output	0/4 ... 20 mA with HART
Output A	0/4 ... 20 mA
Output signal	0/4 – 20mA active & passive
Output current at $I_e=0$	0 mA
Output residual ripple	< 20 mV <sub>eff</sub>
Output functional range	0 – 24 mA
Load resistance $R_L$ max.	1000 Ω
Settling time 10 ... 90 %	< 200 μs
Settling time note	isol. repeater mode: < 600 μs
Deviation	≤ 0,1 %
Typical deviation	0.05 %
Temperature influence error limits	< 0,1 % / 10K
Behaviour of the output	= input signal

#### Ambient Conditions

Ambient temperature	-20 °C ... +60 °C
Ambient temperature	-4 °F ... +140 °F
Storage temperature	-40 °C ... +80 °C
Storage temperature	-40 °F ... +176 °F
Relative humidity max.	10 ... 95 %
Use at the height of	<2000m
Electromagnetic compatibility	EN 61326-1 Use in industrial environment Immunity according to EN 61000-6-2 Interference emission to EN 61000-6-4

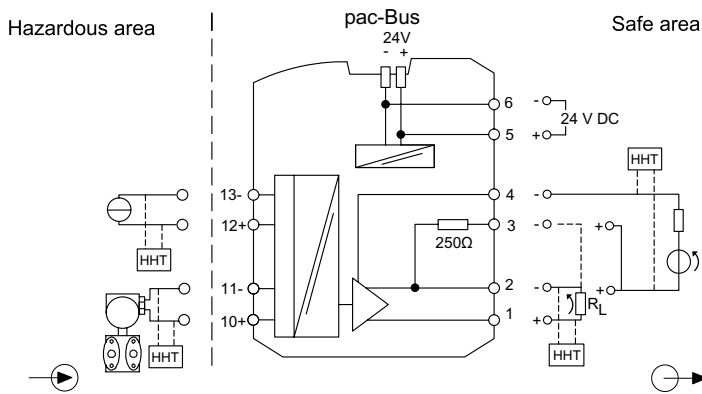
#### Mechanical Data

Degree of protection (IP)	IP30
Terminal degree of protection (IP)	IP20
Fire resistance (UL 94)	V0
Enclosure material	Polyamide
Clamping range AWG	24 – 12
Connection cross-section AWG	24 ... 12
Grid dimension	12.5 mm
Width inches	4.43 in
Length inches	0.49 in
Mounting depth inches	4.51 in
Weight	0.185 kg
Weight	0.41 lb

#### Mounting / Installation

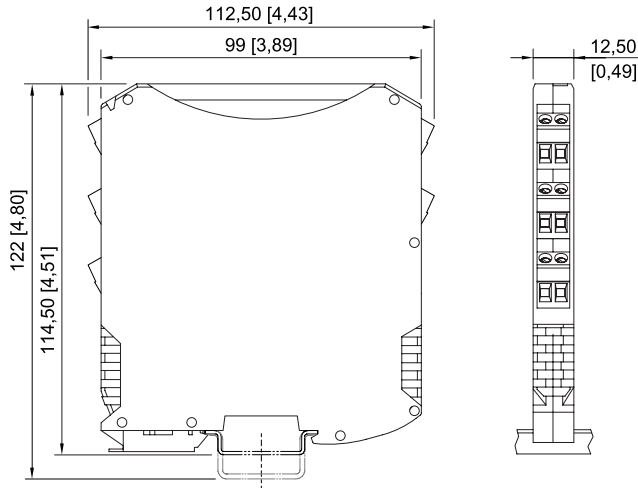
Mounting type	DIN rail (NS35/15, NS35/7,5)
Mounting position	vertical horizontal
Connection type	Screw terminal
Conductor cross-section rigid min.	0.2 mm <sup>2</sup>
Conductor cross-section solid max.	2.5 mm <sup>2</sup>
Conductor cross-section flexible min.	0.2 mm <sup>2</sup>
Conductor cross-section flexible max.	2.5 mm <sup>2</sup>

#### Technical Drawings – Subject to Alterations



Connection diagram 9260/13-11-10

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



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

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## Accessories

Supply modul		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.