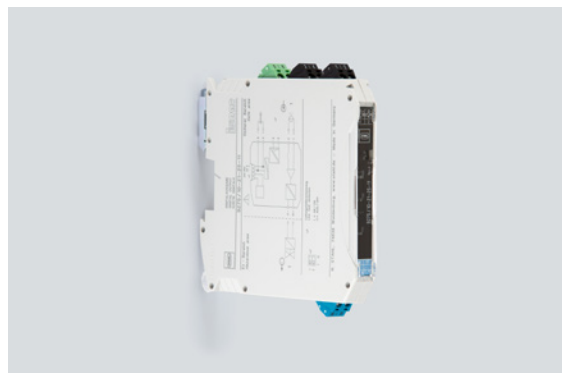


Isolators

Binary output

Ex i field circuit

9275/10-24-48-11s Art. No. 261435



- Space savings due to a slim design – 12.5 mm wide
- Can be used for functional safety levels up to SIL 3 (IEC/EN 61508)
- A wire breakage and short-circuit monitoring system, which can be disconnected and includes messages

WebCode 9275A



Series 9275 digital outputs issue signals for the operation of intrinsically safe solenoid valves, indicators or horns. The devices feature three-way galvanic separation.

Technical Data

Explosion Protection

Application range (zones)	2
Ex interface zone	0 1 2 20 21 22
IECEX gas certificate	IECEX IBE 17.0044X
IECEX gas explosion protection	Ex nA [ia Ga] IIC T4 Gc
IECEX dust certificate	IECEX IBE 17.0044X
IECEX dust explosion protection	[Ex ia Da] IIIC
ATEX gas certificate	IBEXU 17 ATEX 1152 X
ATEX gas explosion protection	⊕ II 3 (1) G Ex nA [ia Ga] IIC T4 Gc
ATEX dust certificate	IBEXU 17 ATEX 1152 X
ATEX dust explosion protection	⊕ II (1) D [Ex ia Da] IIIC
cULus certificate	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, [AEx ia]/[Ex ia] IIC T4 any mounting pos. Ta = 60°C See Doc. 9275 6 031 001 3
Certificates	ATEX (IBE), Canada / USA (UL), IECEX (IBE), Korea (KTL), SIL (BVS)
Ship approval	DNV
Notes	CCC, UKCA certificate available from 2022 onward

Safety Data

Max. voltage U_o	27.06 V
Max. current I_o (Ex ia)	91.11 mA
Max. power P_o	616 mW

Safety Data

Max. permissible external capacity C_o for IIC	0.078 μ F
Max. permissible external capacity C_o for IIB	0.686 μ F
Max. permissible external capa.IIA	2.29 μ F
Max. permissible external inductance L_o for IIC	3.5 mH
Max. permissible external inductance L_o for IIB	15 mH
Max. permissible external inductance L_o for IIA	32 mH
Internal capacitance	11 nF
Internal inductance	Negligible
Safety-related max. voltage	253 V AC

Functional Safety

SIL	3
HFT	0
SFF	94,82%
Lambda SD	0 FIT
Lambda SU	406 FIT
Lambda DD	45,1 FIT
Lambda DU	24,6 FIT
Lambda, total	683 FIT
PFD _{avg} at T _{proof} 1 year	1,08E-04
PFD _{avg} at T _{proof} 2 years	2,16E-04
PFD _{avg} at T _{proof} 5 years	5,41E-04
PFDavg at Tproof 10 years	1,08E-03
PFH	2,46E-08

Electrical Data

Number of channels	1
LFD relay	Yes

Auxiliary Power

Auxiliary power	24 V DC
Auxiliary power voltage range	19.2 to 30 V
Nominal current	90 mA
Power consumption	2.16 W
Max. power dissipation	1.62 W
Polarity reversal protection	Yes
Undervoltage monitoring	No
Operation indication	Green "PWR" LED

Galvanic Isolation

Test voltage as per standard	IEC EN 60079-11
Galvanic separation Ex i output to input	375 V AC peak value
Galvanic separation Ex i output to HE	375 V AC peak value
Galvanic separation Ex i output to FMC	375 V AC peak value
Test voltage as per standard	EN 61010/EN 50178

Galvanic Isolation

Fault message contact to auxiliary power	300 V _{eff}
Input to auxiliary power	300 V _{eff}
Fault message contact to input	300 V _{eff}

Input

Input voltage for ON	15 – 30 V
Input voltage for OFF	0 – 5 V
Control current	< 12 mA

Output

Output open-circuit voltage U _a	24.3 V
Max. output current I _{a max}	48 mA
Output internal resistance R _i	297 Ω
Switching delay ON/OFF	< 30 ms
Switching delay OFF/ON	< 30 ms
Response time output	< 30 ms
Switching state indication	Yellow "STAT" LED
Fault message contact switching capacity	30 V / 50 mA
LF switch user adjustment	Activated/deactivated
Indication of line fault	Red "LF" LED
Wire breakage error detection	> 10 kΩ
Short circuit error detection	< 50 ohm
Test current	< 0.6 mA

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
Maximum relative humidity	10 to 95%
Use at the height of	< 2000 m
Electromagnetic compatibility	EN 61326-1 Use in industrial environment Immunity according to EN 61000-6-2 Interference emission to EN 61000-6-4

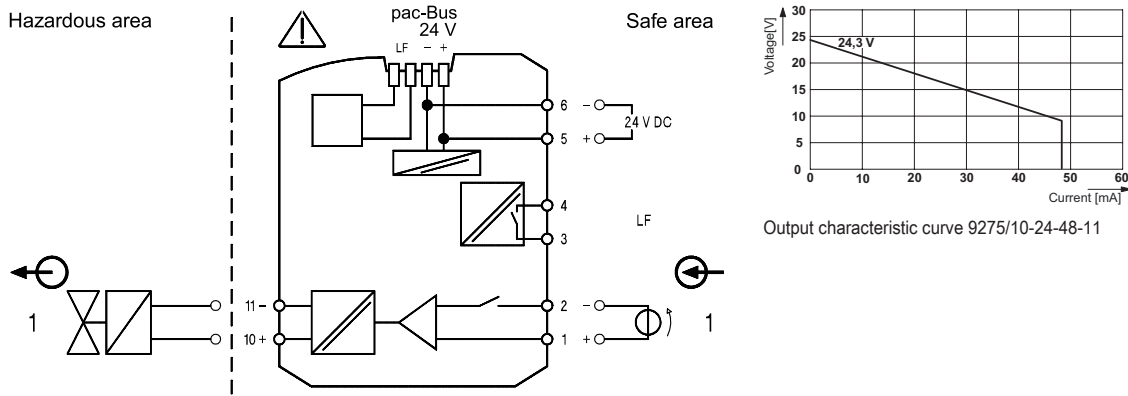
Mechanical Data

Degree of protection (IP)	IP30
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	112.5 mm
Length, inches	4.43 in
Weight	0.16 kg
Weight	0.35 lb

Mounting / Installation

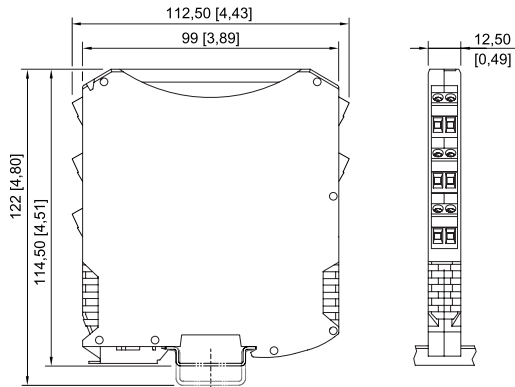
Mounting type	DIN rail NS35/15, NS35/7.5
Mounting orientation	Vertical Horizontal
Connection type	Screw terminal
Min. rigid conductor cross section	0.2 mm ²
Max. rigid conductor cross section	2.5 mm ²
Min. flex conductor cross section	0.2 mm ²
Max. flex conductor cross section	2.5 mm ²
Connection cross-section AWG	24 – 13

Technical Drawings – Subject to Alterations



Connection diagram 9275/10-21-25-11

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

Isolators

Binary output

Ex i field circuit

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pac-Bus



Wiring for power supply and common error messaging

Art. No.

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.