



- Sixteen channels can be used in pairs as inputs or outputs (24 V/0.5 A)
- Ex ec inputs/outputs with line fault monitoring, an LED fault and status display for each channel and SIL2 shutdown input
- Module in Zone 2 can be replaced without having to disconnect the power supply (i.e. hot-swapped)

A4

WebCode **9472A**



The 9472/35 24 V digital input/output module for Zone 2 has 16 channels which can be used in pairs for operation as inputs for contacts and PNP or NAMUR proximity switches (EN 60947-5-6) or as outputs for solenoid valves up to 24 V/0.5 A. Eight inputs can be used for frequencies of up to 20 kHz, and four can be used for detecting the direction of rotation.

All inputs/outputs are short-circuit proof and galvanically separated from the system. Additional control input for "Plant STOP" (IEC 61508/up to SIL2).

	IECEX / ATEX					
	0	1	2	20	21	22
Zone						
Ex interface			•			
Installation in			•			

	NEC® 500 CE Code Appendix J					
	Class I		Class II		Class III	
Division	1	2	1	2	1	2
Ex interface		•				
Installation in		•				

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

Selection Table				
Installation	Zone 2 and safe areas			
Number of channels	Product Type		Art. No.	Weight
(adjustable parameters in pairs) 16 Ex ec Inputs/Outputs	9472/35-16-12		230239	275 g
Please order two terminals separately – see accessories and spare parts				

Technical Data	
Explosion Protection	
IECEX gas explosion protection	Ex ec ic [ia Ga] IIC T4 Gc
ATEX gas explosion protection	Ⓔ II 3 (1) G Ex ec ic [ia Ga] IIC T4 Gc
Certificates	ATEX (DEK), Canada (FM), China (NEPSI), IECEX (DEK), India (PESO), Korea (KTL), SIL (exida), USA (FM)
Declaration of Conformity	ATEX (EUK), China (CCC)
Electrical Data	
Max. number of 3-conductor PNP inputs	16 (channels 0 ... 15)
Auxiliary Power	
Current consumption	90 mA
Max. power consumption	2.2 W
Max. power dissipation	Output: 5.4 W Input: 1.4 W
Input	
Max. number of frequency inputs	8 (channel 8 to 15)

Technical Data

Input

Notes	<p>Max. supply voltage PNP: corresponds to the external supply voltage U_H (X0)</p> <p>External supply voltage U_H (X0): 18 to 32 V DC (nominal voltage 24 V)</p> <p>Max. current consumption (X0): 4 x 0.5 A (depends on the total current of the binary outputs)</p> <p>IEC 60947-5-6-1999 (NAMUR), 3-conductor PNP proximity switches and active 24 V signals with and without 47 kΩ resistor connected in parallel</p>
-------	--

Output

Supply voltage binary output	Corresponds to the ext. supply voltage U_H - 0.7 V (X0)
Output current binary output	30 mA to 0.5 A per channel (electronically limited)
Notes	If auxiliary power is not connected: 6 V/2 mA

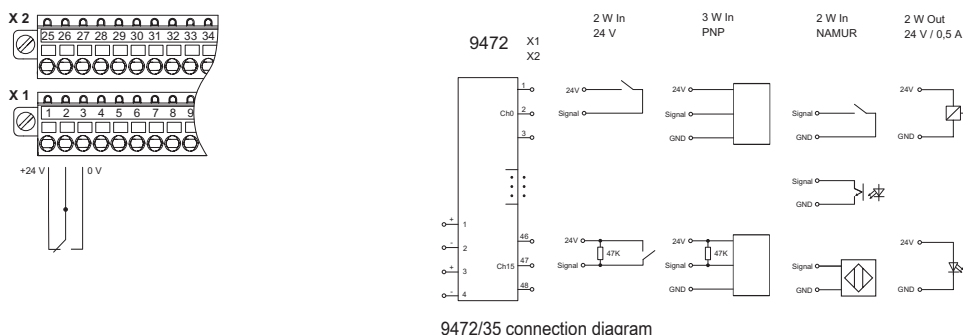
Ambient Conditions

Ambient temperature	-40°C ... +75°C
---------------------	-----------------

Mechanical Data

Degree of protection (IP) (IEC 60529)	IP20
Width	96.5 mm
Height	67 mm
Length	128 mm

Technical Drawings – Subject to Alterations



9472/35 connection diagram

Accessories

Figure	Description	Art. No.	Weight
Pluggable terminal			
	1.5 mm ² with lock, 24-pin, spring clamp connection, black, for connecting the field signals to I/O modules, for non-intrinsically safe field circuits Version: Only for 9469, 9471 and 9472 I/O modules Labelling: 1 to 24	245090	20 g
	1.5 mm ² with lock, 24-pin, spring clamp connection, black, for connecting the field signals to I/O modules, for non-intrinsically safe field circuits Version: Only for 9469, 9471 and 9472 I/O modules Labelling: 25 to 48	245091	20 g
Resistor error message suppression			
	The resistors are used to suppress error messages for unused I/O channels Resistance value: 5K6/0.5 W Suitable for: AIM 9468; UMH 9469; DIOM 9470; DIOM 9471; DIOM 9472; DOM 9475 For intrinsically safe circuits (simple apparatus according to EN 60079-11)	244911	-
Partition			
	For mounting between intrinsically safe and non-intrinsically safe connections between I/O modules to maintain a tight string length of 50 mm	220101	10 g

Accessories			
Figure	Description	Art. No.	Weight
Warning label			
	"Clean modules only with a damp cloth."	162796	1 g
DIN A4 sheet			
	For label plate on I/O modules; 6 plates per sheet; IS Wizard printout; packaging unit = 20 sheets	162832	1 g
Labelling strips			
	"FB Addr ... Mod No ..." for pluggable terminal, 26 pieces on the sheet	162788	1 g
Vibration bracket set			
	When installed in environments with extreme vibration (> 0.7 g and max. 4 g), the 9490 vibration brackets may be used as an additional measure and provide mechanical stability for the individual modules. For mounting: All I/O modules, except 9477/12 and 9478 Number of brackets in a set: 8 Screws (item no. 275516) must be ordered separately.	271920	-
Set of screws			
	Set of M5 x 14 screws (self-tapping) for 9490 vibration brackets Number of screws in a set: 25	275516	-

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

