



- Sixteen channels can be used in pairs as inputs or outputs (24 V / 0.5 A)
- Inputs/outputs Ex ec with line fault monitoring and LED error and status indication for each channel plus SIL 2 shutdown input
- Module in Zone 2, Cl. I, Div. 2 can be hot swapped

06 b

WebCode **9472A**



The 9472/35 24 V series digital input/output module for Zone 2, Cl. I, Div. 2 has 16 channels, which can be used in pairs for operation as inputs for contacts and PNP or NAMUR proximity sensors (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" (IEC61508 / through SIL2)

	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 NEC® 506					
	Class I					
Zone	0	1	2	20	21	22
Ex interface			•			
Installation in			•			

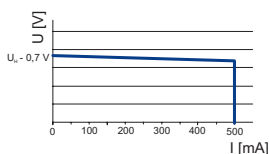
	IECEX / ATEX					
	Zone	0	1	2	20	21
Ex interface			•			
Installation in			•			

Selection Table				
Installation	Zone 2, Cl. I, Div. 2 and safe area			
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	
FMus certificate	FM17US0332X
cFM certificate	FM16CA0134X
Marking cFMus	NI, Class I, Div. 2, Groups A,B,C,D; Class I, Zone 2, AEx/Ex ec ic Group IIC T4 Gc Ta = -40°C ... +75°C See Doc. 9472.6.031.001.1
IECEX gas explosion protection	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)
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

Technical Data	
Auxiliary Power	
Max. power dissipation	Output: 5.4 W Input: 1.4 W
Input	
Max. number of frequency inputs	8 (channel 8 to 15)
Notes	Max. supply voltage PNP: corresponds to the external supply voltage U_{in} (X0) External supply voltage U_{in} (X0): 18 ... 32 V DC (nominal voltage 24 V) Max. current consumption (X0): 4 x 0.5 A (depending on the total current of the binary outputs) IEC 60947-5-6-1999 (NAMUR), 3-conductor PNP proximity switches and active 24 V signals with and without 47 kΩ resistance connected in parallel
Output	
Supply voltage binary output	Corresponds to the ext. supply voltage $U_{in} - 0.7$ V (X0)
Output current binary output	30 mA to 0.5 A per channel (electronically limited)
Notes	When auxiliary power is not connected: 6 V / 2 mA
Ambient Conditions	
Ambient temperature °F	-40°F ... +167°F
Ambient temperature °C	-40°C ... +75°C
Mechanical Data	
Degree of protection (IP) (IEC 60529)	IP20

Technical Drawings – Subject to Alterations



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

Spare Parts			
Figure	Description	Art. No.	Weight
Warning label			
	"Clean modules only with a damp cloth."	162796	1 g
Labelling strips			
	"FB Addr ... Mod No ..." for pluggable terminal, 26 pieces on the sheet	162788	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

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

