



- Sixteen channels can be used in pairs as inputs or outputs
- Intrinsically safe Ex ia IIC inputs/outputs with line fault monitoring and LED error and status indication for each channel
- Module in Zone 1 can be hot swapped

A4

WebCode 9470C



The 9470/32 series digital input/output module for Zone 1 has 16 channels, which can be used in pairs for Ex i operation as inputs for contacts and NAMUR proximity sensors (EN 60947-5-6) or as outputs for indicator lamps and low-power solenoid valves. 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.

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


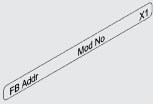

	NEC 505			NEC 506		
	Class I					
Zone	0	1	2	20	21	22
Ex interface		•	•	•	•	•
Installation in		•	•		•	•

	NEC 500					
	Class I		Class II		Class III	
Division	1	2	1	2	1	2
Ex interface	•	•	•	•	•	•
Installation in	•	•	•	•	•	•


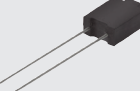

Selection Table							
Installation	in Zone 1, Zone 2, Zone 21, Zone 22 and in safe areas						
Number of channels	Product Type				Art. No.	PS	Weight kg
Adjustable parameters in pairs 16 Ex i inputs/outputs	9470/32-16-11				210447 ▲	22	0.275
Please order 2 terminals separately - see accessories and spare parts							

Technical Data	
Explosion Protection	
Gas explosion protection IECEx	Ex ia [ia Ga] IIC T4 Gb
Gas explosion protection ATEX	⊕ II 2 (1) G Ex ia [ia Ga] IIC T4 Gb
Dust explosion protection IECEx	[Ex ia Da] IIIC
Dust explosion protection ATEX	⊕ II (1) D [Ex ia Da] IIIC
Certificates	ATEX (DEK), Brazil (ULB), Canada (FM), EAC (STV), IECEx (DEK), India (PESO), Korea (KTL), USA (FM)
Ship approval	ABS, CCS, ClassNK, DNVGL, RINA
Safety Data	
Max. voltage U ₀	9.8 V
Max. current I ₀ (Ex ia)	10.4 mA
Max. power P ₀ (Ex ia)	25.5 mW

Technical Data	
Auxiliary Power	
Current consumption	120 mA
Max. power consumption	2.5 W
Max. power dissipation outputs	2.5 W
Input	
Signal input	input EN 60947 (NAMUR)
Supply voltage	8.2 V
Function	Up/down counter frequency with direction
Output	
Output rated operation	6 V / 2 mA
Notes	Output characteristic, see data sheet on the Internet r-stahl.com (WebCode 9470C)
Mechanical Data	
Width	96.5 mm
Depth	67 mm
Length	128 mm

Accessories and Spare Parts			
Figure	Description	Art. No.	Weight kg
DIN A4 sheet			
	For label plate on I/O modules; 6 labels on each sheet; print-out using IS Wizard; packaging unit = 20 sheets	162832	0.001
Labelling strips			
	"FB Addr ... Mod No ..." for pluggable terminal, sheet with 26 strips	162788	0.001
Partition			
	For mounting between intrinsically safe and non-intrinsically safe connections of the I/O modules, in order to adhere to the required 50 mm distance	220101 ▲	0.010
Warning sign			
	"Clean modules only with a damp cloth."	162796	0.001
Pluggable terminal			
	2.5 mm ² with lock, 16-pole, screw connector, blue, for connecting the field signals to I/O modules, for intrinsically safe field circuits Labelling: 1 ... 16 Attention: An additional terminal is necessary for I/O module Series 9470 and 9482. Labelling: 17 ... 32	162702	0.028
	2.5 mm ² with lock, 16-pole, screw connector, blue for connecting the field signals to I/O modules, for intrinsically safe field circuits Labelling: 17 ... 32	162718	0.028

Accessories and Spare Parts

Figure	Description	Art. No.	Weight kg
Pluggable terminal			
	2.5 mm ² with lock, 16-pole, spring clamp connection, blue, for connecting the field signals to I/O modules, for intrinsically safe field circuits, incl. test jacks Labelling: 1 ... 16 Attention: An additional terminal is necessary for I/O module Series 9470 and 9482. Labelling: 17 ... 32	162695 ▲	0.028
	2.5 mm ² with lock, 16-pole, spring clamp connection, blue for connecting the field signals to I/O modules, for intrinsically safe field circuits, incl. test jacks Labelling: 17 ... 32	162716 ▲	0.028
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; DIOM 9470; DIOM 9471; DIOM 9472; DOM 9475 For intrinsically safe circuits (simple apparatus according to EN 60079-11)	244911	-
Indicating Lamp			
	Single electrical equipment for intrinsically safe circuits according to EN 60079-11	228026	0.035

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

