

Control Unit Module

Sigma MOD AO

Product code: PW-036-A



Reliability



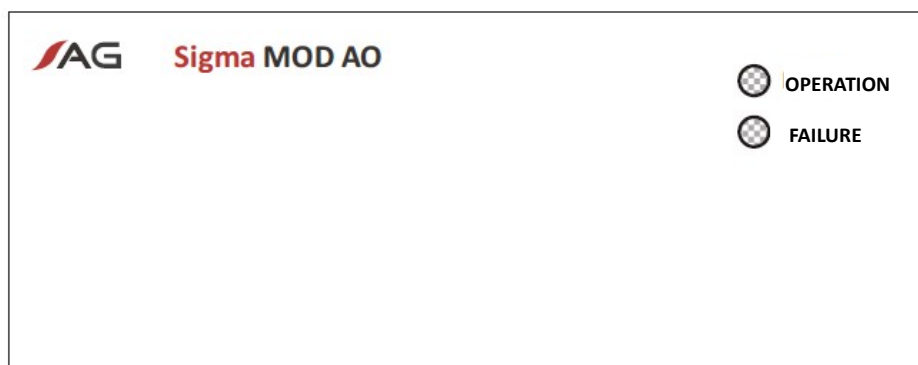
Innovations





Information about the product

Sigma MOD AO is a device designed for collaboration with gas detectors and other associated appliances to make up an overall system Sigma Gas developed to provide gas safety on the supervised area. Integration of gas monitoring devices with comprehensive automation and control systems deployed in existing industrial and other facilities is frequently carried out by means of current loops with 4 --20 mA signals. Therefore there is a need to set up an interface between the Sigma Gas system that uses digital transmission of information on one side and existing systems of field automation with the current loop 4 – 20 mA to enable easy combining of the both systems. It is the task that is entrusted to the Sigma MOD AO module described in this leaflet.

User interface



The module is in the **operation** mode when:

-  it is fully operable and defect-free,
-  operates with default settings.

Failure:

-  a critical defect is indicated

Electrical interface

GND	+	GND	B	A
Power		SBUS		

NC	NO	COM	NC	NO	COM
Output 8			Output 7		

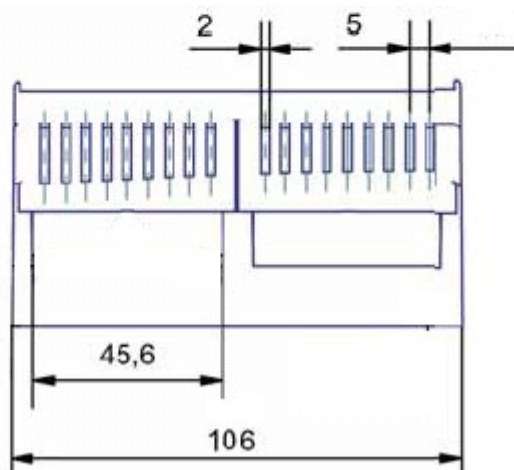
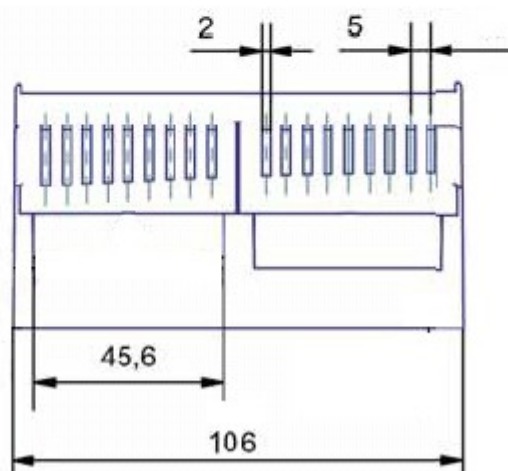
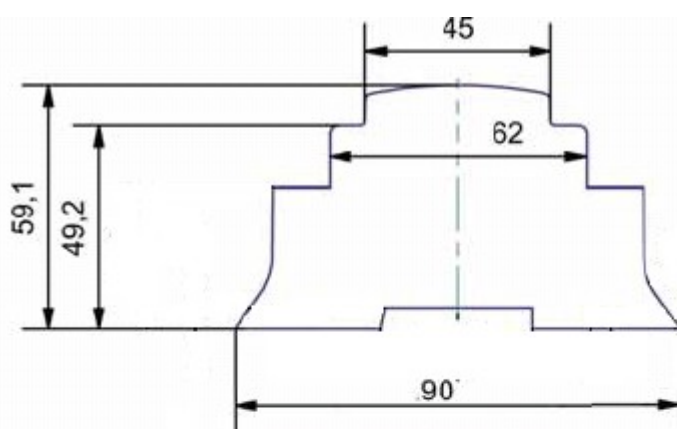
Output 1			Output 2			Output 3		
+	S	-	+	S	-	+	S	-

Output 4			Output 5			Output 6		
+	S	-	+	S	-	+	S	-

No.	Name	Pin	Description
1	Power supply		Device power supply port
		GND	Negative. Both "GND" terminals are internally connected
		+	Positive. Both "+" terminals are internally connected
2	SBUS		System communication port. Used for data exchange between devices in Sigma system
		A	Signal line A
		B	Signal line B
		GND	Ground. Both "GND" terminals are internally connected

No.	Name	Pin	Description
3	Output 1 ÷ 8		Communication port
		+	Gas detector input – positive
		S	Current input of gas detectors
		-	Gas detector input – negative

Dimension



Technical specification

Power supply	10 – 30 V DC	
• Voltage Vcc	10 W	
• Power		
Environment	In operation	Storage
• Ambient temperatures	0 – +50 °C	0 ÷ 50 °C
• Humidity	10 – 80% long term 0 – 90% short term	30 ÷ 90% long term
• Pressure	1013± 10% hPa	
• PH	5,5 ÷ 7	
IP	IP20	
Analog output parameters	750 kΩ	
• R _{OBC_MAX}		
Digital input parameters	10 kΩ	
• R _{IN}	0 – 1 V	
• Inactive	10 – 30 V	
• Active	any polarisation whichever polarization > 1s	

Digital communication parameters	RS - 485 Sigma BUS
• Electric standard	
• Communication protocol	
Integrated signalling equipment (visual)	LED indicator
Cable glands (cable diameter range)	1 – 2 mm ² (cable lugs 2 x 1 mm ² or 2 x 0.75 mm ² should be used for double wires)
Enclosure material	Self – extinguishing ABS / PC
Weight	0,2 kg
Lifetime	10 years
Mounting	On DIN-35 / TS35

Product marking

Product code	Device
PW-036-A	Control Unit Module Sigma MOD AO



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