PolyGard®2

Gas Controller Expansion Module EP-06

Expansion module with four analog inputs (4 to 20 mA), four alarm relays with potential-free SPDT contacts and two analog outputs (4 to20 mA) for the connection to the PolyGard®2 Gas Controller GC-06.

Up to seven expansion modules can be connected either centrally at the controller or distributed anywhere along the communication bus.

For the field bus output there is an integrated overload and reverse polarity protection. A further field bus output with repeater fuchtion is provided in addition.

Discontinuity and functionality control of the external warning devices is available as an option for alarm relays AR03 and AR04.

EP-06 Module

APPLICATION

Expansion of the analog inputs and outputs, as well as of the alarm relays of the gas controller system GC-06.

FEATURES

- Four analog inputs, 4 to 20 mA, for analog sensors
- Four alarm relays with SPDT contacts, potential-free, max. 250 V AC, 5 A
- Two analog outputs, 4 to 20 mA, with selective signal output for special mode, fault, etc.
- Integrated reverse polarity and overload protection for field bus output
- Second field bus output with repeater function
- Suitable for rail mounting (distribution box)
- Option: Monitoring of the connected warning devices for functionality and discontinuity at alarm relays AR03 and AR04

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Gas Controller Expansion Module EP-06

SPECIFICATIONS

Electrical

Power supply	24 V DC ± 20 %
Power consumption	3 W, 120 mA
Analog input (4)	4 to 20 mA, overload and short-circuit protected, input resistance 200 Ω
Tension for external analog transmitter	24 V DC (same as power supply), max. 100 mA / per sensor
Analog output (2) configurable for each input	Proportional, overload and short-circuit- protected, charge ≤ 500 Ω 4 - 20 mA = measuring range 3.0 < 4 mA = underrange > 20 – 21.2 mA = overrange 2.0 mA = fault
Alarm relay (4)	250 V AC, 5 A, potential-free, change-over (SPDT)

Interface field bus

Transceiver	RS 485 / 19200 Baud

Environmental

Humidity	15 – 95 % RH non-condensing
Working temperature	-10 °C to +40 °C (14 °F to 104 °F)
Storage temperature	0 °C to +40 °C (32 °F to 104 °F)

Physical

Enclosure		Plastic housing ABS
Colour		RAL 7035
Protection class		IP 40
Weight		0.2 kg (0.5 lb.)
Packaging volumes		Ca. 4.4 l
Mounting		Top hat DIN rail mounting, installation in distribution box
Dimensions		(W x H x D) 106 x 110 x 62 mm (4.2 x 4.3 x 2.4 in.)
Wire connection:	Power supply	Screw type terminal: 2.5 mm^2 (14 AWG)
	Output	2 x spring type terminal: min. 0.5 mm^2, max. 1.5 mm^2 (22 to 16 AWG)
	Input	Spring type: min. 0.5 mm^2, max. 1.5 mm^2 (22 to 16 AWG)

Guidelines	EMC Directive 2014/30/EU Low voltage directive 2014/35/EU EN 50 545-1 EN 50271 EN 61010-1:2010 ANSI/UL 61010-1 CAN/CSA-C22.2 No. 61010-1
Warranty	2 years on device

OPTIONS

Control of external warning devices

Power supply of the external warning devices	24 V DC
Measuring resistance at the warning device	12 kΩ, 0.5 W, 5 %

Note: If EP-06s are distributed along the communication bus it is recommended that each be powered by a separate DC power supply with only the ground connected to the bus.

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Gas Controller Expansion Module EP-06

ORDER INFORMATION

EP-06- XX0

OPTIONS

1X0	Standard version, all alarm relays potential-free, max. 250 V AC
2X0*	AR03 & AR04 with control function of the external warning devices (24 V DC)
XI0	Installation in plastic housing 180 x 180 x 90 mm

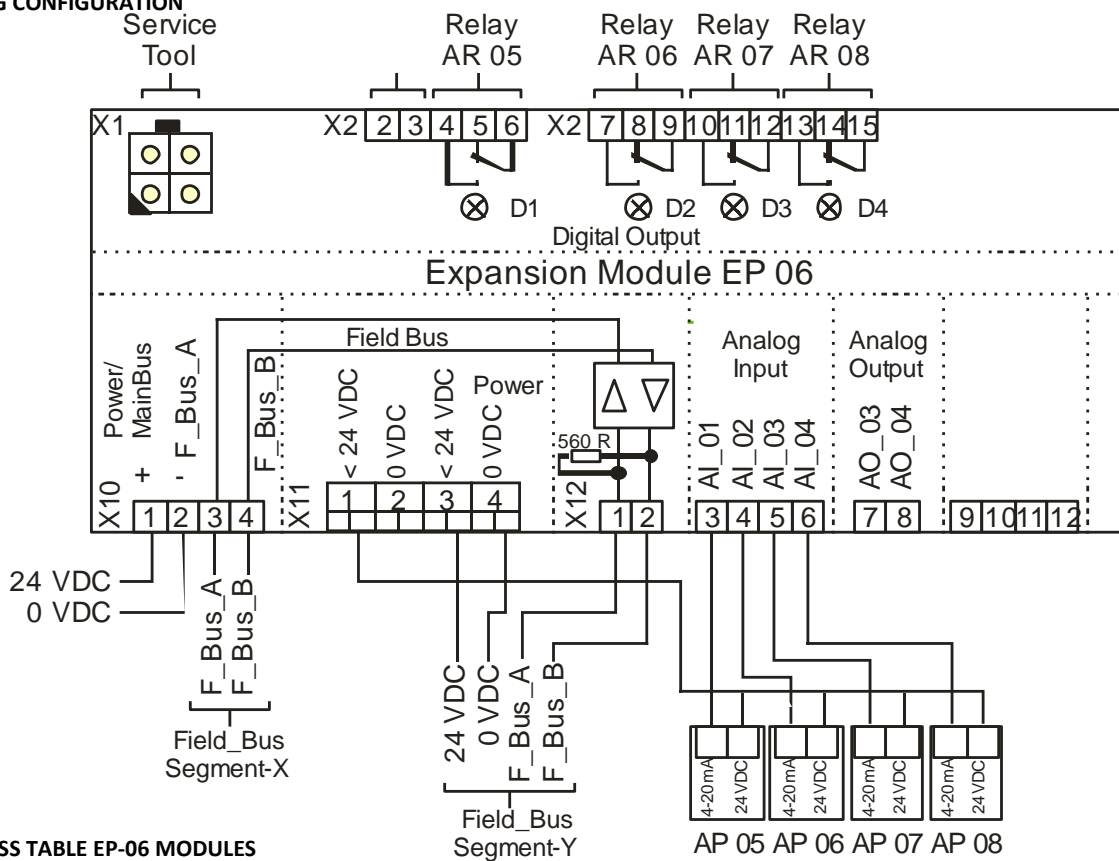*** only on request**

EXAMPLE

Expansion Module EP-06 with four alarm relays and control of external warning devices

Ordering number: EP-06-200

WIRING CONFIGURATION

ADDRESS TABLE EP-06 MODULES

EP No.	EP Addr.	MP No.	Rel. No.	AO No.
01	01	05 – 08	05 – 08	03 – 04
02	02	09 – 12	09 – 12	05 – 06
03	03	13 – 16	13 – 16	07 – 08
04	04	17 – 20	17 – 20	09 – 10
05	05	21 – 24	21 – 24	11 – 12
06	06	25 – 28	25 – 28	13 – 14
07	07	29 – 32	29 – 32	15 – 16

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