

Model EP7408 - 8 Mixed I/O PIFA

Description

- See *General PIFA Specifications* on page 132.
- EP7408 has:
 - 2 analog outputs of the type **Standard AO**.
 - 4 analog inputs of the type **Multisensor AI**, also handling 0–20 mA transmitters.
 - 2 digital inputs of the type **Standard 24V DC DI**. The inputs are supplied with advanced software functions for pulse counting etc.
 - 1 communication port of the type **Port 3**.
- EP7408 is designed for use in general control applications.

Electrical Specifications

Power Supply

Supply voltage.....	24 V DC
tolerance.....	18–30 V DC
power consumption with max load.....	electronically fused to 1.1 A
power consumption with no load.....	80 mA
+C output for DI, level.....	= Supply voltage
max load.....	200 mA

Internal Power Consumption

5 V.....	70 mA
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Analog Outputs2

Basic resolution.....	11 bits
Output range.....	0 to 10 V
accuracy.....	±0.2 % ±20 mV at max 1000 Ohms load
Max current on one output.....	20 mA, 10 V/500 Ohm

Analog Inputs	4
Basic resolution	12 bits
Measurement range	individually configurable, determined by program parameters
Current	0 to 22 mA
input resistance	10 Ohm
current limit, active up to 12 V, then transient protection is activated	25 mA
accuracy (% of value).....	±0,1 % ±20 uA
Temperature Ni1000, Pt1000.....	-50 to 150°C
accuracy (excluding sensor)	±0.2°C
Temperature Pt100.....	-50 till 150°C
accuracy (excluding sensor)	±0.3°C
Temperature Pt100, (extended range)	0–600°C
accuracy.....	±0.6°C
Voltage.....	0 to 10 V, 0 to 200 mV
input resistance	10 MOhm
accuracy (% of full scale)	±0.1 %
Resistance.....	0–2000 Ohm
accuracy.....	±3 Ohm
Conversion time.....	see software description
+C output for feeding of sensor, level.....	= Supply voltage
current limit, electronically fused.....	200 mA
Digital Inputs	2
Input 1–2	type Advanced

Communication ports

Port 3 see *Communication Ports* on page 133.

Connections

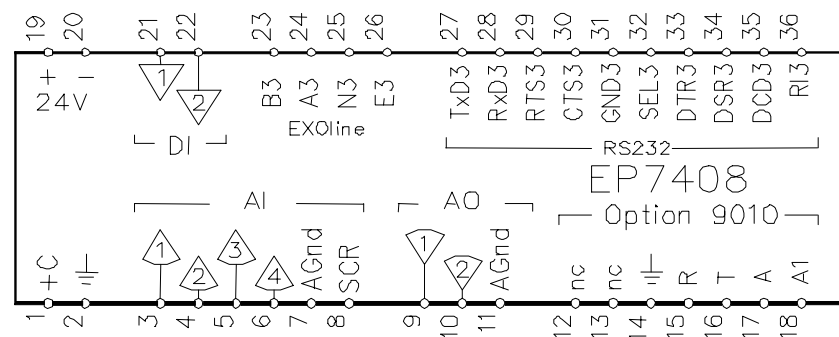
See *General PIFA Specifications* on page 132 and its various sections for information on process connections.

All **AGnd** are internally linked to each other and to 24Vminus (connection 20).

To attain maximum accuracy on analog input measurements and according to specifications **Agnd**, (connection 7) should be used as reference for AI.

It is the same for analog outputs, where **Agnd**, connection 11, should be used as reference for AO1–2.

Figure 79.



The RS232 Port

The designations below follow the RS232 standard's DTE terminology.

Pin no	Signal	Function	Direction
Port 3			
27	TxD3	Transmit Data	Out
28	RxD3	Receive Data	In
29	RTS3	Request To Send	Out
30	CTS3	Clear To Send	In
31	GND3	Signal Ground	
32	SEL3	Select RS232 interface. See Communication Ports , page 133, on how to select RS232 interface.	
33	DTR3	Data Terminal Ready	Out
34	DSR3	Data Set Ready	In
35	DCD3	Data Carrier Detect	In
36	RI3	Ring Indication	In

Options

Figure 80. Connection of the EP7408 with the modem option 9010 on Port 3.

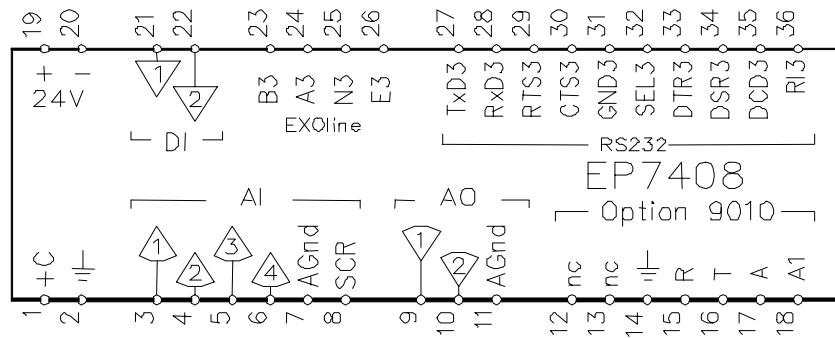


Figure 81. Connection of the EP7408 with EIB option 9017 on Port 3.

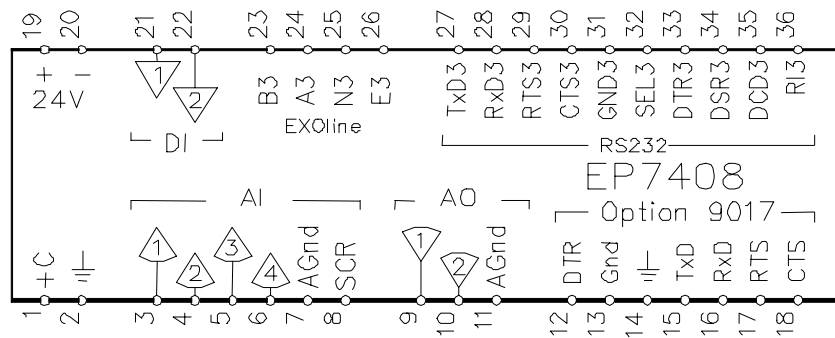


Figure 82. Connection of the EP7408 with the SIOX option 9020F on Port 3.

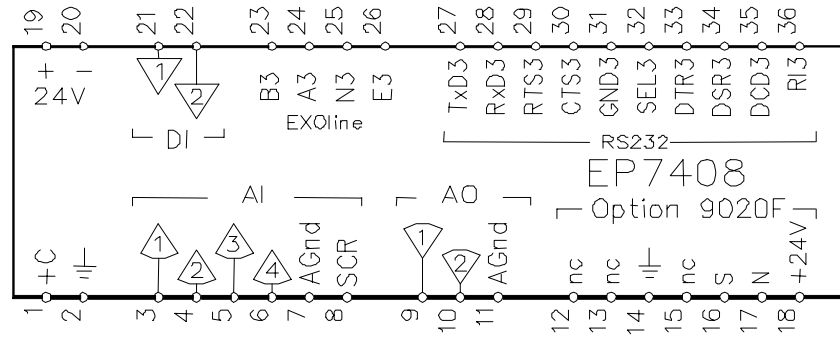


Figure 83. Connection of the EP7408 with Foxboro option 9015 on Port 3.

