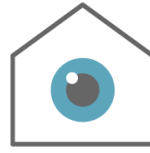


BAS 920DIOM



BA SYSTEMS
BUILDING AUTOMATION SYSTEMS

Datasheet

BAS920DIOM is a combined I/O and communication module, applicable for BAS920 expansion.

BAS920DIOM includes

- 1 x M-Bus communication port
- 1 x RS232 to M-Bus converter
- 8 digital inputs
- 8 digital outputs

The M-Bus port is a master interface with support for up to 16 M-Bus slave units. It is galvanically isolated from the BAS920 system.

The RS232 to M-Bus converter port is intended to be used for M-Bus unit configuration, when connected to a PC.

Digital inputs controlled by BAS920 features

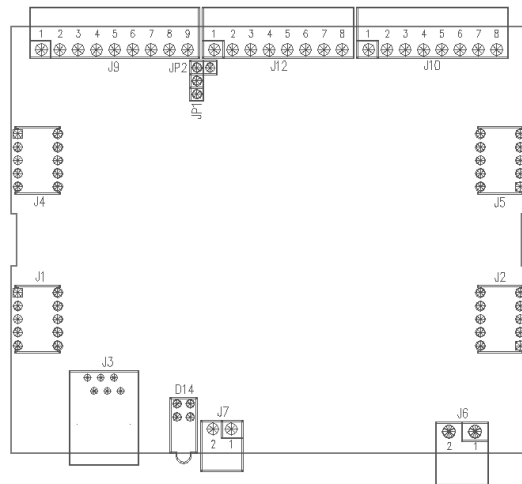
- High/low signal sense
- Counter input for up to 200Hz signal frequency
- Internal supply for switch connection

Digital outputs implemented as electronic relay's, consists of a set of terminals named DOX.A,B.

Controlled by BAS920 it may be set for

- Connecting or disconnecting
- Connecting for given period of time in milli seconds
- Connecting/disconnecting with a given frequency.

All 16 digital ports may be configured individually. BAS920DIOM in-/outputs are galvanically separated from the BAS920 system, with an isolation voltage of 1500V.



Notes:

- J4, J1 = Expansion bus in
- J5, J2 = Expansion bus out
- J9 = DI channel 1-8
- J12 = DO channel 1-4
- J10 = DO channel 5-8
- J3/232MB = RS232 to M-Bus converter port
- J7 = M-Bus port
- J6 = 24VAC power to M-Bus

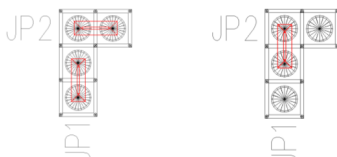
D14 = Status diodes

JP1, JP2

Jumpers in both positions = internal supplied DI.
 Jumper between positions = external supplied DI

Internal supply

External supply



J9 / Pin no.	J9 / Signal
1	DI.1
2	DI.2
3	DI.3
4	DI.4
5	DI.5
6	DI.6
7	DI.7
8	DI.8
9	DI.COM (GND)

J12 / Pin no.	J12 / Signal
1	DO1.A
2	DO1.B
3	DO2.A
4	DO2.B
5	DO3.A
6	DO3.B
7	DO4.A
8	DO4.B

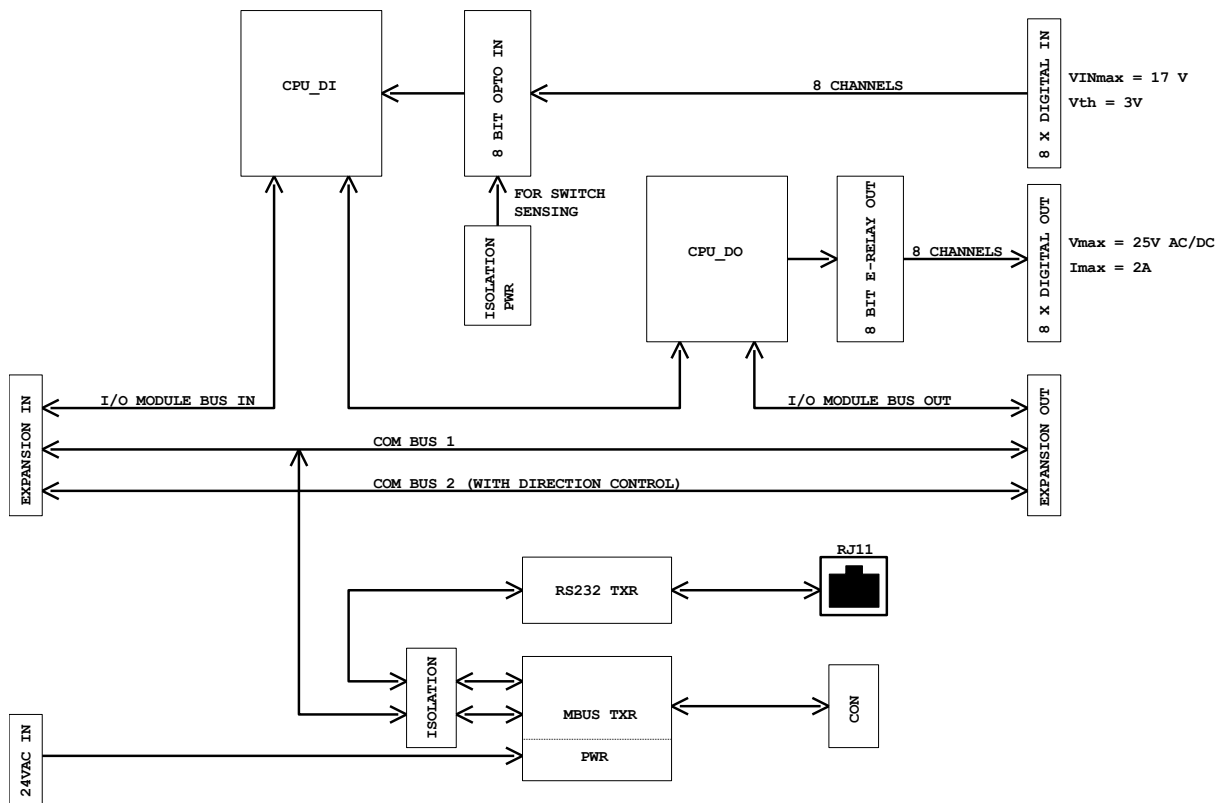
J10 / Pin no.	J10 / Signal
1	DO5.A
2	DO5.B
3	DO6.A
4	DO6.B
5	DO7.A
6	DO7.B
7	DO8.A
8	DO8.B

J3 / Pin no.	J3 / Signal
1	5V
2	5V
3	TXD
4	RXD
5	GND
6	GND

J6 / Pin no.	J6 / Signal
1	24VAC_F
2	24VAC_N

J7 / Pin no.	J7 / Signal
1	MBUS+
2	MBUS-

BAS920DIOM BLOCK DIAGRAM



Technical data	
Power supply:	Supplied by BAS920, and additional 24VAC/300mA for M-Bus circuit.
Temperature	Storage -20 °C til +70 °C Operating -10°C til +60°C
Humidity	Max. 90% RH, non condensing
Enclosure	ABS/PC, IP20 106 x 86 x 58 mm 250 g
Digitale outputs	8 pcs Solid state relay 24V/2A, inductive loads may create short over-current and over-voltage conditions. In this case protect output.
Digital inputs	8 pcs Configuration for internal supply (5VDC). To supply contacts/switches, max 10 mA/input. Minimum pulse length <ul style="list-style-type: none"> • 2.5 ms, as counter input • 20ms, as digital input Max. Voltage input = 17 VDC
Communication channels	M-Bus RS232 to M-Bus converter