8BAC0130.000-1

1 General information

The Digital I/O plug-in module 8BAC0130.000-1 can be used in SLOT2 of an ACOPOSmulti module.

The following +24 VDC inputs and outputs are available:

- Two digital inputs (sink)
- Two high-speed outputs with a maximum continuous current of 50 mA.
  These are designed for a maximum switching frequency of 62.5 kHz (resistive load).
- Two readable standard outputs with a maximum continuous current of 500 mA.
  These are designed for a maximum switching frequency of 1.25 kHz (resistive load).

2 Order data

Model number	Short description	Figure
	Plug-in modules	
8BAC0130.000-1	ACOPOSmulti plug-in module, 2 digital outputs, 50 mA, max. 62.5 kHz, 2 digital outputs, 500 mA, max. 1.25 kHz, 2 digital inputs 24 VDC	
	Required accessories	
	Terminal blocks	
8TB1110.20D-00	Screw clamp terminal block 10-pin, single-row, pitch: 3.5 mm, numbered consecutively, coding D: 1100110011	
8TB1110.21D-00	Cage clamp terminal block 10-pin, single-row, pitch: 3.5 mm, coding D: 1100110011	

Table 1: 8BAC0130.000-1 - Order data

3 Technical data

Model number	8BAC0130.000-1
General information	
Module type	ACOPOSmulti plug-in module
B&R ID code	0xA9D6
Slot	Slot 2
Max. power consumption	800 mW
Certifications	
CE	Yes
KC	Yes
UL	cULus E225616 Power conversion equipment
Module connection	
Module-side connection	10-pin multipoint connector
Status indicators	UP LED (module OK) and DN LED (module NOT OK)
Digital inputs	
Quantity	2
Modulation compared to ground potential	Max. 30 V
Wiring	Sink
Input current at nominal voltage	Approx. 11 mA
Input voltage	
Nominal	24 VDC
Maximum	30 VDC
Electrical isolation	
Input - Input	No
Input - ACOPOSmulti	Yes

Table 2: 8BAC0130.000-1 - Technical data

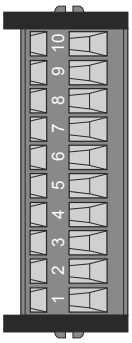
Model number	8BAC0130.000-1
Digital outputs [1]	
Quantity	4
Readable outputs	Yes
Continuous current	
Outputs 1 - 2	Max. 50 mA
Outputs 3 - 4	Max. 500 mA
Short circuit current at 24 V (until cutoff)	
Outputs 1 - 2	Approx. 0.2 A
Outputs 3 - 4	Approx. 1.2 A
Electrical isolation	
Output - ACOPOSmulti	Yes
Output - Output	No
Switching frequency (resistive load)	
Outputs 1 - 2	Max. 62.5 kHz
Outputs 3 - 4	Max. 1.25 kHz
Switching voltage	
Minimum	18 VDC
Nominal	24 VDC
Maximum	30 VDC
Switching delay 0 → 1 and 1 → 0	
Outputs 1 - 2	Max. 1 µs
Outputs 3 - 4	Max. 50 µs
Type	
Outputs 1 - 2	Push-Pull
Outputs 3 - 4	High side
Protective measures	
Short circuit protection	Yes
Overload protection	Yes
Modulation compared to ground potential	
Outputs 3 - 4	Max. 30 V
Environmental conditions	
Temperature	
Operation	
Nominal	5 to 40°C
Maximum	55°C
Storage	-25 to 55°C
Transport	-25 to 70°C
Relative humidity	
Operation	5 to 85%
Storage	5 to 95%
Transport	Max. 95% at 40°C

Table 2: 8BAC0130.000-1 - Technical data

1) Shielded cables must be used for outputs 1 and 2.

4 Wiring

4.1 Pinout

Figure	X11	Pin	Description	Function
		1	Digital O 1	Digital output 1
		2	n.c.	---
		3	Digital O 2	Digital output 2
		4	n.c.	---
		5	Digital O 3	Digital output 3
		6	Digital O 4	Digital output 4
		7	Digital I 1	Digital input 1
		8	Digital I 2	Digital input 2
		9	+24 V In	+24 V power supply
		10	COM (1, 3, 5 - 9)	0 V power supply

Terminal cross section	[mm²]	[AWG]
Solid core / Multiple-conductor lines	0.2 - 1.5	28 - 14
Flexible, multiple wire line		
Without wire end sleeves	0.2 - 1.5	28 - 14
With wire end sleeves	0.2 - 1.5	28 - 14
Approbation data		
UL/C-UL-US	---	28 - 14
CSA	---	28 - 14
Tightening torque for the terminal screws [Nm]	0.2 to 0.25	

Table 3: Digital I/O interface 8BAC0130.000-1 - Pinout

Caution!

The two high-speed digital outputs (X11/1 and X11/3) must be wired using shielded lines.

Shield set 8SCS002.0000-00 must be used on ACOPOSmulti power supply or inverter modules! The shield must be attached as close to the terminal as possible.

4.2 Input/Output circuit diagram

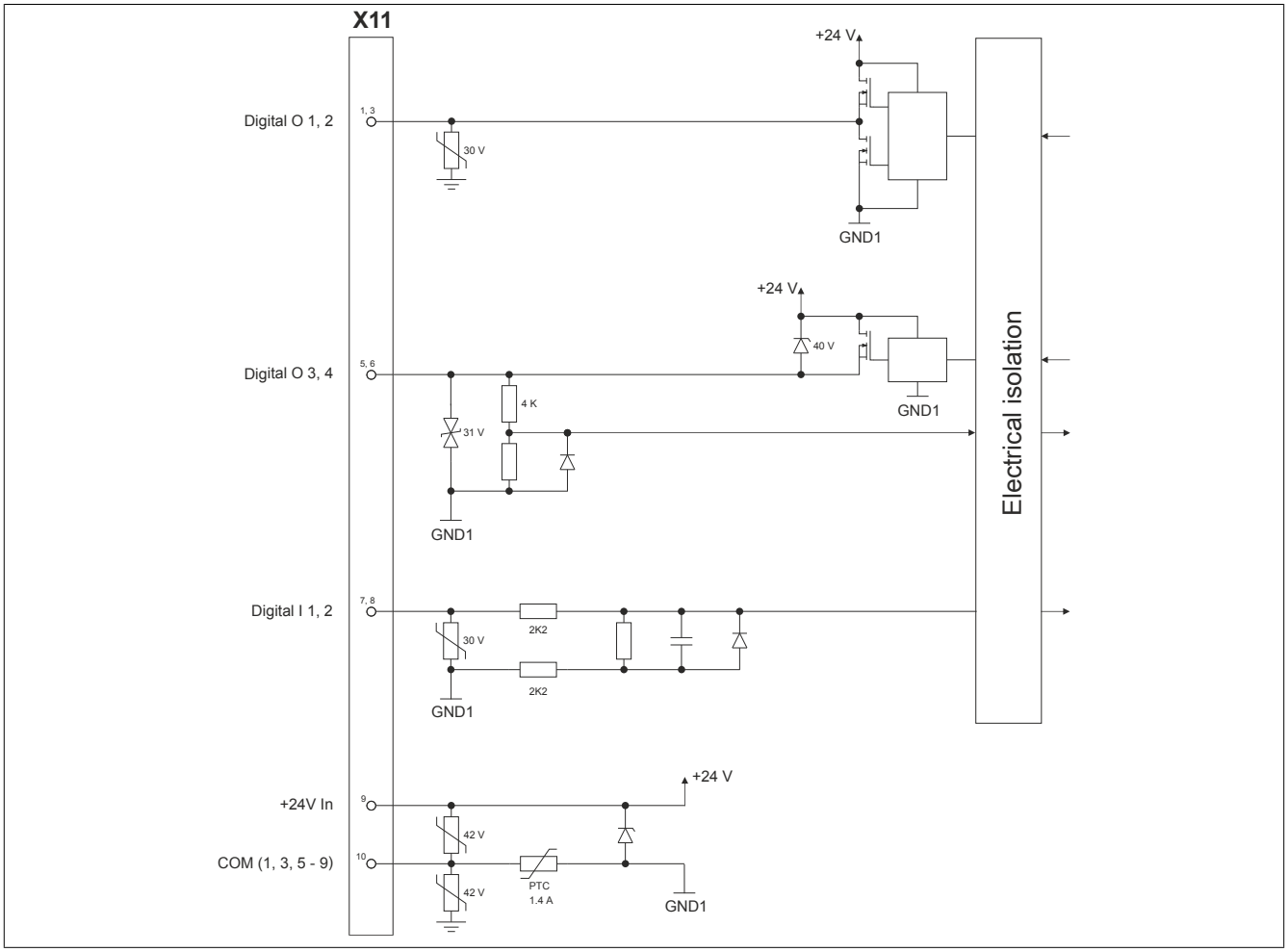


Figure 1: Digital I/O interface 8BAC0130.000-1 - Input/Output circuit diagram

5 Status indicators

The indicators (LEDs UP/DN) are located on the front of the ACOPOSmulti drive or power supply module where the plug-in module is installed.

The UP/DN LEDs light up according to the module state.

UP-LED ... lit, if the module is functioning properly (green).
DN-LED ... lit, if the module is not (yet) functioning properly (red).

6 Firmware

The firmware is part of the operating system for the ACOPOSmulti drive system. Firmware is updated by updating the ACOPOSmulti operating system.