Option 9020F, SIOX

Communication card for meter readings via SIOX, for internal mounting in EXOflex etc.

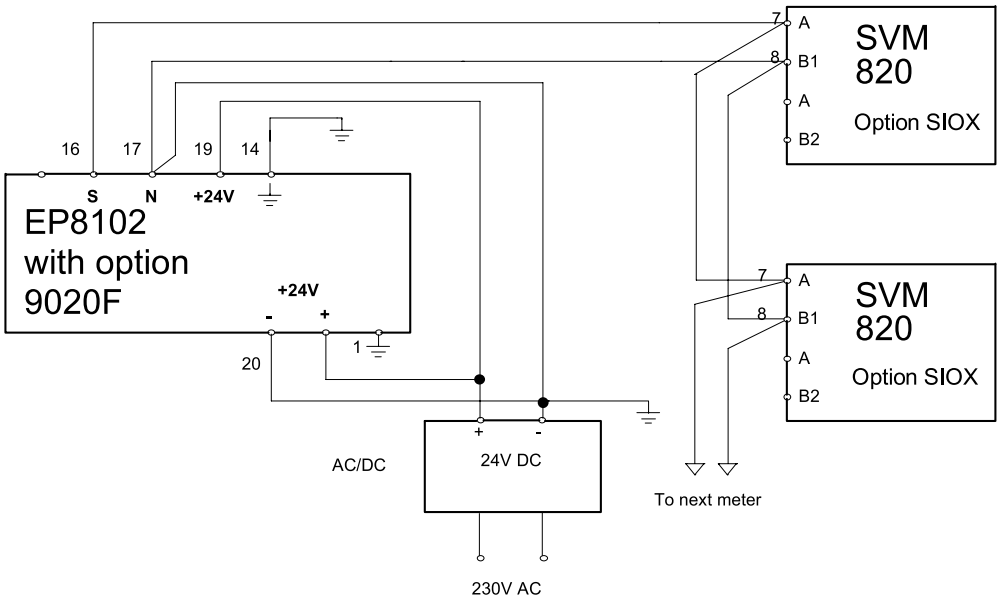
- **Can communicate with multiple meters**
- **Different meter brands can be mixed on the same loop**
- **For applications where EP7408, EP8101 or EP8102 are installed**

Option 9020F is a plug-in card for serial communication on the SIOX bus, typically for certain types of meters.

The cable should not be longer than 2000 meters for 300 bps communication speed or 1000 meters at 1200 bps, when used with EXOflex controllers. The bus should normally not be terminated.

Up to 20 units with SIOX interface can be hooked up to an EXOflex unit with this option.

The figure below shows a connection between an EP8102 and SVM 820 with SIOX interface.



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Connections

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

Pin no	Signal	Detailed function	Group function
1	+C	+24 V DC. Output for analog inputs AI and digital inputs DI.	
2	EMI ground	This terminal is connected internally to the PIFA's frame and to internal protective circuits. It should be connected to the ground rail with a separate, heavy wire.	
3	AI1	Analog input 1, type Multisensor	
4	AI2	Analog input 2, type Multisensor	
5	AI3	Analog input 3, type Multisensor	
6	AI4	Analog input 4, type Multisensor	
7	AGnd	Reference pole for AI1-AI4	
8	SCR	Connection for screen, AI1-AI4	
9	AO1	Analog output 1, type Standard	
10	AO2	Analog output 2, type Standard	
11	AGnd	Reference pole for AO1-AO2 for high-ohm loads. For low-ohm loads, use the 0 V terminal (20) as reference pole.	
12	nc		Option 9020F
13	nc		
14	EMI ground	This terminal is connected internally to the PIFA's frame and to internal protective circuits. It should be connected to the ground rail with a separate, heavy wire.	
15	nc		
16	S	Meter signal	
17	N	Meter signal	
18	+24 V DC		
19	+24 V DC		Inputs for +24 V DC power supply
20	0 V	Power supply 0 V. The 0 V-connection is normally grounded at the supply source, so as to define the potential to earth reference and to compensate for disturbances and transients from I/O signals.	
21	DI1	Digital input 1, type Standard 24 V DC	
22	DI2	Digital input 2, type Standard 24 V DC	
23	B3		EXOline connection, Port 3 Galvanically insulated from all other circuits.
24	A3		
25	N3	The 0 V reference. This should be connected to the screen of the communication cable, which in turn should be grounded at one point at least.	
26	E3		
27	TxD3		RS232 connection, Port 3 This connection is galvanically insulated from the internal circuits. GND3 is the signal zero. Use screened cable and earth it at one point.
28	RxD3		
29	RTS3		
30	CTS3		
31	GND3		
32	SEL3		
33	DTR3		
34	DSR3		
35	DCD3		
36	RI3		

Connection of EP8101 with SIOX option 9020F on Port 3.

Pin no	Signal	Detailed function	Group function
1	EMI ground	This terminal is connected internally to the PIFA's frame and to internal protective circuits. It should be connected to the ground rail with a separate, heavy wire.	
2	nc		
8	B		EXOline connection, Port 2/3 Galvanically insulated from all other circuits.
9	A		
10	N	The 0 V reference. This should be connected to the screen of the communication cable, which in turn should be grounded at one point at least.	
11	E		
12	nc		Option 9020F
13	nc		
14	EMI ground	This terminal is connected internally to the PIFA's frame and to internal protective circuits. It should be connected to the ground rail with a separate, heavy wire.	
15	nc		
16	S	Meter signal	
17	N	Meter signal	
18	+24 V DC		
19	nc		
20	nc		
27	TxD		RS232 connection, Port 2/3 This connection is galvanically insulated from the internal circuits. GND is the signal zero. Use screened cable and earth it at one point.
28	RxD		
29	RTS		
30	CTS		
31	GND		
32	SEL		
33	DTR3		
34	DSR3		
35	DCD3		
36	RI3		

Connections of EP8102 with the SIOX option 9020F on Port 3.

Pin no	Signal	Detailed function	Group function
1	EMI ground	This terminal is connected internally to the PIFA's frame and to internal protective circuits. It should be connected to the ground rail with a separate, heavy wire.	
2	+12 V DC		+12 V DC output
3	Gnd3	Signal Ground	
4	B2		EXOline connection, Port 2 Galvanically insulated from all other circuits.
5	A2		
6	N2	The 0 V reference. This should be connected to the screen of the communication cable, which in turn should be grounded at one point at least.	
7	E2		
8	B3		EXOline connection, Port 3 Galvanically insulated from all other circuits.
9	A3		
10	N3	The 0 V reference. This should be connected to the screen of the communication cable, which in turn should be grounded at one point at least.	
11	E3		
12	nc		Option 9020F
13	nc		
14	EMI ground	This terminal is connected internally to the PIFA's frame and to internal protective circuits. It should be connected to the ground rail with a separate, heavy wire.	
15	nc		
16	S	Meter signal	
17	N	Meter signal	
18	+24 V DC		
19	+24 V DC		Inputs for +24 V DC power supply
20	0 V	Power supply 0 V. The 0 V-connection is normally grounded at the supply source, so as to define the potential to earth reference and to compensate for disturbances and transients from I/O signals.	
21	TxD2		RS232 connection, Port 2 This connection is galvanically insulated from the internal circuits. GND2 is the signal zero. Use screened cable and earth it at one point.
22	RxD2		
23	RTS2		
24	CTS2		
25	GND2		
26	SEL2		
27	TxD3		RS232 connection, Port 3 This connection is galvanically insulated from the internal circuits. GND3 is the signal zero. Use screened cable and earth it at one point.
28	RxD3		
29	RTS3		
30	CTS3		
31	GND3		
32	SEL3		
33	DTR3		
34	DSR3		
35	DCD3		
36	RI3		

Product documentation

Document	Type
EH11...41 / EH10...40 / ECX1	Instruction for EXOflex houses and the EXOflex processor ECX1
EXO System Manual 2005	Manual covering the EXO System

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