Circuit Board Modules AS-i, PCB Solutions safe/standard

AS-i Safety Circuit Board Module

Connection of 2 safe switching contacts

(figure similar)

Figure	Type	Inputs Safety, SIL 3, cat. 4	Inputs digital, EDM (1)	Outputs digital	Safety signal inputs	Connection (2)	Coated (3)	AS-i address (4)	Article no
	circuit board 73mm x 37,5mm	1 x 2 channels	–	2 x electronic	floating contacts	wiring pin	no	1 Single Slave	**BWR1801**
	circuit board 73mm x 37,5mm	1 x 2 channels	–	2 x electronic	floating contacts	solder lugs	no	1 Single Slave	**BWR1934**

(1) **Inputs digital, EDM**
An externally connected relay (contactor) can be connected via a feedback loop to the Safety Monitor for monitoring purposes.

(2) **Connection**: further connection options are available on request.

screw terminals nominal cross section 0,5 mm^2	**wiring pins** contact spacing 2,54 mm	**solder lugs** contact spacing 2,54mm	**socket board** nominal cross section 0,65 mm^2	**plug-in spring type terminals** nominal cross section 0,5 mm^2	**connecting wires** nominal cross section 0,34 mm Length 100 / 200 mm (other lengths available on request)
					

(3) **Coated**: coating protects components and circuit boards when touched.

not coated	**coated**
	

(4) **AS-i address**: AB slave (max. 62 AB slaves/AS-i network), 2 AB slaves (max. 31 modules with 2 AB slaves), single slaves (max. 31 single slaves/per AS-i network), mixed use allowed (**upon request, slaves are available with specific AS- Slave profiles**).

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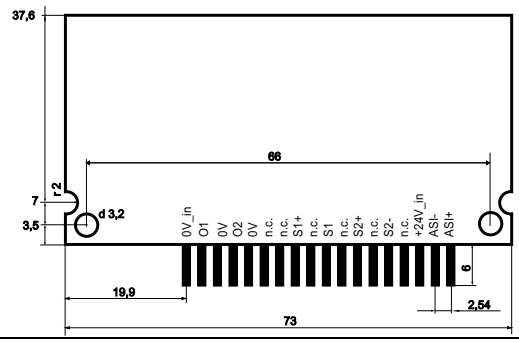
Article no.	BWR1801	BWR1934
Connection		
Connection	wiring pins	solder lugs
Length of connector cable	I/O: max. 15 m (1)	
AS-i		
Profile, S-IO.ID.ID2	S-7.B.0	
Address	1 single slave	
Required Master profile	≥ M0	
Since AS-i specification	2.0	
Voltage	22 .... 31,6V	
Max. current consumption	< 80 mA	
AUX		
Voltage	24 V (20 ... 30 V_{DC}) (PELV)	
Max. current consumption	1,5 A at output short-circuit	
Input		
Number	1 x 2 channels	
Safety signal	floating contacts	
Power supply	out of AS-i	
Switching threshold	U_{in} < 2 V low, U_{in} >10 V high	
Max. loop resistance (switch)	200 Ω	
Output		
Number	2, electronic, short-circuit protected	
Power supply	out of AUX	
Max. output current	100 mA per output	
Display		
LED FLT (red)	AS-i communication error	
LED AS-i (green)	AS-i voltage	
LED S1, S2 (yellow)	state of safe inputs	
LED Out1, Out 2 (yellow)	state of outputs	
UL Recognized Component		
In general	ЯU mark does not provide UL certification for any functional safety rating or aspects of the above devices	
External protection	The input to the devices need to be provided with a fuse rated 4A max or else the devices need to be powered from a class 2 or a SELV limited power source.	
Environment		
Applied standards	EN 61000-6-2 EN 61000-6-4 EN 62061 SIL 3 EN ISO13849-1 PLe	
Ambient temperature	0 °C ... +70 °C	
Storage temperature	-25 °C ... +85° C	
Protection category (EN 60529)	IP00	
Coated	no	
Allowable shock and vibration stress	≤ 15g, T ≤ 11 ms 10 ... 55 Hz, 0,5 mm amplitude	
Weight	27 g	
Dimensions (W /H / D in mm)	73 / 37,5 / 12	

(1) loop resistance: ≤ 150Ω

Programming:	AS-i Bit-setting			
	D0	**D1**	**D2**	**D3**
	Safe input			
BWR1801, BWR1934	S1	S1	S2	S2
	Output			
BWR1801, BWR1934	O1	O2	-	
	Parameter bit			
	P0	**P1**	**P2**	**P3**
BWR1801, BWR1934	not used			

BWR1801, BWR1934



Caution:

The modules can not be used with the OEM carrier board BW1484.

LED assignment

BWR1896, BWR1934