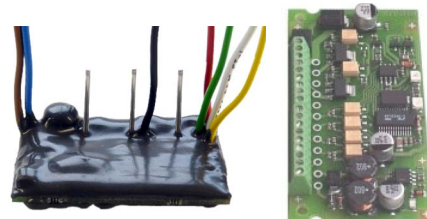


## ASi Safety Circuit Board Module

### Connection of 2 safe switching contacts



(figure similar)

Figure	Type	Inputs Safety, SIL 3, cat. 4	Inputs digital, EDM <sup>(1)</sup>	Outputs digital	Safety signal inputs	Connection <sup>(2)</sup>	Coated <sup>(3)</sup>	ASi address <sup>(4)</sup>	Article no
	circuit board 73mm x 37,5mm	1 x 2 channels	–	2 x electronic	floating contacts	wiring pin	no	1 Single address	<b>BWR1801</b>
	circuit board 73mm x 37,5mm	1 x 2 channels	–	2 x electronic	floating contacts	solder lugs	no	1 Single address	<b>BWR1934</b>

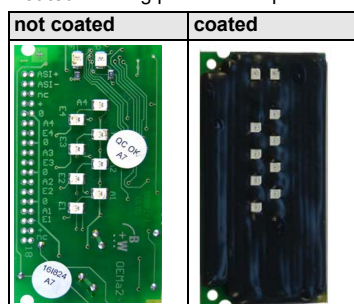
**(1) Inputs digital, EDM**

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 <sup>2</sup>	wiring pins contact spacing 2,54 mm	solder lugs contact spacing 2,54mm	socket board nominal cross section 0,65 mm <sup>2</sup>	plug-in spring type terminals nominal cross section 0,5 mm <sup>2</sup>	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.



**(4) ASi address:** AB address (max. 62 AB addresses/ASi network), 2 AB addresses (max. 31 modules with 2 AB addresses), single addresses (max. 31 single addresses/per ASi network), mixed use allowed (**upon request, ASi nodes are available with specific ASi address profiles**).

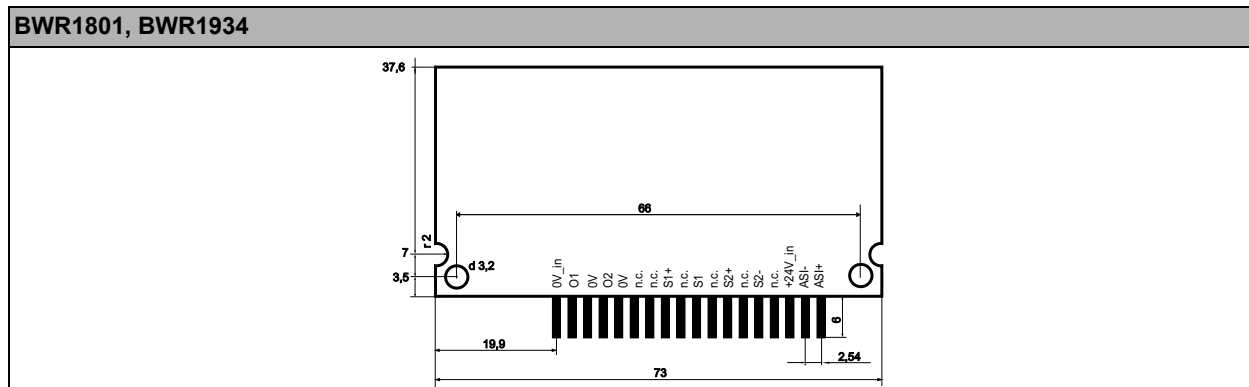
# Circuit Board Modules ASi, PCB Solutions safe/standard

Article no.	BWR1801	BWR1934
<b>Connection</b>		
Connection	wiring pins	solder lugs
Length of connector cable	I/O: max. 15 m <sup>(1)</sup>	
<b>ASi</b>		
Profile, S-IO.ID.ID2	S-7.B.0	
Address	1 single address	
Required Master profile	≥ M0	
Since ASi specification	2.0	
Voltage	22 ... 31,6V	
Max. current consumption	< 80 mA	
<b>AUX</b>		
Voltage	24 V (20 ... 30 V <sub>DC</sub> ) (PELV)	
Max. current consumption	220 mA <sup>(2)</sup>	
<b>Input</b>		
Number	1 x 2 channels	
Safety signal	floating contacts	
Power supply	out of ASi	
Switching threshold	U <sub>in</sub> < 2 V low, U <sub>in</sub> > 10 V high	
Max. loop resistance (switch)	200 Ω	
<b>Output</b>		
Number	2, electronic, short-circuit protected	
Power supply	out of AUX	
Max. output current	100 mA per output	
<b>Display</b>		
LED FLT (red)	ASi communication error	
LED ASi (green)	ASi voltage	
LED S1, S2 (yellow)	state of safe inputs	
LED Out1, Out 2 (yellow)	state of outputs	
<b>UL Recognized Component</b>		
In general	RU 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.	
<b>Environment</b>		
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	

<sup>(1)</sup> loop resistance: ≤ 150Ω

<sup>(2)</sup> At output short-circuit max. 1.5 A.

Programming:	ASi 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			



**Caution:**

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

