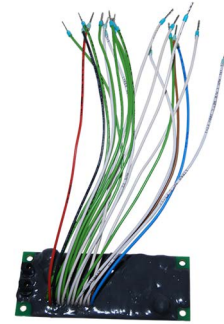


## ASi-3 Circuit Board Module 8I/8O 2 x 4I/4O AB addresses (up to 62 addresses)

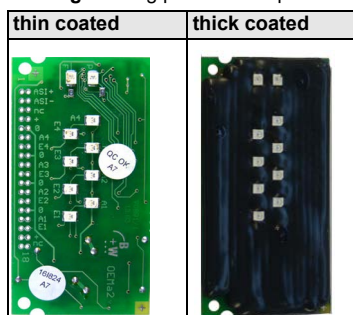
Special variants on request



(Figure similar)

Figure	Circuit board dimensions <sup>(1)</sup>	Inputs digital	Outputs digital	Connection <sup>(2)</sup>	Coating <sup>(3)</sup>	LED status display <sup>(4)</sup>	Input voltage (sensor supply) <sup>(5)</sup>	Output voltage (actuator supply) <sup>(6)</sup>	ASi address <sup>(7)</sup>	Art.no.
	104 mm x 41 mm	8	8 x electronic	connecting wires, 200 mm	thick coated	yes	out of ASi	out of ASi	2 AB addresses	<b>BWR5165</b>

- (1) **Circuit board dimensions:** 2 holes for assembly angles.  
 (2) **Connection:** further connection options are available on request.  
 (3) **Coating:** coating protects components and circuit boards when touched.



- (4) **LED status display:** status of in- and outputs is indicated by LEDs. In addition to that, both ASi LEDs (PWR green and FAULT red) show - as usual regarding the ASi slaves - the status of the ASi slaves. Uaux is indicated by a green LED.  
 (5) **Input voltage (sensor supply):** inputs are supplied by ASi or by AUX (auxiliary 24 V power). If supplied by ASi, inputs shall not be connected to earth or to external potential.  
 (6) **Output voltage (actuator supply):** outputs are supplied by ASi or by AUX (auxiliary 24 V power). If supplied by ASi, outputs shall not be connected to earth or to external potential.  
 (7) **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/ASi network), mixed use allowed.  
 For modules with several ASi nodes addresses, all ASi nodes addressed to address "0" are turned off.  
 Upon request, ASi nodes are available with specific ASi address profiles.

<b>Article no.</b>	<b>BWR5165</b>
<b>Connection</b>	
ASi / peripheral connection	connecting wires, 200 mm
Length of connector cable	I/O: max. 1,5 m <sup>(1)</sup>
<b>ASi</b>	
Profile	S-7.A.7, ID1=7 (fixed)
Address	2 AB addresses
Required Master Profile	≥M4
Since ASi specification	3.0
Operating voltage	30 V (18 ... 31,6 V)
Max. current consumption	≤400 mA
Max. current consumption without sensor/actuator supply	≤65 mA

<b>Article no.</b>	<b>BWR5165</b>
<b>Inputs digital</b>	
Number	8
Power supply	out of ASi
Input level	$I_{in} < 0,3 \text{ mA low}, I_{in} > 2 \text{ mA high}$
<b>Outputs digital</b>	
Number	8
Power supply	out of ASi
Max. current consumption	70 mA per output, $\Sigma (In/Out) \leq 200 \text{ mA}$
<b>Display</b>	
LED indicators	yes
<b>Environment</b>	
Applied standards	EN 61 000-6-2 EN 61 000-6-3 EN 60529
Passive safety (up to PLe/SIL 3)	yes <sup>(2)</sup>
Operating altitude	max. 2000 m
Ambient temperature	-25 °C ... +70 °C
Storage temperature	-40 °C ... +85 °C
Protection class	IP00 (coated)
Coating	thick coated
Allowed shock and vibration stress	$\leq 15g, T \leq 11 \text{ ms},$ 10 ... 55 Hz, 0,5 mm amplitude
Weight	15 g
Dimensions (W / H / D in mm)	41 / 104 / 16

(1) loop resistance:  $\leq 150 \Omega$

(2) Exclusion of errors for the connection of the two ASi and AUX potentials can be assumed in the module. Passive safety for the application can only be achieved if this is ensured for all components used.

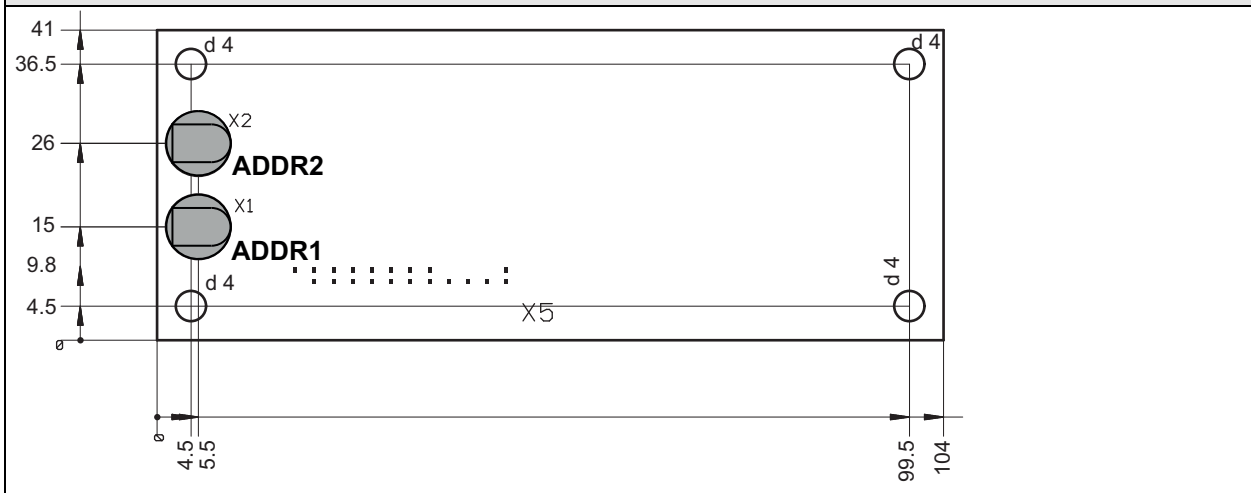
Programming	Bit Setting Digital IO			
	D0	D1	D2	D3
	<b>input</b>			
BWR5165	Address 1: I1	Address 1: I2	Address 1: I3	Address 1: I4
	Address 2: I5	Address 2: I6	Address 2: I7	Address 2: I8
	<b>output</b>			
BWR5165	Address 1: O1	Address 1: O2	Address 1: O3	Address 1: O4
	Address 2: O5	Address 2: O6	Address 2: O7	Address 2: O8

Programming	Parameter bit			
	P0	P1	P2	P3
BWR5165	0= off / 1= on (Watchdog)	0= on / 1= off (data input filter 128 $\mu\text{s}$ )	0= on / 1= off (synchronous I/O mode)	not used

Programming notes	
BWR5165	ASi addresses are preset "0", changeable via ASi address programming device

## Dimensional drawings

### BWR5165



### Connections:

ASi +IN, ASi -IN	connection to the ASi bus
I1 - I16	inputs
O1 - O16	outputs
24 V_EXT, 0 V_EXT	output for 24 V power supply for the inputs
ADDR1, ADDR2	connection for ASi addressing device, node 1 and 2
n.c.	not connected



### Notice

You shall not connect wiring with connections marked **n.c.** (**not connected**).

## Terminal diagram

### BWR5165

