

PCB ASi modules, board based solutions



Special variants on request




(Figure similar)

Figure	Circuit board dimensions (1)	Inputs digital	Outputs digital	Inputs analog	Connec-tion (2)	Coated (3)	LED sta-tus display (4)	Input voltage (sensor supply) (5)	Output voltage (actuator supply) (6)	ASi address (7)	Art.no.
	29,7mm x 36,5mm	1	1 x	–	wiring pins, straight	no	no	out of ASi	out of ASi	1 AB slave	BWR1566
	29,7mm x 36,5mm	2	2 x electronic	–	solder lugs	no	no	out of ASi	out of ASi	1 AB slave	BWR1421
	29,7mm x 36,5mm	2	2 x electronic	–	wiring pins, straight	no	no	out of ASi	out of ASi	1 AB slave	BWR3189
	29,7mm x 36,5mm	2	2 x electronic	–	solder lugs, screw terminals only to ASi pins	no	no	out of ASi	out of ASi	1 AB slave	BWR1957
	29,7mm x 36,5mm	2	2 x electronic	–	screw terminals	no	no	out of ASi	out of ASi	1 AB slave Profile: S-7.A.7.E	BWR2782
	29,7mm x 36,5mm	2	2 x electronic	–	screw terminals	no	no	out of ASi	out of ASi	1 AB slave	BWR1443
	29,7mm x 36,5mm	2 (input mirrored)	2 x electronic	–	screw terminals	yes	no	out of ASi	out of ASi	1 AB slave	BWR2393
	73mm x 37,5mm	4	3 x electronic	–	solder lugs	no	no	out of ASi	out of ASi	1 AB slave	BWR1408
	73mm x 37,5mm	4	3 x electronic	–	solder lugs	no	yes	out of ASi	out of AUX	1 AB slave	BWR1682
	73mm x 37,5mm	4	3 x electronic	–	plug-in spring-type terminals	no	no	out of ASi	out of ASi	1 AB slave	BWR2229
	73mm x 37,5mm	4	3 x electronic	–	screw terminals	no	no	out of ASi	out of ASi	1 AB slave	BWR1387
	73mm x 37,5mm	4	3 x electronic	–	wiring pins, angled	no	no	out of ASi	out of ASi	1 AB slave	BWR1386
	73mm x 37,5mm	4	4 x electronic	–	solder lugs	no	no	out of ASi	out of ASi	1 single slave	BWR2052
	73mm x 37,5mm	4	4 x electronic	–	solder lugs	no	yes	out of ASi	out of ASi	1 single slave	BWR1468
	73mm x 37,5mm	4	4 x electronic	–	solder lugs	no	yes	out of ASi	out of AUX	1 AB slave	BWR2442
	73mm x 37,5mm	4	4 x electronic	–	socket board	no	no	out of ASi	out of ASi	1 AB slave	BWR3116
	73mm x 37,5mm	4	4 x electronic	–	connecting wires, 200 mm	yes, thick coated	yes	out of ASi	out of ASi	1 single slave	BWR2597
	73mm x 37,5mm	4	4 x electronic	–	connecting wires, 200 mm	yes, thick coated	yes	out of ASi	out of ASi	1 AB slave	BWR2571
	73mm x 37,5mm	4	4 x electronic	–	wiring pins, angled	no	no	out of ASi	out of ASi	1 single slave	BWR1218
	73mm x 37,5mm	4	4 x electronic	–	wiring pins, angled	no	yes	out of ASi	out of AUX	1 single slave	BWR2591
	73mm x 37,5mm	4	4 x electronic	–	wiring pins, angled	yes	yes	out of AUX	out of AUX	1 AB slave	BWR3215
	73mm x 37,5mm	4	4 x electronic	–	wiring pins, straight	yes	yes	out of AUX	out of AUX	1 AB slave	BWR3214
	73mm x 37,5mm	4	4 x electronic	–	wiring pins, straight	yes, thick coated	yes	out of AUX	out of AUX	1 AB slave	BWR3213
	73mm x 37,5mm	4	4 x electronic	–	plug-in spring-type terminals	no	no	out of ASi	out of ASi	1 AB slave	BWR1889








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Figure	Circuit board dimensions (1)	Inputs digital	Outputs digital	Inputs analog	Connection (2)	Coated (3)	LED status display (4)	Input voltage (sensor supply) (5)	Output voltage (actuator supply) (6)	ASi address (7)	Art.no.
	73mm x 37,5mm	4	4 x electronic	–	screw terminals	no	no	out of ASi	out of ASi	1 single slave	BWR1219
	73mm x 37,5mm	4	4 x electronic	–	screw terminals	no	no	out of AUX	out of AUX	1 single slave	BWR1389
	73mm x 37,5mm	4	4 x electronic	–	screw terminals	no	yes	out of ASi	out of ASi	1 single slave	BWR1470
	73mm x 37,5mm	4	4 x electronic	–	screw terminals	no	yes	out of ASi	out of AUX	1 single slave	BWR1628
	73mm x 37,5mm	4	4 x electronic	–	screw terminals	yes	yes	out of ASi	out of ASi	1 AB slave	BWR3190
	73mm x 37,5mm	4	4 x electronic	–	screw terminals	yes	yes	out of ASi	out of ASi	1 single slave	BWR1789
	73mm x 37,5mm	4	4 x electronic	–	screw terminals	yes, thick coated	yes	out of AUX	out of AUX	1 AB slave	BWR2803
	73mm x 37,5mm	4	–	–	connecting wires, 200 mm	yes, thick coated	yes	out of ASi	–	1 AB slave	BWR2842
	73mm x 37,5mm	8	–	–	connecting wires, 200 mm	yes, thick coated	no	out of ASi	–	2 AB slaves	BWR2774
	73mm x 37,5mm	8	–	–	wiring pins, angled	no	no	out of ASi	–	2 AB slaves	BWR1351
	73mm x 37,5mm	8	–	–	screw terminals	no	no	out of ASi	–	2 AB slaves	BWR1352
	73mm x 37,5mm	–	6 x electronic	–	screw terminals	no	no	–	out of ASi	2 AB slaves	BWR1627

(1) **Circuit board dimensions:** 2 holes for assembly angles.

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

screw terminals nominal cross section 0,5 mm ²	wiring pins, angled contact spacing 2,54 mm	wiring pins, straight 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) **Coating:** coating protects components and circuit boards when touched.

coated	thick coated
	

(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 slave (max. 62 AB Slaves/ASi network), 2 AB slaves (max. 31 modules with 2 AB slaves), single Slaves (max. 31 single Slaves/ASi network), mixed use allowed. For modules with two slaves the second slave is turned off as long as the first slave is addressed to address "0". Upon request, slaves are available with specific ASi slave profiles.

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For technical data on further devices, see the next pages!

Article no.	BWR1566	BWR3189	BWR2782	BWR1443	BWR2393	BWR1957	BWR1421
Connection							
ASi / peripheral connection	wiring pins, straight		screw terminals			solder lugs, screw terminals only to ASi pins	solder lugs
Length of connector cable	I/O: max. 1,5 m ⁽¹⁾						
ASi							
Profile	S-B.A.E, ID1=F (default)	S-B.A.E, ID1=7 (default)	S-7.A.7, ID1=E (default)	S-B.A.E, ID1=7 (default)		S-B.A.E, ID1=F (default)	S-B.A.E, ID1=7 (default)
Address	1 AB slave						
Required Master profile	≥M3						
Since ASi specification	2.1						
Operating voltage	30 V (18 ... 31,6 V)						
Max. current consumption	120 mA	130 mA					
AUX							
Operating voltage	-						
Max. current consumption	-						
Inputs digital							
Number	1	2					
Power supply	out of ASi						
Power supply of attached sensors	max. 80 mA, $\sum (In/Out) \leq 80$ mA						
Input level	$U_{in} < 2$ V low, $U_{in} > 10$ V high						
Outputs digital							
Number	1	2					
Power supply	out of ASi						
Max. current consumption	80 mA per output, $\sum (In/Out) \leq 80$ mA						
Display							
LED indicators	no						
UL Recognized Component							
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 4 A max or else the devices need to be powered from a class 2 or a SELV limited power source.						
Environment							
Applied standards	EN 61 000-6-2 EN 61 000-6-3 EN 60529						
Operating altitude	max. 2000 m						
Ambient temperature	-25 °C ... +70 °C						
Storage temperature	-25 °C ... +85 °C						
Protection class	IP00						
Coating	no		yes			no	
Allowed shock and vibration stress	≤ 15 g, $T \leq 11$ ms, 10 ... 55 Hz, 0,5 mm amplitude						
Weight	15 g						
Dimensions (W / H / D in mm)	29,7 / 36,5 / 10						

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

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Article no.	BWR2229	BWR1387	BWR1386	BWR1408	BWR1682
Connection					
ASi / AUX / peripheral connection	plug-in spring-type terminals	screw terminals	wiring pins, angled	solder lugs	
Length of connector cable	I/O: max. 1,5 m ⁽¹⁾				
ASi					
Profile	S-7.A.E, ID1=7 (default)			S-7.A.E, ID1=F (default)	
Address	1 AB slave				
Required Master profile	≥M3				
Since ASi specification	2.1				
Operating voltage	30 V (18 ... 31,6 V)				
Max. current consumption	220 mA			230 mA	
AUX					
Voltage	-			24 V (18 ... 30 V)	
Max. current consumption	-			2,1 A	
Inputs digital					
Number	4				
Power supply	out of ASi				
Power supply of attached sensors	max. 180 mA, ∑ (In/Out) ≤180 mA			max. 180 mA	
Input level	U _{in} <2 V low, U _{in} >10 V high				
Outputs digital					
Number	3				
Power supply	out of ASi			out of AUX	
Max. current consumption	100 mA per output, ∑ (In/Out) ≤180mA			250 mA per output, ∑ ≤500 mA	
Display					
LED indicators	no			yes	
UL Recognized Component					
In general	UL 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 4 A 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 61000-6-3 EN 60529				
Operating altitude	max. 2000 m				
Ambient temperature	-25 °C ... +70 °C			-25 °C ... +60 °C	
Storage temperature	-25 °C ... +85 °C				
Protection class	IP00				
Coating	no				
Allowed 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	73 / 37,5 / 7	73 / 37,5 / 10	73 / 37,5 / 7	73 / 37,5 / 10

(1) loop resistance: ≤150 Ω

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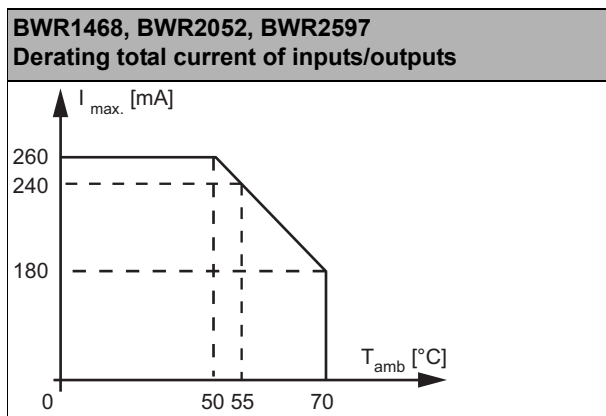
Article no.	BWR3116	BWR3190	BWR2571	BWR2597	BWR1468	BWR2052	BWR2442	
Connection								
ASi / AUX / peripheral connection	socket board	screw terminals	connecting wires, 200 mm		solder lugs			
Length of connector cable	I/O: max. 1,5 m ⁽¹⁾							
ASi								
Profile	S -7.A.7, ID1=7 (fixed)		S -7.0.E, ID1=F (default)	S -7.0.F, ID1=F (default)		S -7.A.7, ID1=7 (fixed)		
Address	1 AB slave		1 single slave			1 AB slave		
Required Master profile	≥M4		≥M0		≥M4			
Since ASi specification	3		2		3			
Operating voltage	18 ... 31,6 V							
Max. current consumption	230 mA		310 mA		300 mA	230 mA		
AUX								
Voltage	-						24 V (18 ... 30 V)	
Max. current consumption	-						2,1 A	
Inputs digital								
Number	4							
Power supply	out of ASi							
Power supply of attached sensors	up to 50 °C	max. 180 mA, ∑ (In/Out) ≤180 mA		max. 260 mA, ∑ (In/Out) ≤260 mA ⁽²⁾		max. 180 mA		
	at 55 °C			max. 240 mA, ∑ (In/Out) ≤240 mA ⁽²⁾				
	at 70 °C			max. 180 mA, ∑ (In/Out) ≤180 mA ⁽²⁾				
Input level	U _{in} <2 V low, U _{in} >10 V high							
Outputs digital								
Number	4							
Power supply	out of ASi						out of AUX	
Max. current consumption	up to 50 °C	100 mA per output, ∑ (In/Out) ≤180 mA		100 mA per output, ∑ (In/Out) ≤260 mA ⁽²⁾		250 mA per output ∑ ≤500 mA		
	at 55 °C			100 mA per output, ∑ (In/Out) ≤240 mA ⁽²⁾				
	at 70 °C			100 mA per output, ∑ (In/Out) ≤180 mA ⁽²⁾				
Display								
LED indicators	no	yes				no	yes	
UL Recognized Component								
In general	UL 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 4 A 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 61000-6-3 EN 60529							
Operating altitude	max. 2000 m							
Ambient temperature	-25 °C ... +70 °C						-25 °C ... +60 °C	
Storage temperature	-25 °C ... +85 °C							
Protection class	IP00		IP54		IP00			
Coating	no	yes	yes, thick coated		no			
Allowed 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 / 7		73 / 37,5 / 13			73 / 37,5 / 10		

(1) loop resistance: ≤150 Ω

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(2)



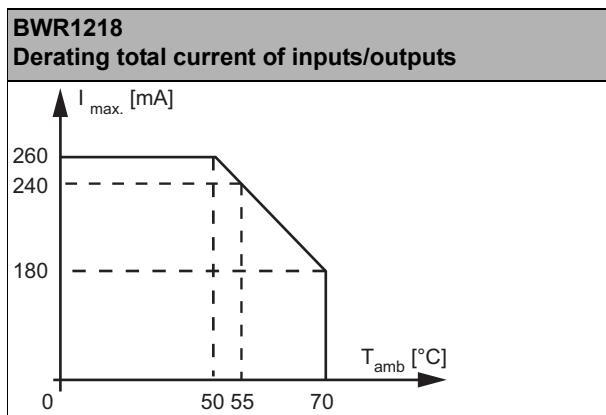
Article no.	BWR3213	BWR3214	BWR3215	BWR2591	BWR1218	BWR1889
Connection						
ASi / AUX / peripheral connection	wiring pins, straight		wiring pins, angled		plug-in spring-type terminals	
Length of connector cable	I/O: max. 1,5 m ⁽¹⁾					
ASi						
Profile	S -7.A.7, ID1=7 (fixed)		S -7.0.E, ID1=F (default)	S -7.0.F, ID1=F (default)	S -7.A.7, ID1=7 (fixed)	
Address	1 AB slave		1 single slave		1 AB slave	
Required Master profile	≥M4		≥M0		≥M4	
Since ASi specification	3		2		3	
Operating voltage	30 V (18 ... 31,6 V)					
Max. current consumption	60 mA		310 mA	300 mA	230 mA	
AUX						
Voltage	24 V (18 ... 30 V)				-	
Max. current consumption	2,1 A				-	
Inputs digital						
Number	4					
Power supply	out of AUX			out of ASi		
Power supply of attached sensors	up to 50 °C	directly out of AUX		max. 260 mA	max. 260 mA, ∑ (In/Out) ≤260 mA ⁽²⁾	max. 180 mA, ∑ (In/Out) ≤180 mA
	at 55 °C				max. 240 mA, ∑ (In/Out) ≤240 mA ⁽²⁾	
	at 70 °C				max. 240 mA, ∑ (In/Out) ≤180 mA ⁽²⁾	
Input level	U _{in} < 2 V low, U _{in} > 10 V high					

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Article no.	BWR3213	BWR3214	BWR3215	BWR2591	BWR1218	BWR1889
Outputs digital						
Number	4					
Power supply	out of AUX			out of ASi		
Max. current consumption	up to 50 °C	250 mA per output, $\Sigma \leq 500$ mA			100 mA per output Σ (In/Out) ≤ 260 mA ⁽²⁾	100 mA per output, Σ (In/Out) ≤ 180 mA
	at 55 °C				100 mA per output, Σ (In/Out) ≤ 240 mA ⁽²⁾	
	at 70 °C				100 mA per output, Σ (In/Out) ≤ 180 mA ⁽²⁾	
Display						
LED indicators	yes			no		
UL Recognized Component						
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 4 A 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 61000-6-3 EN 60529					
Operating altitude	max. 2000 m					
Ambient temperature	-25 °C ... +70 °C		-25 °C ... +60 °C		-25 °C ... +70 °C	
Storage temperature	-25 °C ... +85 °C					
Protection class	IP00					
Coating	yes, thick coated	yes		no		
Allowed shock and vibration stress	$\leq 15g$, $T \leq 11$ ms, 10 ... 55 Hz, 0,5 mm amplitude					
Weight	27 g					
Dimensions (W / H / D in mm)	73 / 37,5 / 10				73 / 37,5 / 7	73 / 37,5 / 12

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

(2)



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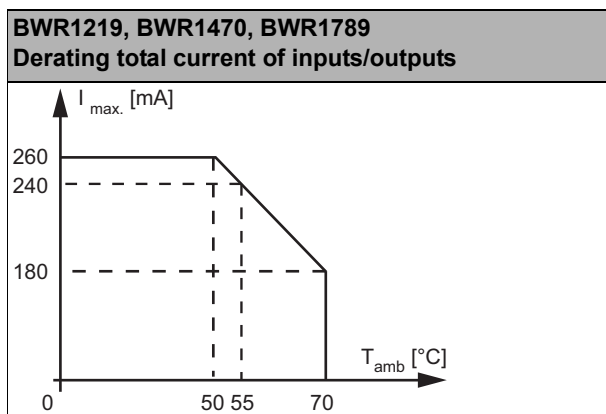


Article no.	BWR1389	BWR1219	BWR1470	BWR1789	BWR1628	BWR2803	
Connection							
ASi / AUX / peripheral connection	screw terminals						
Length of connector cable	I/O: max. 1,5 m ⁽¹⁾						
ASi							
Profile	S-7.0.F, ID1=F (default)			S-7.0.E, ID1=F (default)	S-7.A.7, ID1=7 (fixed)		
Address	1 single slave					1 AB slave	
Required Master profile	≥M0					≥M4	
Since ASi specification	2					3	
Operating voltage	30 V (18 ... 31,6 V)						
Max. current consumption	40 mA	300 mA	310 mA		60 mA		
AUX							
Voltage	24 V (18 ... 30 V)	-			24 V (18 ... 30 V)		
Max. current consumption	200 mA	-			2,1 A		
Inputs digital							
Number	4						
Power supply	out of AUX	out of ASi				out of AUX	
Power supply of attached sensors	up to 50 °C	max. 180 mA, ∑ (In/Out) ≤180 mA	max. 260 mA, ∑ (In/Out) ≤260 mA ⁽²⁾			no power supply	directly out of AUX
	at 55 °C		max. 240 mA, ∑ (In/Out) ≤240 mA ⁽²⁾				
	at 70 °C		max. 180 mA, ∑ (In/Out) ≤180 mA ⁽²⁾				
Input level	U _{in} < 2 V low, U _{in} > 10 V high						
Outputs digital							
Number	4						
Power supply	out of AUX	out of ASi				out of AUX	
Max. current consumption	up to 50 °C	100 mA per output, ∑ (In/Out) ≤180 mA	100 mA per output, ∑ (In/Out) ≤260 mA ⁽²⁾			250 mA per output, ∑ ≤500 mA	
	at 55 °C		100 mA per output, ∑ (In/Out) ≤240 mA ⁽²⁾				
	at 70 °C		100 mA per output, ∑ (In/Out) ≤180 mA ⁽²⁾				
Display							
LED indicators	no			yes			
UL Recognized Component							
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 4 A 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 61000-6-3 EN 60529						
Operating altitude	max. 2000 m						
Ambient temperature	-25 °C ... +60 °C	-25 °C ... +70 °C			-25 °C ... +60 °C		
Storage temperature	-25 °C ... +85 °C						
Protection class	IP00						
Coating	no		yes		no	yes, thick coated	
Allowed 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 / 10		73 / 37,5 / 13		73 / 37,5 / 10		

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

(2)



Article no.	BWR2842	BWR2774	BWR1352	BWR1351	BWR1627
Connection					
ASi / AUX / peripheral connection	connecting wires, 200 mm		screw terminals	wiring pins, angled	screw terminals
Length of connector cable	I/O: max. 1,5 m ⁽¹⁾				
ASi					
Profile	S -7.A.7, ID1=7 (fixed)	2 x S-0.A.2, ID1=7 (default)		2 x S-8.A.0, D1=7 (default)	
Address	1 AB slave	2 AB slaves			
Required Master profile	≥M4	≥M3			
Since ASi specification	3	2.1			
Operating voltage	30 V (18 ... 31,6 V)				
Max. current consumption	230 mA				
AUX					
Voltage	-				
Max. current consumption	-				
Inputs digital					
Number	4	8			-
Power supply	out of ASi				-
Power supply of attached sensors	max. 180 mA				-
Input level	U _{in} < 2 V low, U _{in} > 10 V high				
Outputs digital					
Number	-	-			6
Power supply	-				out of ASi
Max. current consumption	-				100 mA per output, Σ ≤ 180 mA
Display					
LED indicators	yes	no			
UL Recognized Component					
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 4 A max or else the devices need to be powered from a class 2 or a SELV limited power source.				

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Article no.	BWR2842	BWR2774	BWR1352	BWR1351	BWR1627
Environment					
Applied standards	EN 61000-6-2 EN 61000-6-3 EN 60529				
Operating altitude	max. 2000 m				
Ambient temperature	-25 °C ... +70 °C				-25 °C ... +60 °C
Storage temperature	-25 °C ... +85 °C				
Protection class	IP54		IP00		
Coating	yes, thick coated		no		
Allowed 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 / 13	73 / 37,5 / 10		73 / 37,5 / 7	73 / 37,5 / 10


(1) loop resistance: ≤150 Ω

Programming	Bit Setting Digital IO							
	slave 1				slave 2			
	D0	D1	D2	D3	D0	D1	D2	D3
	input							
BWR1566	—		I1	—			—	
BWR1421, BWR1443, BWR1957, BWR2782, BWR3189	—		I1	I2			—	
BWR1218, BWR1219, BWR1387, BWR1386, BWR1389, BWR1408, BWR1468, BWR1470, BWR1628, BWR1682, BWR1789, BWR1889, BWR2052, BWR2229, BWR2442, BWR2571, BWR2591, BWR2597, BWR2803, BWR2842, BWR3116, BWR3190, BWR3213, BWR3214, BWR3215	I1	I2	I3	I4			—	
BWR1351, BWR1352, BWR2774	I1	I2	I3	I4	I5	I6	I7	I8
BWR1627	—							
BWR2393	I1	I2	I1	I2			—	
	output							
BWR1566	O1		—				—	
BWR1421, BWR1443, BWR1957, BWR2782, BWR3189	O1	O2	—				—	
BWR1386, BWR1387, BWR1408, BWR1682, BWR2229	O1	O2	O3	—			—	
BWR1218, BWR1219, BWR1389, BWR1468, BWR1470, BWR1628, BWR1789, BWR1889, BWR2052, BWR2442, BWR2571, BWR2591, BWR2597, BWR2803, BWR3116, BWR3190, BWR3213, BWR3214, BWR3215	O1	O2	O3	O4			—	
BWR1351, BWR1352, BWR2774	—							
BWR1627	O1	O2	O3	—	O4	O5	O6	—
BWR2393	O1	O2	—				—	

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Programming	Parameter bit			
	P0	P1	P2	P3
BWR1421, BWR1443, BWR1566, BWR1957, BWR2393, BWR3189	not used			
BWR1218, BWR1219, BWR1386, BWR1387, BWR1389, BWR1408, BWR1468, BWR1470, BWR1628, BWR1682, BWR1789, BWR2052, BWR2229, BWR2442, BWR2591, BWR2803, BWR3190, BWR3213, BWR3214, BWR3215	not used			
BWR1351, BWR1352, BWR2774	not used			
BWR1627	not used			
BWR2782	not used			not used
BWR1889, BWR2571, BWR2597, BWR2842, BWR3116	0=off / 1=on (Watchdog)	0=on / 1=off (data input filter)	0=on / 1=off (synchronous I/O mode)	

Programming	
BWR1218, BWR1219, BWR1386, BWR1387, BWR1389, BWR1408, BWR1421, BWR1443, BWR1470, BWR1566, BWR1628, BWR1682, BWR1789, BWR1889, BWR1957, BWR2229, BWR2393, BWR2571, BWR2597, BWR2782, BWR2803, BWR2842, BWR3116, BWR3189, BWR3190, BWR3213, BWR3214, BWR3215	Address preset 0 changeable via bus master or programming devices
BWR1351, BWR1352, BWR2774	Address preset 0 + 0, changeable only via ASi Master in configuration mode.
BWR1627	Address preset 0 + 1, changeable only via ASi Master in configuration mode.
Position of DIP switch	
BWR1351, BWR1352, BWR1627, BWR2774	<div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 20px;"> <p>1</p>  <p>ON</p> </div> <div> <p>1: 2. ASi slave is activated ON: 2. ASi slave is deactivated</p> </div> </div>

Connections:	
ASi +, ASi -	Connection to the ASi bus
I _x	Input x
O _x	Output x
0 V	Reference potential for outputs
+ or +24V	Output for 24 V power supply for the inputs
+24 V _{in}	Input for 24 V power supply
+24 V ₁₂ , +24 ₃₄	Output for 24 V power supply for inputs 1+2 and/or 3+4
Sig1+, Sig2+	Positive terminal of analog inputs 1+2
Sig1-, Sig2-	Negative terminal of analog inputs 1+2
n.c.	not connected

PCB ASi modules, board based solutions



Dimensional drawings	
<p>BWR1421, BWR1443, BWR1566, BWR1957, BWR2393, BWR2782, BWR3189</p>	<p>BWR1218, BWR1219, BWR1351, BWR1386, BWR1389, BWR1408, BWR1468, BWR1470, BWR1627, BWR1628, BWR1682, BWR1789, BWR1889, BWR2052, BWR2229, BWR2442, BWR2571, BWR2591, BWR2597, BWR2774, BWR2803, BWR2842, BWR3116, BWR3190, BWR3213, BWR3214, BWR3215</p>
	<p>BWR1352, BWR1387</p>

LED assignment	
<p>BWR1468, BWR1470, BWR1789, BWR2571, BWR2597, BWR3190</p>	<p>BWR1628, BWR2442, BWR2591, BWR2803, BWR3213, BWR3214, BWR3215</p>
<p>BWR2842</p>	<p>BWR1682</p>

PCB ASi modules, board based solutions



Connection assignment	
BWR1421, BWR1443, BWR1566, BWR1957, BW2392, BWR2782, BWR3189	BWR1218, BWR1219, BWR1351, BWR1352, BWR1386, BWR1387, BWR1389, BWR1408, BWR1468, BWR1470, BWR1627, BWR1628, BWR1682, BWR1789, BWR1889, BWR2052, BWR2229, BWR2442, BWR2571, BWR2591, BWR2597, BWR2774, BWR2803, BWR2842, BWR3116, BWR3190, BWR3213, BWR3214, BWR3215

	Notice You shall not connect wiring with connections marked n.c. (not connected).
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Terminal diagram	
BWR1421, BWR1443, BWR1957, BWR2782, BWR3189 	BWR1218, BWR1219, BWR1468, BWR1470, BWR1789, BWR1889, BWR2052, BWR2597, BWR3116, BWR3190
BWR1389 	BWR1351, BWR1352, BWR2774
BWR1627 	BWR1628

PCB ASI modules, board based solutions



Terminal diagram	
BWR2393 <p>IO-Block 1+2 ASI</p>	BWR1682 <p>PWR PWR PWR PWR ASI-</p>
BWR2442, BWR2591 <p>PWR PWR IN PWR PWR OUT ASI-</p>	BWR2803, BWR3213, BWR3214, BWR3215 <p>PWR IN IO-Block 1+2 IO-Block 3+4 PWR IN ASI-</p>
BWR2842 <p>18 (nc) 17 (RD) 16 (WH) 15 (nc) 14 (nc) 13 (WH) 12 (nc) 11 (nc) 10 (WH) 9 (nc) 8 (nc) 7 (WH) 6 (nc) 5 (nc) 4 (RD) 3 (nc) 2 (BU) 1 (BN)</p>	BWR1566 <p>IO-Block 1+2 ASI+</p>
BWR2571 <p>18 (nc) 17 (+) 16 WH-BU 15 YE-BU 14 (0) 13 WH-RD 12 YE-RD 11 (0) 10 WH-GY 9 YE-GY 8 (0) 7 WH-PK 6 YE-PK 5 BK 4 (+) 3 RD 2 BU 1 BN</p>	BWR1386, BWR1387, BWR1408, BWR2229 <p>18 (nc) 17 (+) 16 (WH) 15 (O1) 14 (0) 13 (I2) 12 (O2) 11 (0) 10 (I3) 9 (O3) 8 (0) 7 (I4) 6 (nc) 5 (nc) 4 (+) 3 (nc) 2 (ASI-) 1 (ASI+)</p>



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