



Robust housing solution for cabinet mounting



(Figure similar)



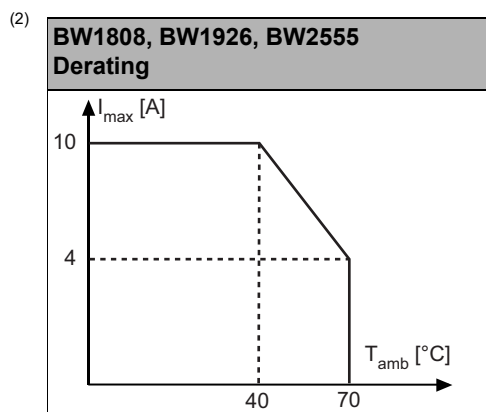
Figure	Type	Inputs digital	Outputs digital	Input voltage (sensor supply) ⁽¹⁾	Output voltage (actuator supply) ⁽²⁾	ASi connection ⁽³⁾	ASi address ⁽⁴⁾	Article No.
	stainless Steel, IP20, depth: 45 mm	4	3 x relay	out of ASi	–	clamps	1 AB slave	BW1808
	stainless Steel, IP20, depth: 45 mm	4	4 x relay	out of ASi	–	clamps	1 single slave	BW1926
	stainless Steel, IP20, depth: 45 mm	4	4 x electronic	out of AUX	out of AUX	clamps	1 AB slave	BW1907
	stainless Steel, IP20, depth: 45 mm	4	4 x electronic	out of AUX	out of AUX	clamps	1 single slave	BWU2565
	stainless Steel, IP20, depth: 45 mm	8	–	out of AUX	–	clamps	2 AB slaves	BWU2077
	stainless Steel, IP20, depth: 45 mm	–	8 x electronic	–	out of AUX	clamps	2 AB slaves	BW2078
	stainless Steel, IP20, depth: 90 mm	4	4 x relay	out of ASi	–	clamps	1 single slave	BW2555
	stainless Steel, IP20, depth: 90 mm	8	–	out of AUX	–	clamps	2 AB slaves	BW2556

Replacement, ASi version 2: Single Slaves (digital), work even with the first ASi Masters.

- (1) **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.
- (2) **Output voltage (actuator supply):** Electronic 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. For relay outputs the relay contacts are initiated from ASi. The load circuit is powered externally as specified in the data sheet.
- (3) **ASi connection:** the connection to ASi as well to AUX (auxiliary 24 V power) is made via yellow resp. black ASi profile cable with piercing technology or via M12 socket (in IP20 via clamps).
- (4) **ASi address:** 1 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.

Article no.	BW1808		BW1926		BW2555	
General data						
Device type	input / output					
Connection						
ASi / AUX connection	spring type terminals					
Periphery connection	spring type terminals					
Length of connector cable	I: max. 1,5 m O: unlimited ⁽¹⁾					
ASi						
Profile	S-7.A.E, ID1= 7 (default)		S-7.F.E, ID1= F (default)			
ASi address	1 AB slave		1 single slave			
Required Master profile	≥M3		≥M0			
Since ASi specification	2.1		2			
Operating voltage	30 V (26 ... 31,6 V)					
Max. current consumption	200 mA					
Max. current consumption without sensor/ actuator supply	<30 mA					
AUX						
Voltage	-					
Max. current consumption	-					
Input						
Number	4					
Power supply	out of ASi					
Power supply of attached sensors	max. 100 mA					
Input level	inputs 24 V _{DC} < 0,8 mA (low) > 5 mA (high)					
Output						
Number	up to +40 °	3 x relays, change over, 230 V; 10 A ⁽²⁾ (AC1)		4 x relays, change over, 230 V; 10 A ⁽²⁾ (AC1)		
	at +70 °C	3 x relays, change over, 230 V; 4 A ⁽²⁾ (AC1)		4 x relays, change over, 230 V; 4 A ⁽²⁾ (AC1)		
Relay control	out of ASi					
Max. output current	-					
Display						
LED PWR (green)	ASi voltage o.k.					
LED AUX (green)	-					
LED FLT/FAULT (red)	communication error					
LEDs I1 ... In (yellow)	state of inputs I1 ... I4					
LEDs O1 ... On (yellow)	state of outputs O1 ... O3		state of outputs O1 ... O4			
Environment						
Applied standards	EN 61000-6-2 EN 61000-6-3 EN 60529					
UL certified	yes					
Operating altitude	max. 2000 m					
Ambient temperature	-25 °C ... +45 °C (up to max. +70 °C) ⁽³⁾					
Storage temperature	-25 °C ... +70 °C					
Housing	stainless steel, for DIN rail mounting					
Protection category	IP20					
Weight	330 g			440 g		
Dimensions (W / H / D) in mm	50 / 120 / 45			50 / 120 / 90		

⁽¹⁾ Loop resistance: ≤150 Ω.



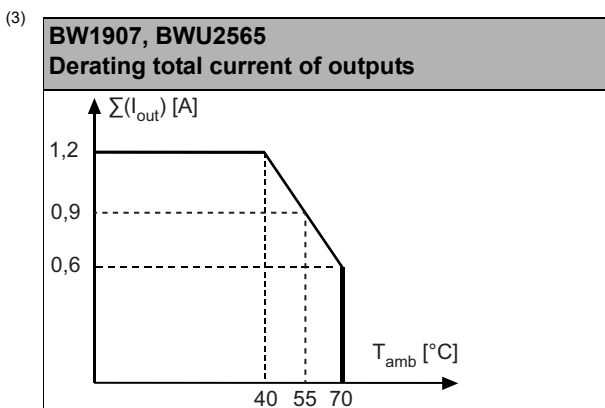
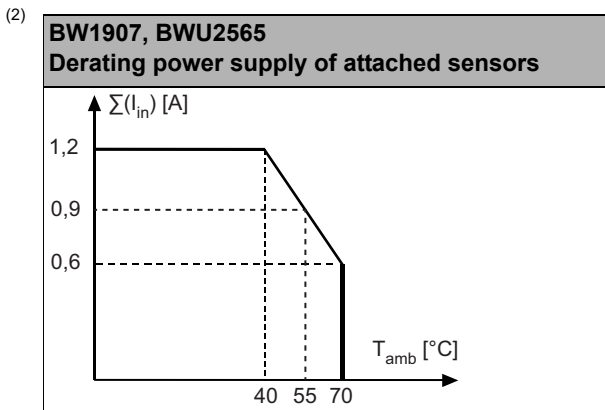
It is possible to connect multiple relay modules in parallel.

(3) Maximum ambient operating temperature +45 °C according UL certificate for the use in the USA and Canada.

Article no.	BWU2565	BW1907
General data		
Device type	input/output	
Connection		
ASi / AUX Connection	spring type terminals	
Periphery connection	sprint type terminals	
Length of connector cable	I/O: max. 1,5 m ⁽¹⁾	
UL-specifications (UL61010-1 and UL61010-2-201)		
External protection	An isolated source with a secondary open circuit voltage of ≤30 V _{DC} with a 3 A maximum over current protection. Over current protection is not required when a Class 2 source is employed.	
ASi		
Profile	S-7. F. E, ID1=7 (fixed)	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	60 mA	
Max. current consumption without sensor/ actuator supply	<30 mA	
AUX		
Voltage	24 V (18 ... 30 V)	
Max. current consumption	AUX-I: 1,2 A permanent operating; 4 A max.	AUX-I: 1,2 A permanent operation; 4 A max.
	AUX-O: 1,2 A permanent operation; 4 A max.	AUX-O: 2 A permanent operation; 4 A max.
	in total: 8 A max.	in total: 8 A max.
Input		
Number	4	
Power supply	out of AUX	
power supply of attached sensors	up to +40 °C	1,2 A permanent operation ⁽²⁾
	at +55 °C	0,9 A permanent operation ⁽²⁾
	at +70 °C	0,6 A permanent operation ⁽²⁾
Switching threshold	inputs 24 V _{DC} < 0,8 mA (low) > 5 mA (high)	

Article no.	BWU2565		BW1907
Output			
Number	4 x electronic		
Power supply	out of AUX		
Max. output current	up to +40 °C	0,5 A per output, \sum (Out) 1,2 A ⁽³⁾	
	at +55 °C	0,5 A per output, \sum (Out) 0,9 A ⁽³⁾	
	at +70 °C	0,5 A per output, \sum (Out) 0,6 A ⁽³⁾	
Display			
LED PWR (green)	on: ASi voltage o.k		
LED AUX (green)	AUX-I: AUX voltage for inputs o.k., AUX-O: AUX voltage for outputs o.k.		
LED FLT/FAULT (red)	on: communication error flashing: AUX I voltage missing or overload		
LEDs I1 ... In (yellow)	state of input I1 ... I4		
LEDs O1 ... On (yellow)	state of outputs O1 ... O4		
Environment			
Applied standards	EN 61000-6-2 EN 61000-6-3 EN 60529		
UL certified	no		
Operating altitude	max. 2000 m		
Ambient temperature	-25 °C ... +70 °C		
Storage temperature	-40 °C ... +70 °C		
Housing	stainless steel, for DIN rail mounting		
Protection category	IP20		
Weight	330 g		
Dimensions (W / H / D) in mm	50 / 120 / 45		

(1) Loop resistance: $\leq 150 \Omega$.

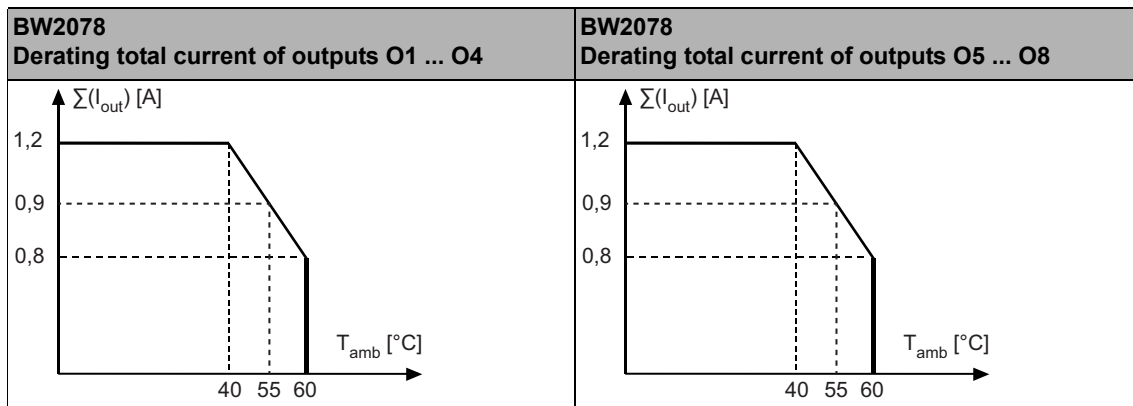


Article no.	BW2078		BWU2077		BW2556	
General data						
Device type	output			input		
Connection						
ASi / AUX Connection	spring type terminals					
Periphery connection	spring type terminals					
Length of connector cable	O: max. 1,5 m ⁽¹⁾			I: max. 1,5 m ⁽¹⁾		
UL-specifications (UL61010-1 and UL61010-2-201)						
External protection	An isolated source with a secondary open circuit voltage of $\leq 30 V_{DC}$ with a 3 A maximum over current protection. Over current protection is not required when a Class 2 source is employed.					
ASi						
Profile	S-7.A.7, ID1= 7 (fixed)			2 x S-0.A.E, ID1= 7 (fixed)		
Address	2 AB Slaves					
Required Master profile	$\geq M4$			$\geq M3$		
Since ASi specification	3			2.1		
Operating voltage	30 V (18 ... 31,6 V)					
Max. current consumption	80 mA			100 mA		
Max. current consumption without sensor/ actuator supply	<30 mA					
AUX						
Voltage	24 V (18 ... 30 V)					
Max. current consumption	AUX1: 2 A permanent operation; 4 A max.			AUX: 1,2 A permanent operation; 4 A max.		
	AUX2: 2 A permanent operation; 4 A max.					
	in total: 8 A max.					
Input						
Number	-			8		
Power supply	-			out of AUX		
power supply of attached sensors	up to +40 °C	-			1,2 A permanent operation ⁽³⁾	
	at +55 °C	-			0,9 A permanent operation ⁽³⁾	
	at +60 °C	-			0,8 A permanent operation ⁽³⁾	
Switching threshold	-			inputs 24 V _{DC} < 0,8 mA (low) > 5 mA (high)		
Output						
Number	8 x electronic			-		
Power supply	out of AUX			-		
Max. output current	up to +40 °C	0,5 A per output, $\sum (O1 \dots O4) 1,2 A +$ $\sum (O5 \dots O8) 1,2 A$ ⁽²⁾			-	
	at +55 °C	0,5 A per output, $\sum (O1 \dots O4) 0,9 A +$ $\sum (O5 \dots O8) 0,9 A$ ⁽²⁾			-	
	at +60 °C	0,5 A per output, $\sum (O1 \dots O4) 0,6 A +$ $\sum (O5 \dots O8) 0,8 A$ ⁽²⁾			-	
Display						
LED PWR (green)				on: ASi voltage o.k. flashing: address 0		
LED AUX (green)	AUX 1, AUX 2: AUX voltage o.k.			AUX voltage o.k.		
LED FLT/FAULT (red)	communication error			on: communication error flashing: AUX voltage missing or overload		
LEDs I1 ... In (yellow)	-			state of inputs I1 ... I8		
LEDs O1 ... On (yellow)	state of outputs O1 ... O8			-		

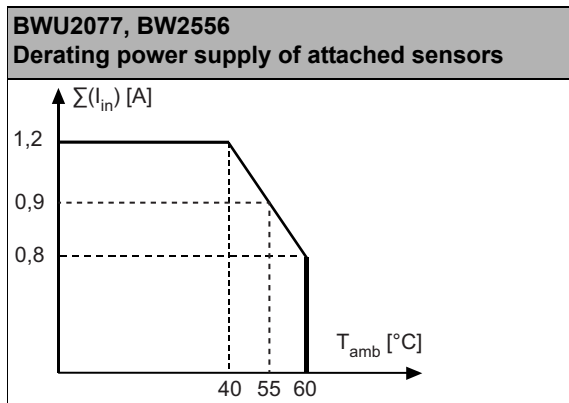
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Environment			
Applied standards	EN 61000-6-2 EN 61000-6-3 EN 60529		EN 61131-2 EN 61000-6-2 EN 61000-6-3 EN 60529
UL certified	no		
Operating altitude	max. 2000 m		
Ambient temperature	-25 °C ... +60 °C		
Storage temperature	-40 °C ... +70 °C		
Housing	stainless steel, for DIN rail mounting		
Protection category	IP20		
Weight	330 g		440 g
Dimensions (W / H / D) in mm	50 / 120 / 45		50 / 120 / 90

(1) Loop resistance: $\leq 150 \Omega$.

(2)



(3)



Programming	Bit setting			
	D0	D1	D2	D3
	input			
BW1808 / BW1907 / BW1926 / BW2555 / BWU2565	I1	I2	I3	I4
BWU2077 / BW2556	Slave 1: I1	Slave 1: I2	Slave 1: I3	Slave 1: I4
	Slave 2: I5	Slave 2: I6	Slave 2: I7	Slave 2: I8
	output			
BW1808	O1	O2	O3	–
BW1907 / BW1926 / BW2555 / BWU2565	O1	O2	O3	O4
BW2078	Slave 1: A1	Slave 1: A2	Slave 1: A3	Slave 1: A4
	Slave 2: A5	Slave 2: A6	Slave 2: A7	Slave 2: A8
	parameter bit			
	P0	P1	P2	P3
BW1907 / BWU2565	0= Off / 1= On (Watchdog)	0= ON / 1= Off (data input filter 128 µs)	0= On / 1= Off (synchronous I/O mode)	not used
BW1808 / BW1926 / BWU2077 / BW2078 / BW2555 / BW2556	not used			

Connections:																																			
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Connections:						
BW2078						
		ASi +, ASi -		Connection to the ASi bus		
ASi+	ASi-	● ADDR 1	+24V1 ext.in	0V1 ext.in	+24 V1 ext.in 0 V1 ext.in	Supply inputs for outputs outputs O1 ... O4
0V1 ext.in	+24 V1 ext.in		● ADDR 2	+24V2 ext.in		
0V1	O1	● PWR	+24V2 ext.in	0V2 ext.in	+24 V2 ext.in 0 V2 ext.in	Supply inputs for outputs outputs O5 ... O8
0V1	O2	● FLT	O5	0V2		
0V1	O3	● O1	O6	0V2	0 V1	Reference potential for outputs O1 ... O4
0V1	O4	● O2	O7	0V2		
ASi+	ASi-	● O3	O8	0V2	0 V2	Reference potential for outputs O5 ... O8
		● O4			O1 ... O8	Outputs