

ASi Module for Building Automation for Manual Call Points

ASi I/O Module for Manual Call Points

ASi Specification 3


AB Slave (up to 62 slaves per ASi Master)

Housing with external fastening tabs



(Figure similar)



Figure	Type	Housing	Inputs digital	Outputs digital	Input voltage (sensor supply)	Output voltage (actuator supply)	ASi connection	ASi address ⁽¹⁾	Article No.
	I/O modules	sur-face-moun- ted box	4	4 x electronic	out of AUX	out of AUX	cage clamp terminals	1 AB slave	BW3412

⁽¹⁾ **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.

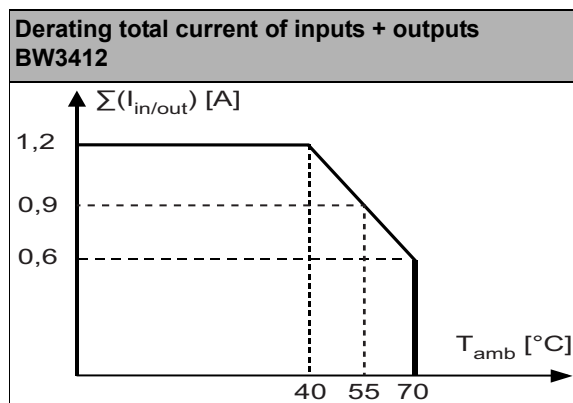
Article no.		BW3412
General data		
Device type	input / output	
Connection		
ASi / AUX connection	cage clamp terminals	
Periphery connection	cage clamp terminals	
Length of connector cable	I/O: max. 15 m ⁽¹⁾	
ASi		
Profile	S-7.A.7, ID1=7 (fixed)	
Address	1 AB slave	
Required Master profile	≥M4	
Since ASi specification	3	
Operating voltage	30 V (18 ... 31.6 V)	
Max. current consumption	70 mA	
Max. current consumption without sensor/ actuator supply	≤ 20 mA	
AUX		
Voltage	24 V (20 ... 30 V)	
Max. current consumption	1,2 A	
Input		
Number	4	
Power supply	out of AUX	
power supply of attached sensors	up to +40 °C	∑ (In/Out) 1,2 A ⁽²⁾
	at +55 °C	∑ (In/Out) 0,9 A ⁽²⁾
	at +70 °C	∑ (In/Out) 0,6 A ⁽²⁾
Switching threshold	U<5 V (low) U>12 V (high)	

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Article no.		BW3412
Output		
Number		4 x electronic
Power supply		out of AUX
Max. output current	up to +40 °C	0,5 A per output Σ (In/Out) 1,2 A ⁽²⁾
	at +55 °C	0,5 A per output Σ (In/Out) 0,9 A ⁽²⁾
	at +70 °C	0,5 A per output Σ (In/Out) 0,6 A ⁽²⁾
Display		
LED ASI (green)		an: ASi voltage on, flashing: ASi voltage on, but peripheral fault ⁽³⁾ or address 0 off: no ASi Voltage
LED FLT/FAULT (red)		an: slave address 0 or slave offline flashing: peripheral fault ⁽³⁾ off: slave online
LED AUX (green)		an: 24 V _{DC} AUX off: no 24 V _{DC} AUX
Environment		
Applied standards		EN 61000-6-2 EN 61000-6-4 EN 60529
Operating altitude		2000 m
Ambient temperature		-25 °C ... +70 °C ⁽²⁾
Storage temperature		-25 °C ... +85 °C
Housing		plastic for screw mounting
Protection category		IP54
Allowable shock and vibration stress		$\leq 15g$, $T \leq 11$ ms 10 ... 55 Hz, 0,5 mm Amplitude
Voltage of insulation		≥ 500 V
Weight		155 g
Dimensions (W / H / D in mm)		93 / 93 / 55

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

(2)



(3) see table „peripheral fault indication“

Article no.	Peripheral fault indication	
	output short circuited	AUX voltage missing
BW3412	•	•

ASi Module for Building Automation for Manual Call Points

Programming	Bit setting			
	D0	D1	D2	D3
	input			
BW3412	I1	I2	I3	I4
	output			
BW3412	O1	O2	O3	O4
	parameter bit			
	P0	P1	P2	P3
BW3412	0 = off / 1 = on (watchdog)	0 = on / 1 = off (data input filter 128 µs)	0 = on / 1 = off (synchronous I/O mode)	not used
Programming instruction				
<ul style="list-style-type: none"> address preset 0, changeable via bus master or programming devices In the base state the "High" signal is continuously present on the inputs. Closing a switch connected to the input changes the input signal to "Low" (see installation manual for further information). 				

Connections				
		Terminal A	Terminal B	
	1	24 V _{ext.out}	13	24 V _{ext.in}
	2	I1	14	0 V _{ext.in}
	3	24 V _{ext.out}	15	
	4	I2	16	ASi +
	5	0 V _{ext.out}	17	
	6	O1	18	ASi -
	7	0 V _{ext.out}	19	
	8	O2	20	24 V _{ext.out}
	9	0 V _{ext.out}	21	
	10	O3	22	I3
	11	0 V _{ext.out}	23	24 V _{ext.out}
	12	O4	24	I4
Addressing socket				
ADDR	connection for ASi addressing device			
Notice				
The inputs I1 ... I4 are bridged internally with 5,1 kΩ each.				

Signal name	Explanation
Ix	digital input x
Ox	digital output x
24 V _{ext.out}	sensor supply
0 V _{ext.out}	GND for outputs (PNP)
24 V _{ext.in}	input for power supply, out of external voltage, positive pole
0 V _{ext.in}	input for power supply, out of external voltage, negative pole
ASi +, ASi -	connection to ASi bus
ADDR	connection for ASi addressing device