

# AS-i Relais Output Modules for 230 / 24 V

## AS-i Field Module

- to control e.g. up to 4 x 230 V / 24 V damper actuators
- for detection of damper end position

up to 4 x relay outputs

Optionally with inputs for e.g. smoke detectors or fusible links

1 AB slave (up to 62 slaves)

External fastening tabs for housing optional



(Figure similar)



The AS-i relay output module with floating contacts is used to control up to 4 damper actuators for 230 V or 24 V and to detect the damper position **damper open** and **damper closed**.

Also other actuators 24 V / 230 V (AC1) can be connected, e.g. lighting, drives, natural smoke and heat vents, smoke protection curtains, and many more.

The outputs are controllable via AS-i or they can be turned ON or OFF manually via DIP switch.

The integrated watchdog function, which switches the outputs to their currentless switching state if there is no communication on the AS-i circuit. The transfer function is permanent monitored in the integrated AS-i Slave and in the AS-i Master.

This module can be connected via cage clamp terminals to the actuators and end position switches.

Article no.	BWU3009	BW3010	BW3011
<b>Connection</b>			
AS-i connection		push-in terminals <sup>(1)</sup>	
Peripheral connection		push-in terminals <sup>(1)</sup>	
Length of connector cable		I/O: max. 15 m <sup>(2)</sup>	
<b>AS-i</b>			
Profile	S-7.A.7, ID1=7 (fixed)	S-7.A.E, ID1=7 (default)	
Address		1 AB slave	
Required Master profile	≥M4	≥M3	
Since AS-i specification	3.0	2.1	
Operating voltage		30 V (18 ... 31,6 V)	
Operating current	140 mA	100 mA	
Quiescent current		≤ 20 mA	
<b>Input</b>			
Number		4 (electronic)	
Connection for fusible link	–	2	–
Power supply		out of AS-i	
<b>Output</b>			
Number	4 relay outputs, change over, 230 V, 10 A (AC1)	2 relay outputs, change over, 230 V, 10 A (AC1)	
Max. output current	up to +40 °C	∑(Out) max. 16 A <sup>(3)</sup>	
	at +70 °C	∑(Out) max. 12 A <sup>(3)</sup>	
Internal protection		1 x changeable 16 A fuse (slow-blow)	
Relay control		out of AS-i	

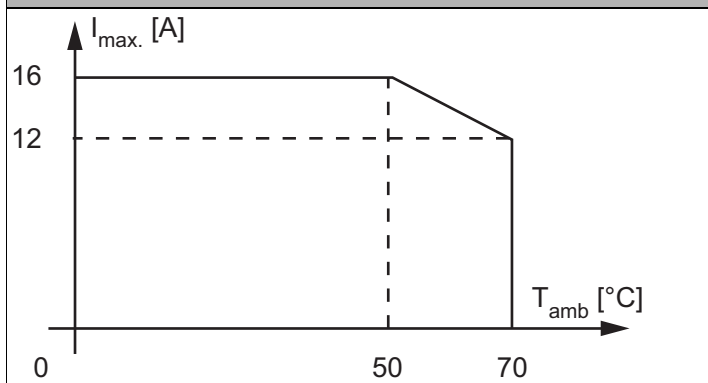
Article no.	BWU3009	BW3010	BW3011
<b>Display</b>			
LED AS-i (green)	on: AS-i voltage on flashing: AS-i voltage on, but address 0 off: no AS-i voltage		
LED FLT/FAULT (red)	on: slave address 0 or slave offline off: slave online		
LEDs I1 ... I4 (yellow)	state of inputs I1 ... I4		
LEDs O1 ... O4 (yellow)	state of outputs O1 ... O4	state of outputs O1, O2	
<b>Environment</b>			
Applied standards	EN 61000-6-2 EN 61000-6-4 EN 60529		
Operating altitude	max. 2000 m		
Ambient temperature	-25°C ... +50°C (max. +70 °C) <sup>(3)</sup>		
Storage temperature	-25°C ... +70°C		
Housing	plastic, for screw mounting		
Pollution degree	2		
Protection category	IP54		
Weight	550 g		520 g
Dimensions (W / H / D) in mm	180 / 130 / 75		

(1) see table "Wiring rules"

(2) loop resistance: ≤150 Ω

(3)

**BW3009, BW3010, BW3011**  
**Derating output current**



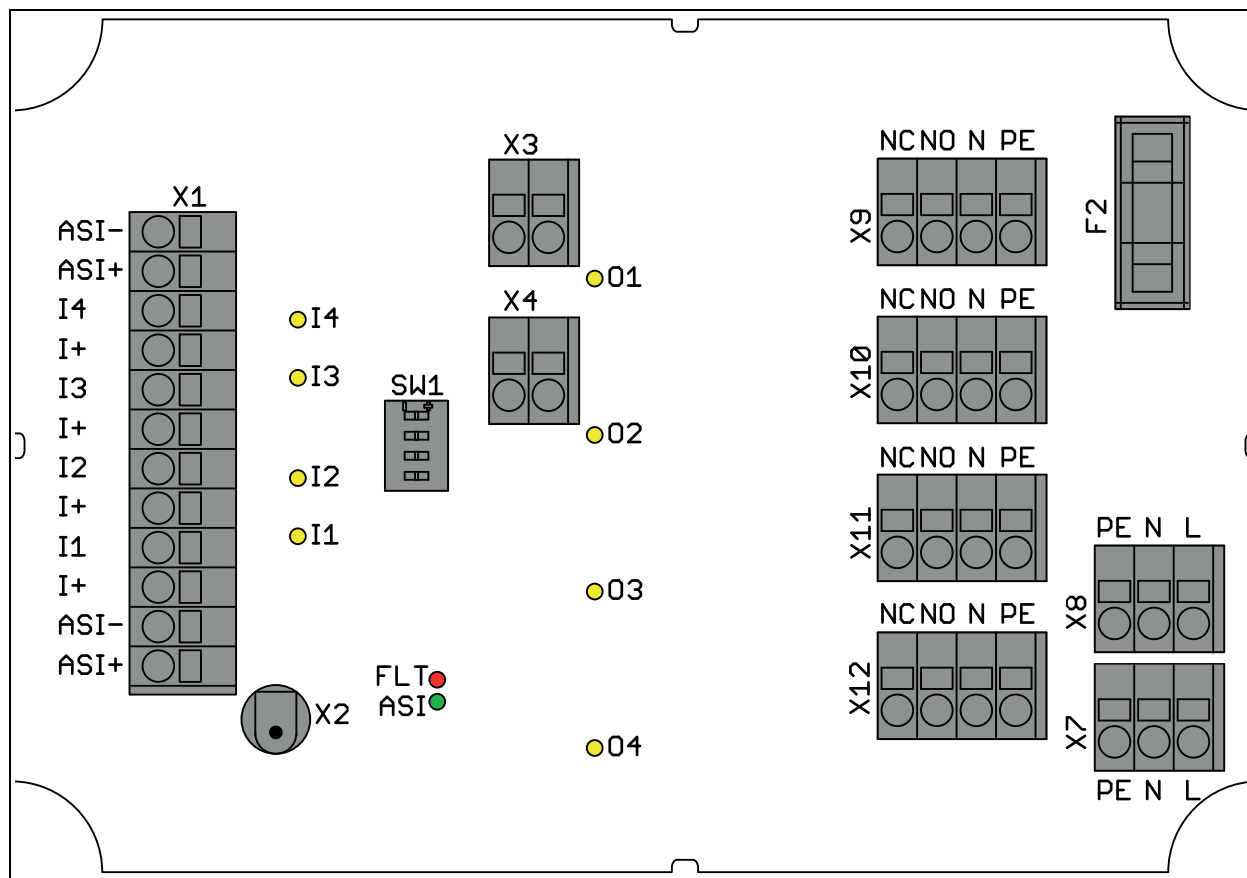
## Wiring rules

Push-in terminals	
<b>General</b>	
Nominal cross section	2,5 mm <sup>2</sup>
<b>Conductor cross section</b>	
Conductor cross section solid	0,2 ... 4,0 mm <sup>2</sup>
Conductor cross section flexible	0,2 ... 2,5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule	without plastic sleeve: 0,25 ... 2,5 mm <sup>2</sup>
	with plastic sleeve: 0,25 ... 2,5 mm <sup>2</sup>
2 conductors with same cross section, stranded, with TWIN ferrules	without plastic sleeve: 0,5 ... 1,5 mm <sup>2</sup>
AWG	24 ... 12
Stripped insulation length	10 mm

Programming	AS-i bit assignment			
	D0	D1	D2	D3
	input			
BW3009, BW3010, BW3011	I1	I2	I3	I4
	output			
BW3009	O1	O2	O3	O4
BW3010, BW3011	O1	O2	-	-
	Parameter bit			
	P0	P1	P2	P3
BW3009, BW3010, BW3011	0= off / 1= on (Watchdog)	0= on / 1= off (data input filter 128µs)	0= on / 1= off (synchronous I/O mode)	not used

## Connections

Signal name	Explanation
I1 ... I4	digital inputs I1 ... I4
I+	power supply of inputs, out of AS-i, positive pole
NC	relay normally closed
NO	relay normally open
L	line
N	neutral
PE	protective earth
AS-i+, AS-i-	connection to AS-i bus



		BW3009	BW3010	BW3011
X1	connection to AS-i bus; digital inputs I1 ... I4; power supply of inputs	•	•	•
X2	connection for AS-i addressing device	•	•	•
X3	input for fusible link	–	•	–
X4	input for fusible link	–	•	–
X7	230 V / 24 V power supply <sup>(1)</sup>	•	•	•
X8	230 V / 24 V power supply <sup>(1)</sup>	•	•	•
X9	relay output O1, change over	•	•	•
X10	relay output O2, change over	•	•	•
X11	relay output O3, change over	•	–	–
X12	relay output O4, change over	•	–	–
F2	changeable 16 A fuse (slow-blow)	•	•	•
SW1	quadruple DIP switch	•	•	•

<sup>(1)</sup> the corresponding connections of terminal blocks X7 and X8 are internally bridged.

Switch positions (SW1)	1	2	3 (BW3009 only)	4 (BW3009 only)
	relay output O1	relay output O2	relay output O3	relay output O4
	permanent ON	permanent ON	permanent ON	permanent ON
	controllable via AS-i	controllable via AS-i	controllable via AS-i	controllable via AS-i
	permanent OFF	permanent OFF	permanent OFF	permanent OFF
	permanent OFF	permanent OFF	permanent OFF	permanent OFF

**Notice:**

- The switch position is freely selectable for each output.
- Switches 3 and 4 are without function for BW3010 and BW3011.

### Accessories:

- AS-i passive distributor to round cable (article no. BW3186 or BW2890)
- External fastening lugs (article no. BW3285)