

## ASi Module to control damper actuators and for detection the damper position

Supply of motors by external 24V

Runtime monitoring of the damper motor in master possible

Connection by cage clamp terminals, optional by flat cable tap

ASi Specifications 2.1/3.0



### Article no. BW2029: Power supply by external 24V

The ASi module to control damper actuators meets the requirements of the ASi Specifications 2.1/3.0. It is used to control the damper actuator and detect the damper position **damper open** and **damper close** as well as the intermediate position „**damper opens**“ or „**damper closes**“.

In addition external contact can be requested, e.g. of an smoke detector or an temperature switch.

The connections are short-circuit -and overload protected. A watchdog function, which switches the outputs to their currentless switching state if there is no communication on the ASi circuit, is integrated. The transfer function is permanent monitored in the integrated ASi Slave and in the ASi Master.

This module can be connected via cage clamp terminals or ready to plug via Belimo-compatible connector.

Article no.	BW2029
<b>Connections</b>	
Damper actuator	cage clamp terminals or Belimo-compatible connectors
ASi	cage clamp terminals
Length of connector cable to motor	≤ 30 m <sup>(1)</sup>
<b>ASi</b>	
Profile	S-7.A.7.E
Address	1 AB slave
Operating voltage	26,5 ... 31,6 V <sub>DC</sub>
Quiescent current (Inputs = 0, Outputs = 0)	≤ 20mA
Required Master profile	≥ M3
Since ASi specification	2.0
Max. current consumption	35mA
<b>AUX</b>	
Voltage	24V (18 ... 30V)
Max. current consumption	400mA
<b>Input</b>	
Number	3 (electronic)
Power supply	out of AUX
Power supply of attached sensors	max. 400 mA ∑ (sensors, outputs) ≤ 400 mA
Switching threshold	≤ 0,8mA (low) ≥ 5mA (high)
<b>Output</b>	
Number	2
power supply	out of AUX
Max. output current	400 mA
Output function	electrical
Short-circuit proof	yes
Loading capacity	400 mA per output

<b>Article no.</b>	<b>BW2029</b>
<b>Display</b>	
Operating	LED green
Function	LED yellow
Inputs 1 - 3	3 x LEDs yellow
Outputs 1 - 2	2 x LEDs yellow
<b>Environment</b>	
Applied standards	EN 61 000-6-2 EN 61 000-6-3 EN 61 000-6-4
Operating temperature	-25°C ... +60°C
Storage temperature	-40°C ... +70°C
Protection category	IP54
Housing	plastic, for DIN rail mounting
Dimensions (W / H / D in mm)	90 / 160 / 55
Weight	250 g

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

Programmierung	Bit setting			
	D3	D2	D1	D0
<b>Input</b>	<b>I4</b>	<b>I3</b>	<b>I2</b>	<b>I1</b>
BW2029	–	external contact	damper open	damper closed
<b>Output</b>	<b>O4</b>	<b>O3</b>	<b>O2</b>	<b>O1</b>
BW2029	–	–	close damper	open damper
<b>Parameter bit</b>	<b>P3</b>	<b>P2</b>	<b>P1</b>	<b>P0</b>
BW2029	1: Peripheral fault is indicated 0: Peripheral fault is <i>not</i> indicated	not used	not used	not used
<b>Programming</b>				
BW2029	preset: address 0 changeable via busmaster-programming devices			

Terminal connections (Ident.No. $\geq 13067$ ):				
	<b>X1</b>	<b>X2</b>	<b>X3 plug</b>	<b>X4 plug</b>
1	ASi +	–	+24 V	O1
2	ASi +	–	+24 V	0 V
3	ASi -	I3	n.c.	O2
4	ASi -	+24 V <sub>ext. out</sub>	n.c.	
5	+ 24 V <sub>ext. in</sub>	I2	I1	
6	+ 24 V <sub>ext. in</sub>	+24 V <sub>ext. out</sub>	I2	
7	0 V <sub>ext. in</sub>	I1		
8	0 V <sub>ext. in</sub>	+24 V <sub>ext. out</sub>		
9		I4		
10		+24 V <sub>ext. out</sub>		
11		O1		
12		0 V <sub>ext. out</sub>		
13		O2		
14		0 V <sub>ext. out</sub>		
<b>X3 (socket for prefabricated AMP plug (6 fold))</b>				
damper position				
<b>X4 (socket for prefabricated AMP plug (3 fold))</b>				
drive				

The diagram shows a terminal block with four sockets: X1 (6 pins), X2 (6 pins), X3 (6 pins), and X4 (3 pins). An ADDR pin is also present. The pin configurations are as follows:

- X1:** 7, 8, 5, 6, 3, 4
- X2:** 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1
- X3:** 5, 3, 1, 6, 4, 2
- X4:** 3, 2, 1



**Warning:**  
Terminals X2,1 and X2,2 must not be connected!

#### Accessories:

- ASi passive distributor to round cable (art. no. BW3186)
- Connecting cable 40 cm with M12 plug (art. no. BW2065)
- ASi passive distributor, ASi flat cable to M12 (art. no. BW1239)
- ASi passive distributor, ASi/24 V to M12 (art. no. BW3803)