

## ASi Module for controlling damper actuators and for detection the damper position

Meets requirements for Switzerland (IG-BSK)

AB Slave (up to 62 slaves)

Runtime monitoring of the damper motor in master possible

Connection by external flat cable terminal via insulation penetration technology

ASi Specifications 2.1/3



(Figure similar)



### Article no. BW2080: Supplied by ASi

The ASi module to control damper actuators meets the requirements of the ASi Specifications 2.1/3. It is used to control the damper actuator and detect the damper position **damper open** and **damper closed** 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.

O1 to the output can be connected in series with a smoke detector and an external fusible link. If they are not connected, the contacts have to be each bridged.

The connections are short-circuit -and overload protected. The integrated watchdog function, which switches the outputs to their

currentless switching state if there is no communication on the ASi circuit, is integrated. An integrated AB slave allows to control up to 62 slaves.

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.

The module is equipped with advanced diagnostic capabilities and is able, by an short circuit at the outputs, to trigger a peripheral error message in the master.

Article no.	BW2080
<b>Connection</b>	
Connection to damper actuator	cage clamp terminals or Belimo-compatible connectors
ASi connection	cage clamp terminals
Length of connector cable to motor	≤ 30 m <sup>(1)</sup>
<b>ASi</b>	
Profile	S 7.A
Address	1 AB slave
Required Master profile	≥ M0
Since ASi specification	2
Operating voltage	26,5 ... 31,6 V DC
Quiescent current (Inputs = 0, Outputs = 0)	≤ 20 mA
Max. current consumption	≤ 420 mA
<b>Input</b>	
Number	3 (electronic)
Power supply	out of ASi
Sensor supply	short-circuit and overload protected according to EN 61131-2
Supply of attached sensors	max. 400 mA ∑ (sensors, outputs) ≤ 400 mA

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Switching threshold	≤ 0,8 mA (low); ≥ 5 mA (high)

<b>Article no.</b>	<b>BW2080</b>
<b>Output</b>	
Number	2
Power supply	out of ASi
Output	short-circuit and overload protected according to EN 61131-2
Max. output current	400 mA
Output function	electrical
Loading capacity	max. 400 mA per output $\Sigma$ (outputs) $\leq$ 400 mA
<b>Display</b>	
Operation (AUX)	LED green
Function (ASi)	LED green
Fault (ERR)	LED red = ASi fault; red flashing = peripheral fault
Inputs (DI)0, 2, 3	3 x LEDs yellow
Input (DI)1	LED blue <sup>(2)</sup>
Outputs (DO)0, 1	2 x LEDs yellow
<b>Environment</b>	
Applied standards	EN 60529 EN 61131-2 EN 61000-6-2, EN 61000-6-3, EN 61000-6-4
Operating altitude	max. 2000 m
Operating temperature	-25 °C ... +60 °C
Storage temperature	-40 °C ... +70 °C
Housing	plastic, for screw mounting
Protection category (acc. EN 60529)	IP54
Tolerable loading referring to humidity	according to EN 61131-2
Insulation voltage	$\geq$ 500 V
Weight	250 g
Dimensions (L / W / H in mm)	160 / 90 / 55

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

(2) since ident.No.  $\geq$ 17304

Programming	Bit assignment			
	D3	D2	D1	D0
<b>Input</b>	<b>I4</b>	<b>I3</b>	<b>I2</b>	<b>I1</b>
BW2080	–	external smoke detector, contact closed	damper open	damper closed
<b>Output</b>	<b>O4</b>	<b>O3</b>	<b>O2</b>	<b>O1</b>
BW2080	–	–	reserved	damper open up
<b>Parameter bit</b>	<b>P3</b>	<b>P2</b>	<b>P1</b>	<b>P0</b>
BW2080	not used	1: peripheral fault indicated 0: peripheral fault not indicated	not used	not used
<b>Programming instructions</b>				
BW2080	preset: address 0 changeable via bus master programming devices			

Terminal assignment:					
	X1	X2	X3 plug	X4 plug	X6
1	ASi +	RM A	+24 V	O1	SL A
2	ASi +	0 V	+24 V	0 V	SL B
3	ASi -	RM B / I3	n.c.	O2	
4	ASi -	+24 V	n.c.		
5		I2	I1		
6		+24 V	I2		
7		I1			
8		+24 V			
9		I4			
10		+24 V			
11		O1			
12		0 V			
13		O2			
14		0 V			

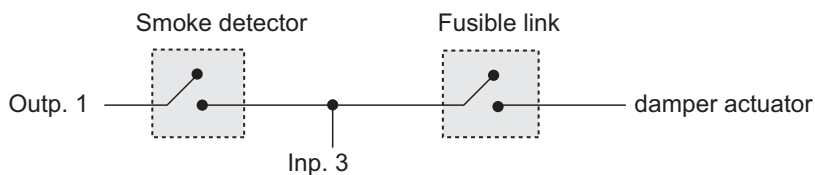
Variants with bridges	
• 1-11: no smoke detector connected no fusible link X6 connected	
• 1- 3: no smoke detector connected	

**SD = smoke detector, FL = fusible link**

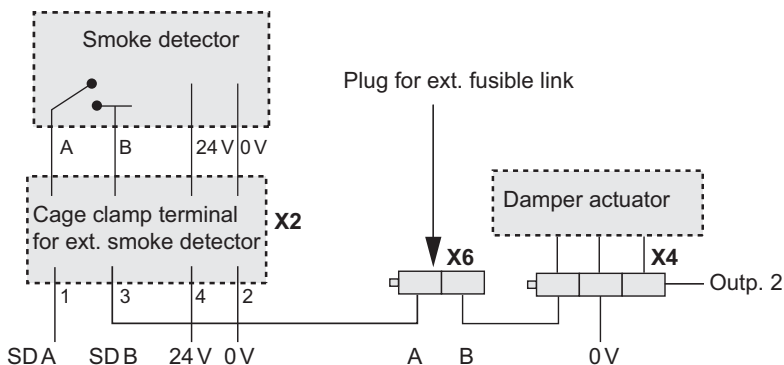
**Notice:**

- The controller can not recognize that by law bridges smoke detectors or fusible link are missing.

### Circuit diagram:



### Connection diagram:



### Scope of delivery:

- ASi passive distributor to round cable (3186) or (BW2890)