

AS-i 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

AS-i Specifications 2.1/3.0



Article no. BW2080: Supplied by AS-i

The AS-i module to control damper actuators meets the requirements of the AS-i Specifications 2.1/3.0. 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 AS-i circuit, is integrated. An integrated AB slave allows to control up to 62 slaves.

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 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
Connection	
Connection to damper actuator	cage clamp terminals or Belimo-compatible connectors
AS-i connection	cage clamp terminals
AS-i	
Profile	S 7.A
Address	1 AB slave
Required Master profile	≥ M0
Since AS-i specification	2.0
Operating voltage	26,5 ... 31,6 V DC
Quiescent current (Inputs = 0, Outputs = 0)	≤ 20 mA
Max. current consumption	≤ 420 mA
Input	
Number	3 (electronic)
Power supply	out of AS-i
Supply of attached sensors	max. 400 mA \sum (sensors, outputs) ≤ 400 mA
Switching threshold	≤ 0,8 mA (low); ≥ 5 mA (high)

AS-i Module to control damper actuators



Article no.	BW2080
Output	
Number	2
Power supply	out of AS-i
Max. output current	400 mA
Output function	electrical
Short-circuit proof	yes
Loading capacity	max. 400 mA per output Σ (outputs) \leq 400 mA
Display	
Operating	LED green
Function	LED yellow
Inputs 1 - 3	3 x LEDs yellow
Outputs 1 - 2	2 x LEDs yellow
Environment	
Applied standards	EN 61000-6-2, EN 61000-6-3, EN 61000-6-4
Operating temperature	-25 °C ... +60 °C
Storage temperature	-40 °C ... +70 °C
Protection category (acc. EN 60529)	IP54
Housing	synthetic material
Dimensions (L / W / H in mm)	160 / 90 / 55

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

Terminal assignment:					
	X1	X2	X3 plug	X4 plug	X6
1	AS-i +	RM A	+24 V	O1	SL A
2	AS-i +	0 V	+24 V	0 V	SL B
3	AS-i -	RM B / I3	n.c.	O2	
4	AS-i -	+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			

AS-i Modul

Connectors: X1 (8,7,6,5,4,3,2,1), 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), X6 (A, B).

ADDR switch: (left), (right)

SD = smoke detector, FL = fusible link

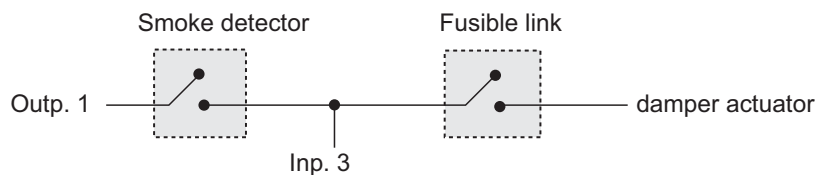
Variants with bridges

- 1-11: no smoke detector connected no fusible link X6 connected
- 1- 3: no smoke detector connected

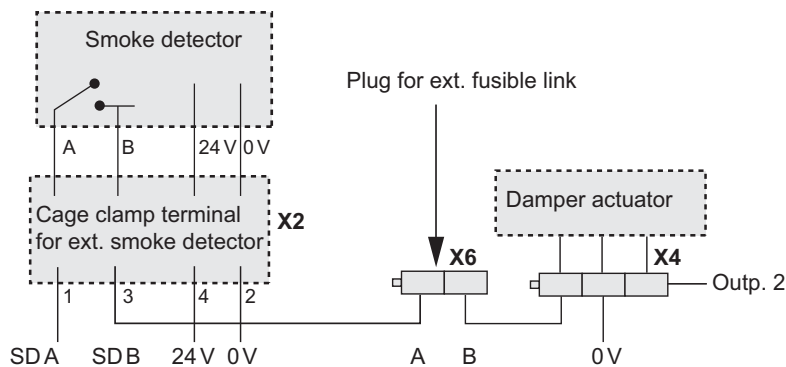
Notice:

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

Circuit diagram:



Connection diagram:



Scope of delivery:

- AS-i passive distributor to round cable (3186) or (BW2890)