

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

Power supply of the motors out of ASi

Runtime monitoring of the damper motor in master possible

ASi connection by cage clamp terminals or external profile cable branch via passive distributor

ASi Specifications 2.1



(Figure similar)



Article no. BW2028: ASi Module for controlling damper actuators, power supply of inputs out of ASi, power supply of outputs out of ASi

The ASi module to control damper actuators meets the requirements of the ASi Specifications 2.1. 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 current-

less switching state if there is no communication on the ASi circuit, is integrated. The transfer function is permanent monitored in the integrated ASi node 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.	BW2028
Connections	
Damper actuator	cage clamp terminals or Belimo compatible connectors
ASi	cage clamp terminals or external profile cable branch via passive distributor
Length of connector cable to motor	≤ 30 m ⁽²⁾
ASi	
Profile	S- 7.D.E (ID1=F default)
Address	1 single address
Required Master profile	≥M3
Since ASi specification	2.1
Operating voltage	30 V _{DC} (26,5 ... 31,6 V)
Max. current consumption	≤420 mA
Max. current consumption without sensor/ actuator supply	≤20 mA
Input	
Number	4
Power supply	out of ASi
Sensor supply	short-circuit and overload protected according to EN 61131-2
Power supply of attached sensors	max. 400 mA ∑ (In/Out) ≤400mA
Switching threshold	≤0,8 mA (low); ≥5 mA (high)

Article no.	BW2028
Output	
Number	2 x electronic
Power supply	out of ASi
Output	short-circuit and overload protected according to EN 61131-2
Max. output current	max. 400 mA $\sum (In/Out) \leq 400\text{mA}$
Display	
LED ASi (green)	on: ASi voltage on flashing: ASi voltage on, but peripheral fault ⁽³⁾ or address 0 off: no ASi voltage
LED ERR (red)	on: address 0 or offline flashing: peripheral fault ⁽³⁾ off: online
LEDs DI 0, 2, 3 (yellow)	state of inputs I1, I3, I4
LED DI 1 (blue ⁽¹⁾)	state of input I2
LEDs DO 0,1 (yellow)	state of outputs O1, O2
Environment	
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	-30°C ... +70°C
Housing	plastic, screw mounting
Pollution degree	2
Protection category	IP54
Tolerable loading referring to humidity	acc. EN 61131-2
Insulation voltage	≥500 V
Weight	250 g
Dimensions (W / H / D in mm)	90 / 160 / 55

(1) from Ident.No. ≥17303.

(2) Loop resistance ≤ 150 Ω

(3) See table "Peripheral fault indication"

Article no.	Peripheral fault indication		
	Overload sensor supply	Output short circuited	AUX voltage missing
BW2028	-	•	-

Programming	Bit setting			
	D3	D2	D1	D0
	input			
	I4	I3	I2	I1
BW2028	reserved	external contact	damper open	damper closed
	output			
	O4	O3	O2	O1
BW2028	-	-	-	fire damper: damper opens
			ventilation/smoke: damper closes	ventilation/smoke damper: damper opens

Programming	Parameter bit			
	P3	P2	P1	P0
BW2028	not used	0= off / 1= on (peripheral fault)	not used	not used
programming note				
BW2028	preset: address 0 changeable via busmaster programming device			

Terminal connections:			
	X1	X2	X5
1	ASi +	I3	I4
2	ASi +	24 V _{out} of ASi	24 V _{out} of ASi
3	ASi -	I2	S6
4	ASi -	24 V _{out} of ASi	S4
5	n.c.	I1	S2
6	n.c.	24 V _{out} of ASi	S1
7	n.c.	I4	
8	n.c.	24 V _{out} of ASi	
9		O1	2
10		0 V _{out} of ASi	1
11		O2	
12		0 V _{out} of ASi	

Double-deck terminal block, 2 x 4/5/6/7 poles (pitch 5 mm)	
General	
Nominal cross section	2.5 mm ²
Conductor cross section	
Conductor cross section solid	0.8 ... 2.5 mm ²
Conductor cross section flexible	0.8 ... 2.5 mm ²
Conductor cross section flexible, with ferrule	without plastic sleeve: 0.25 ... 2.5 mm ²
	with plastic sleeve: 0.25 ... 1.5 mm ²
2 conductors with same cross section, stranded, with TWIN ferrules	–
AWG	28 ... 12
Stripped insulation length	6 mm

Accessories:

- Passive Distributor ASi to 1 x round cable/connecting wires, depth 19 mm, IP67 (art. no. BW3186)
- ASi-5/ASi-3 Address Programming Device (art. no. BW4708)