Analogue Actuator AA/S 4.1



The Analogue Actuator converts measured data received via the EIB / KNX to analogue output signals. The device features four outputs. The analogue outputs can be used as current or voltage outputs with adjustable output signals. The number of analogue outputs can be increased to 8 using the Analogue Actuator Module AAM/S. The Analogue Actuator is a DIN rail device for installation in the distribution board. The connection to the EIB / KNX is established using a bus connection terminal. The device needs an external 24 V AC power supply.

Technical Data

Power supply	Operating voltage	24 V AC ± 10 %	
	Bus voltage	21 30 V DC via EIB / KNX	
	Current consumption device / EIB / KNX	Max. 310 mA / < 10 mA	
	Power consumption	typ. 150 mW	
Outputs	4 analogue outputs A1A4	Extendable with Analogue Actuator Module AAM/S to 8 outputs	
	Signal type	01 V DC 020 mA 010 V DC 420 mA depending on parameterisation	
	Output signal load	Voltage signal: $\geq 1 \ k\Omega$ Current signal: $\leq 500 \ \Omega$	
Output current	Voltage signal	Max. 10 mA per channel	
	Current signal	Max. 20 mA per channel	
Operating and display elements	Device status display	Status LED (3-colour: red, orange, green)	
	Output signal A1A4 display	Status LED (yellow)	
	Programming button and LED (red)	For assignment of the physical address	
Connections	EIB / KNX	Bus connection terminal (black/red)	
	Analogue outputs A1A4 24 V AC power supply	2 screw terminals per output/terminal Conductor cross-section: single-core: 0.50 – 4.0 mm ² stranded: 0.34 – 4.0 mm ² stranded: 0.14 – 2.5 mm ²	
	System connector, 6-pole	Connection for max. 1 analogue actuator module	
Enclosure	IP 20, EN 60 529		
Ambient temperature range	Operation	– 5°C + 45°C	
	Storage	– 25 °C + 70 °C	
	Transport	– 25 °C + 70 °C	
Humidity	Ambient/Storage/Transport	Max. 93 % rel. humidity, no condensation	
Design	Modular installation device		
Housing, colour	Plastic housing, grey		
Installation	On 35 mm mounting rail	to DIN EN 50 022	
Dimensions	90 x 72 x 69.5 mm (H x W x D)		
Mounting depth / width	70 mm / 4 modules at 18 mm		
Weight	approx. 180 g		
Mounting position	as required		
Approvals	EIB / KNX to EN 50 090-1, -2		
CE mark	in accordance with the EMC guideline and low		

Table 1: Analogue Actuator AA/S 4.1

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Application program	Number communication objects	Max. number of group addresses	Max. number of associations
Analogue output 4-8f /1.3	58	200	200

Note:

The programming requires EIB Software Tool ETS2 V1.3 or higher. If ETS3 is used a ".VD3" type file must be imported. The application program is available in the ETS2 / ETS3 at ABB/output/analogue output.

Wiring diagram

6

- A1 A2 A3 A4 U/I U/I U/I (5 ٢ ٢ ٢ ٢ ٢ ٢ € ٢ ABB AA/S 4.1 0V A1 0V A2 0V A3 0V A4 4 ABB i-bus[®] *EI∃* knx $U_S = 24 \text{ V AC}$ A1 ... A4: 0 - 10 V DC 0(4) -20 mA 3 Status A A Extensio 2 \odot Q ٢ D (6 24 V AC 230 V AC 24 V AC
- **1** Bus connecting terminal
- 2 Programming LED/button
- 3 Status LED output A1...A4
- 4 Status LED device
- 5 Connection terminals A1...A4
- 6 Connection for Analogue Actuator Module
- 7 Connection terminal 24 V AC

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Installation

6

The connection to a max. of one Analogue Actuator Module is implemented via a 6-pole system connector (included with the Analogue Actuator Module).



Do not connect electronic ballast's or electronic transformers with 1-10 V control input to the outputs!

- Do not connect external voltages to the outputs. Connected components must ensure safe separation from other voltages.
- The 0 V terminals must not be connected with the • terminals of the same designation of an Analogue Actuator (risk of irreparable damage!).
- The 0 V terminals of outputs A5...A8 are internally connected.

6

AA/S 4.1

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