ABB i-bus® EIB/KNX

AA/S 4.1 Analogue Actuator
AAM/S 4.1 Analogue Actuator Module

AA/S 4.1 and AAM/S 4.1

Application

- Control of components of HVAC (e.g. drives for ventilation flaps)
- Usage as an active control unit for dimming applications (1 Bit, 4 Bit, only with 8 Bit input signal)

Function

- Transformation of received values (8 Bit or 16 Bit) via EIB/KNX in analogue output signals
- Voltage signals: 0…1 V DC
  0…10 V DC
- Current signals: 0…20 mA
  4…20 mA

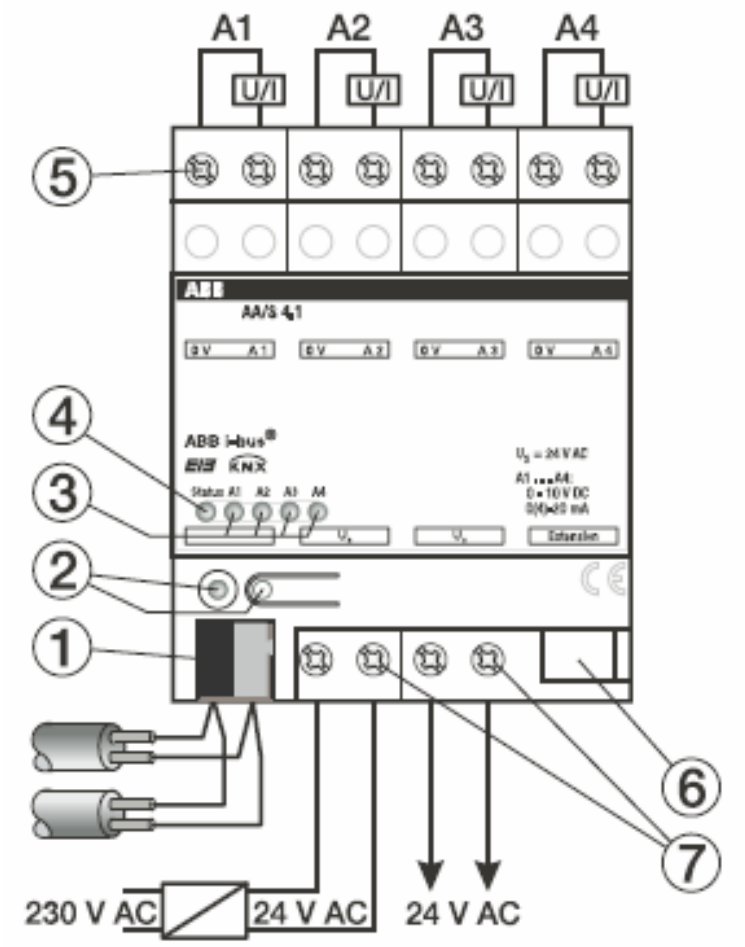
Analogue Actuator AA/S 4.1

Hardware

- AA/S 4.1 Analogue actuator 4fold, MDRC
- Successor of AA/S 2.1
- 4 adjustable analogue outputs
- Indication elements
  1x Status-LED: Voltage, Commissioning, Module scan, Under voltage at module, Short circuit
  4x channel-LED: (On = output signal > 0)
- 24 V AC auxiliary supply necessary
- Width: 4 MW

Analogue Actuator AA/S 4.1

Connection diagram



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

Analogue Actuator Module AAM/S 4.1

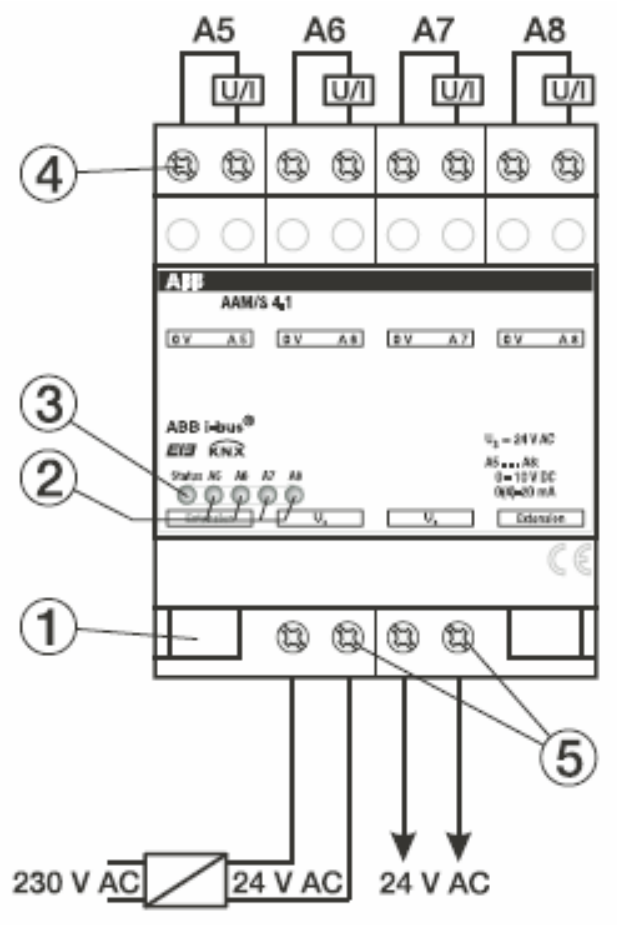
Hardware

- AAM/S 4.1 Analogue actuator module 4fold, MDRC
- 4 adjustable analogue outputs
- Connection to AA/S via system connector
- Indication elements
  1x Status-LED: Voltage, Initialisation, no commissioning

  4x channel-LED: (On = output signal > 0)
- 24 V AC auxiliary supply necessary
- Parametrisation via AA/S 4.1
- Width: 4 MW

Analogue Actuator Module AAM/S 4.1

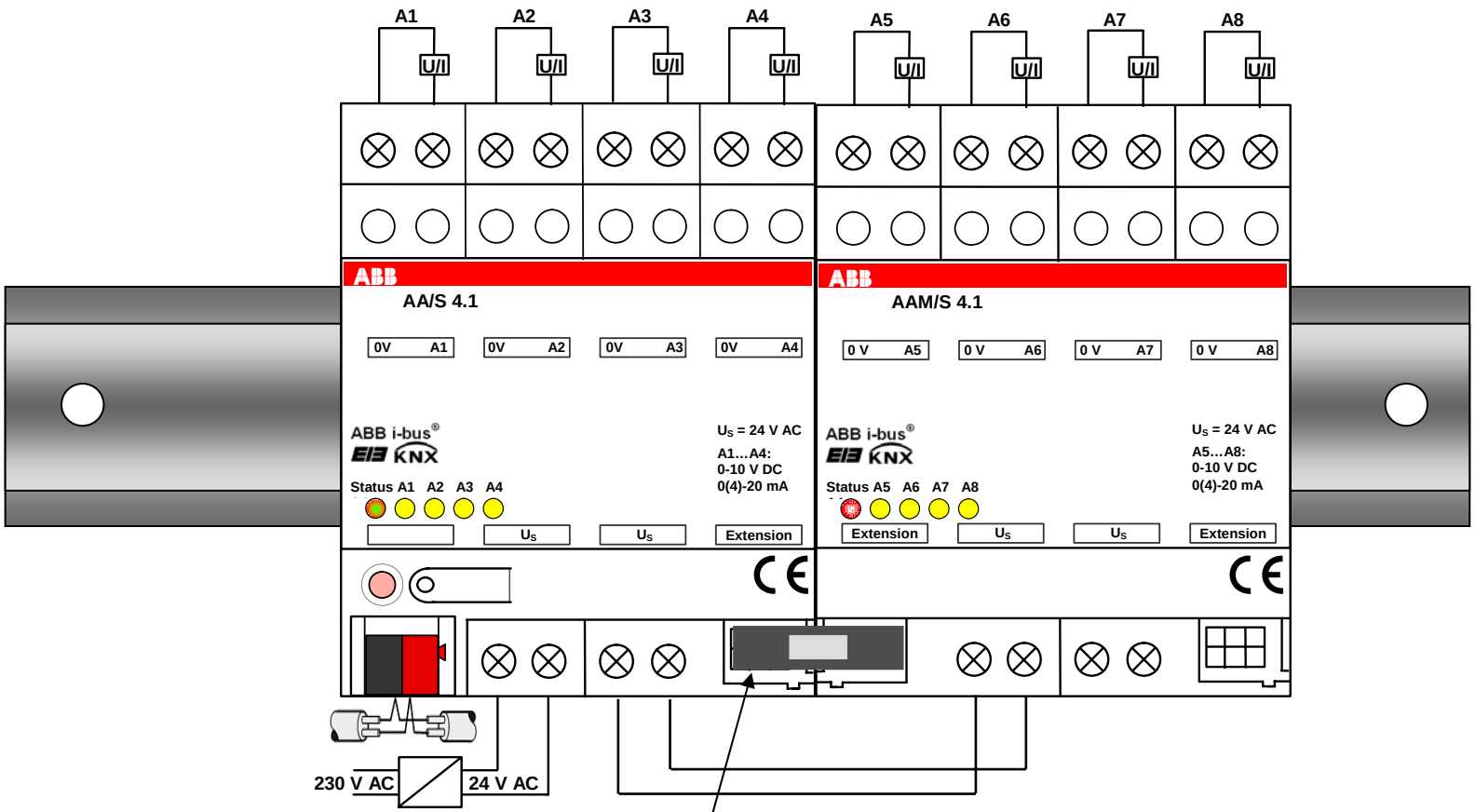
Connection diagram



1 Connection to analogue actuator
2 Status LED output A5…A8
3 Status LED device
4 Connection terminals A5…A8
5 Connection terminal 24 V AC

AA/S 4.1 and AAM/S 4.1

Connection



6-pole system connector

AA/S 4.1 and AAM/S 4.1

Software

- Parametrisable input for 0 % and
  100% output value (only with 16 Bit input value)
- Switch and dimming functions (only with 8 Bit input value)
- Adjustable output value after initialisation in %
- Behaviour parametrisable in case of bus voltage failure and recovery
- Scanning of the input objects after initial start

AA/S 4.1 and AAM/S 4.1

Software

- 2 objects for forced operation
- Cyclical monitoring of input value or forced operation
- Adjustable output value in % in case of exceeding the monitoring time
- Status object of the actual output value
- Alarm function in the event of overload at the output or at the end of the monitoring time

Analogue actuator AA/S 4.1

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 A1…A4	Extendable with Analogue Actuator Module AAM/S to 8 outputs
	Signal type	0...1 V DC 0...20 mA 0...10 V DC 4...20 mA depending on parameterisation
	Output signal load	Voltage signal: ≥ 1 kΩ Current signal: ≤ 500 Ω
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 A1…A4 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 A1...A4 24 V AC power supply	2 screw terminals per output/terminal Conductor cross-section: single-core: 0.50 – 4.0 mm² stranded: 0.34 – 4.0 mm² stranded: 0.14 – 2.5 mm²

Analogue actuator module AAM/S 4.1

Technical data

Power supply	Operating voltage	24 V AC ± 10 %
	Current consumption	Max. 120 mA
	Current consumption on system connector	Max. 6 mA
Outputs	4 analogue outputs	Outputs A5...A8
	Signal type	0...1 V DC 0...20 mA 0...10 V DC 4...20 mA depending on parameterisation
	Output signal load	Voltage signal: ≥ 1 kΩ
		Current signal: ≤ 500 Ω
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 (red)
	Output signal A5...A8 display	Status LED (yellow)
Connections	Analogue outputs A5...A8 24 V AC power supply	2 screw terminals per output/terminal Conductor cross-section: single-core: 0.50–4.0 mm² stranded: 0.34–4.0 mm² stranded: 0.14–2.5 mm²