Model Number

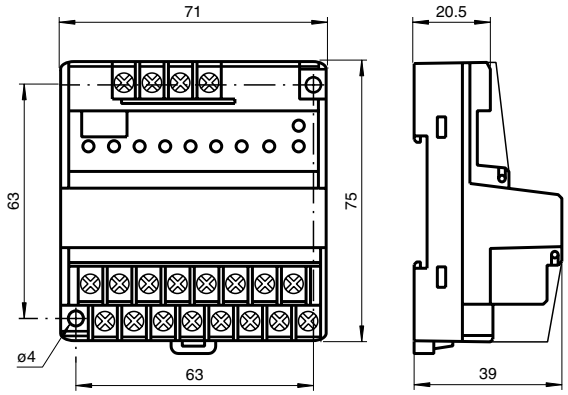
VAA-4EA-K3-ZE/E2

Junction box modul
4 inputs (PNP) and 4 electronic outputs

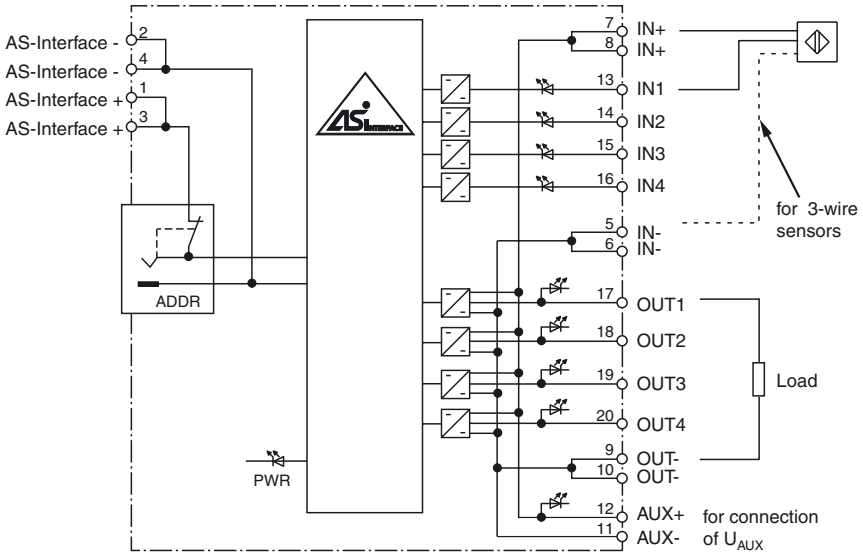
Features

- AS-Interface certificate
- Inputs for 2- and 3-wire sensors
- Addressing jack
- Power supply of the inputs and outputs from the external auxiliary voltage
- Function display for bus, ext. auxiliary voltage, inputs and outputs

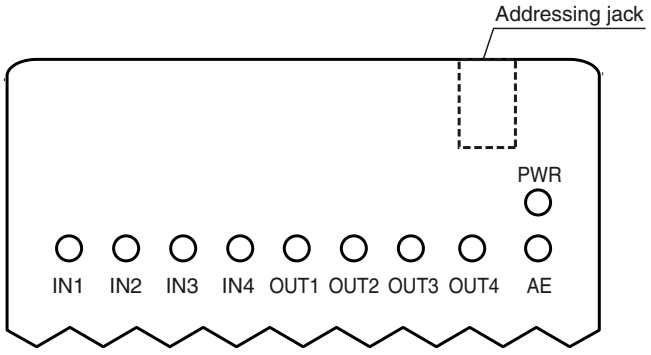
Dimensions



Electrical connection



Indicating / Operating means



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Technical data

General specifications			
Slave type		Standard slave	
AS-Interface specification		V2.0	
Required master specification		≥ V2.0	
UL File Number		E106378	
Indicators/operating means			
LED PWR		dual-LED green/red green: AS-Interface voltage, normal operation red: communication error or address 0	
LED IN		switching state (input); 4 LED yellow	
LED OUT		switching state (output); 4 LED yellow	
LED AE		ext. auxiliary voltage U_{AUX}; LED green	
Electrical specifications			
Auxiliary voltage (output)	U_{AUX}	24 V DC ± 15 % PELV	
Protection class		III	
Rated operational voltage	U_e	26.5 ... 31.6 V from AS-Interface	
Rated operational current	I_e	≤ 60 mA	
Input			
Number/Type		4 inputs for 2- or 3-wire sensors (PNP), DC	
Supply		from external auxiliary voltage U_{AUX}	
Current loading capacity		≤ 1 A	
Input current		≤ 8 mA (limited internally)	
Switching point			
0 (unattenuated)		≤ 1.5 mA	
1 (attenuated)		≥ 4 mA	
Output			
Number/Type		4 electronic outputs, PNP	
Supply		from external auxiliary voltage U_{AUX}	
Current		500 mA per output	
Voltage		ext. auxiliary voltage U_{AUX} - 0.5 V	
Programming instructions			
Profile		S-7.F	
IO code		7	
ID code		F	
Data bits (function via AS-Interface)		**input**	**output**
D0		IN1	OUT1
D1		IN2	OUT2
D2		IN3	OUT3
D3		IN4	OUT4
Parameter bits (programmable via AS-i)		**function**	
P0		communication monitoring P0 = 1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs maintain their condition	
P1		not used	
P2		not used	
P3		not used	
Ambient conditions			
Ambient temperature		-25 ... 60 °C (248 ... 333 K)	
Storage temperature		-25 ... 85 °C (248 ... 358 K)	
Mechanical specifications			
Protection degree		IP20	
Connection		terminal connection ≤ 2.5 mm²	
Mass		110 g	
Mounting		DIN rail or screw mounting	
Compliance with standards and directives			
Standard conformity			
Protection degree		EN 60529	

Function

The VAA-4EA-K3-ZE/E2 AS-Interface coupling module is a junction box module with 4 inputs and 4 electronic outputs. Mechanical contacts and 2- and 3-wire sensors can be connected to the inputs.
The design of this module makes it particularly suitable for operation within a junction box. Its housing, only 39 mm thick, occupies little space in an installation. The VAA-4EA-K3-ZE/E2 is installed by snapping it onto the 35 mm DIN Rail per EN 50022.
Screw terminals are available, for connecting the inputs and outputs or the AS-Interface cable. These permit the connection of conductors of up to 2.5 mm². The inputs and outputs of the module are supplied externally with 24 V DC. The external power supply may be directly connected to the module. Separate terminals are available for the supply of sensors/actuators, which are connected to the respective lines of the sensors/actuators (see connection diagram). A green LED indicates if the external power supply is available. The module itself is supplied via the AS-Interface cable. The outputs can be loaded with up to 0.5 A per channel.
The current switching state of each input and output is indicated by a yellow LED, located on the unit's front panel.
The power supply through AS-Interface is indicated by a dual LED, which is also used to indicate the address of zero, and for communication monitoring.
A programming jack is integrated into the unit, for address configuration before or after installation. It permits a connection to the hand-held programming device.

Accessories

VBP-HH1
AS-Interface handheld

VAZ-PK-1,5M-V1-G
Connection cable module/hand-held programming device

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