Model Number

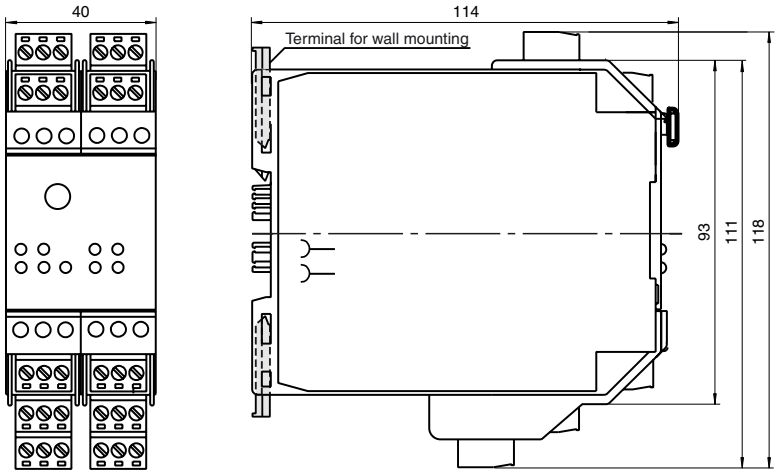
VAA-4EA-KF2-ZE/T

Cabinet module
4 inputs (PNP) and 4 electronic outputs

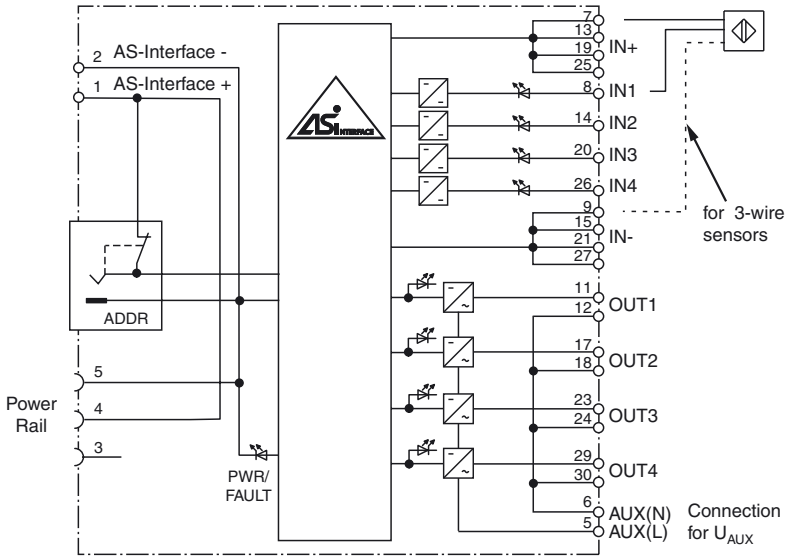
Features

- Housing with removable, coded terminals
- AS-Interface connection via Power Rail
- Communication monitoring, turn-off
- 115/230 V AC electronic outputs
- Inputs for 2- and 3-wire sensors
- Addressing jack
- Power supply of outputs from the external auxiliary voltage
- Power supply of inputs from the module
- Function display for bus, inputs and outputs

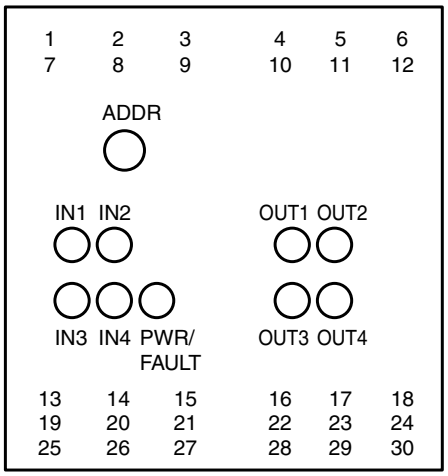
Dimensions



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		E87056
Indicators/operating means		
LED PWR/FAULT		dual LED green/red green: AS-Interface voltage red: communication error or address 0 green/red flashing: overload sensor supply
LED IN		switching state (input); 4 LED yellow
LED OUT		Switching state (output); 4 LED yellow
Electrical specifications		
Auxiliary voltage (output)	U_{AUX}	115 / 230 V AC ± 10 %
Rated operational voltage	U_e	26.5 ... 31.6 V from AS-Interface
Rated operational current	I_e	≤ 80 mA (without sensors) / max. 230 mA
Input		
Number/Type		4 inputs for 2- or 3-wire sensors (PNP), DC
Supply		from AS-Interface
Voltage		21 ... 31 V DC
Current loading capacity		≤ 150 mA, short-circuit protected
Switching point		
0 (unattenuated)		≤ 2 mA
1 (attenuated)		≥ 4 mA
Output		
Number/Type		4 electronic outputs, AC
Supply		from external auxiliary voltage U_{AUX}
Current		≤ 2 A total (T_B ≤ 50°C) ≤ 1.5 A total (T_B ≤ 60°C) ≤ 0.7 A total (T_B ≤ 70°C)
Voltage		≥ (U_{AUX} - 2 V)
Electrical isolation		AS-Interface/Outputs: Safe isolation according to EN 50178 (250 V AC)
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 ... 70 °C (248 ... 343 K)
Storage temperature		-25 ... 85 °C (248 ... 358 K)
Mechanical specifications		
Protection degree		IP20
Connection		removable coded terminals, Power Rail
Mass		170 g
Mounting		DIN rail
Compliance with standards and directives		
Standard conformity		
Protection degree		EN 60529

Function

The VAA-4EA-KF2-ZE/T AS-Interface coupling module is a cabinet module with 4 inputs and 4 electronic outputs for 115/230 V AC. To install the VAA-4EA-KF2-ZE/T, simply snap it onto the 35 mm DIN Rail, according to EN 50022, with the integrated Power Rail.
When an AS-Interface master/gateway is used in the cabinet housing, the AS-Interface signal is automatically transmitted via the Power Rail. The connection of the module to the AS-Interface cable is accomplished by simply snapping it onto the DIN Rail.
The plug-in coded terminals of the inputs and outputs allow "online" maintenance, i. e. while the system is under power. The terminals are coded to prevent incorrect connections at the inputs and outputs.
If a master/gateway other than the one in the cabinet housing is used, the connection to the AS-Interface cable is established via the same terminals. Once the AS-Interface cable has been connected to the terminals, the AS-Interface signal is automatically transferred to the Power Rail.
Power to the module and to the inputs is supplied by the AS-Interface cable and the outputs are powered externally (see connection diagram). A programming jack is available for address configuration.

Note:
The outputs are de-energised by means of an integrated watchdog, whenever communication on the AS-Interface cable is interrupted for more than 80 ms. The watchdog can be disabled by the parameter bit P0.
If a short circuit occurs in the sensor supply, the AS-Interface master indicates an error and the module disconnects from the AS-Interface.

Accessories

VBP-HH1-V3.0
AS-Interface Handheld

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

UPR-05
Universal Power Rail

UPR-E
End cap

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