Model number

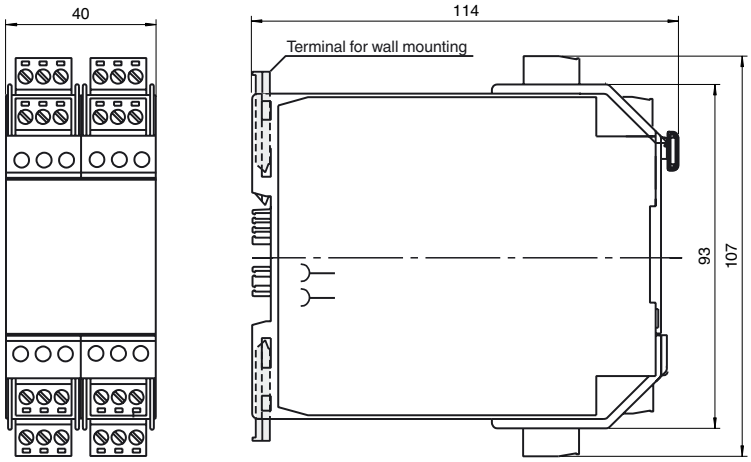
VAA-4EA-KF-ZE/R

Cabinet module
4 inputs (PNP) and 4 relay outputs

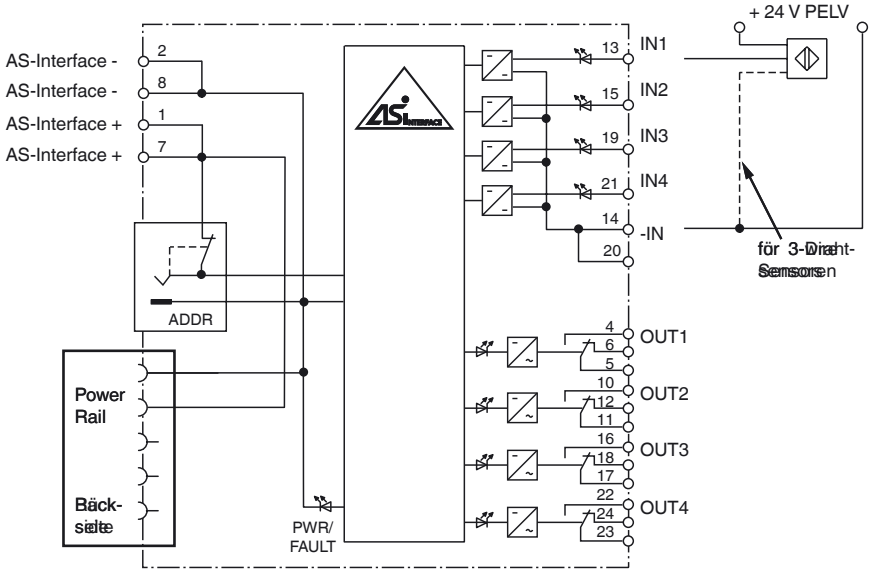
Features

- AS-Interface certificate
- Housing with removable, coded terminals
- AS-Interface connection via Power Rail
- Communication monitoring, turn-off
- Outputs loadable up to 8 A (per module)
- Addressing jack
- External power supply of sensors
- Function display for bus, inputs and outputs
- 4 potential-free switch-contacts

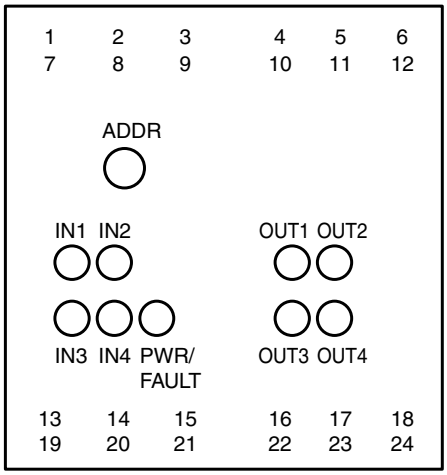
Dimensions



Electrical connection



Indicating / Operating means



Release date: 2019-01-09 10:13 Date of issue: 2019-01-09 087524_eng.xml

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, normal operation red: communication error or address 0	
LED IN		switching state (input); 4 LED yellow	
LED OUT		Switching state (output); 4 LED yellow	
Electrical specifications			
Rated operating voltage	U_e	26.5 ... 31.6 V from AS-Interface	
Rated operating current	I_e	≤ 110 mA	
Input			
Number/Type		4 inputs for 2- or 3-wire sensors (PNP), DC	
Supply		external	
Switching point			
0 (unattenuated)		≤ 2 mA	
1 (attenuated)		≥ 4 mA	
Output			
Number/Type		4 relay outputs	
Galvanic isolation		AS-Interface - Outputs: Safe isolation according to EN 50178 (250 V AC) Output - Output: Safe isolation according to EN 50178 (250 V AC)	
Contact loading		2 A/30 V DC per output 2 A/250 V AC per output	
Life span		mechanical: 30 x 10^6 switching cycles electrical: 1 x 10^6 operations (30 V DC, 2 A, ohmic) 5 x 10^6 operations (250 V AC, 2 A, cosϕ = 1) 4.5 x 10^6 switching cycles (250 V AC, 2 A, cosϕ = 0.7)	
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 (default settings), 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 (-13 ... 158 °F)	
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)	
Mechanical specifications			
Degree of protection		IP20	
Connection		removable coded terminals, Power Rail	
Mass		170 g	
Mounting		DIN mounting rail	
Compliance with standards and directives			
Standard conformity			
Degree of protection		EN 60529	

Function

The VAA-4EA-KF-ZE/R AS-Interface coupling module is a cabinet module with 4 inputs and 4 relay outputs. Its design, only 40 mm wide, occupies little space in a cabinet installation. The VAA-4EA-KF-ZE/R is installed by snapping it onto the 35 mm DIN Rail per 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.
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 is supplied by the AS-Interface cable and the inputs and 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.

Accessories

VBP-HH1-V3.0-KIT
AS-Interface Handheld with accessory

VBP-HH1
Handheld programming device

UPR-05
Universal Power Rail with end caps and cover, 5 conductors, length: 2 m

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

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