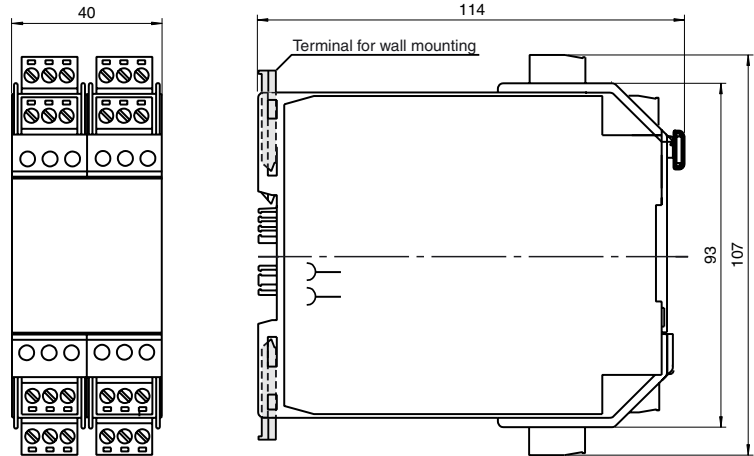
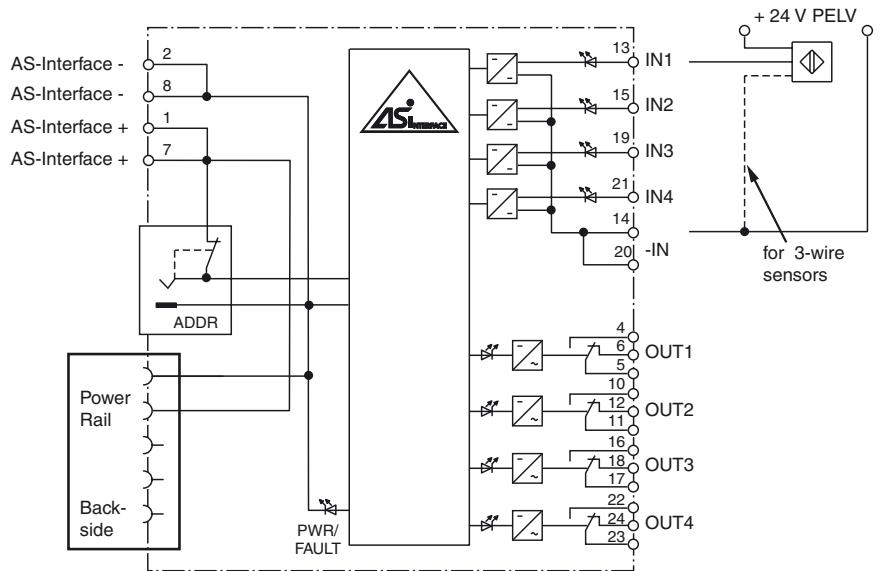




Dimensions



Electrical connection



Model Number

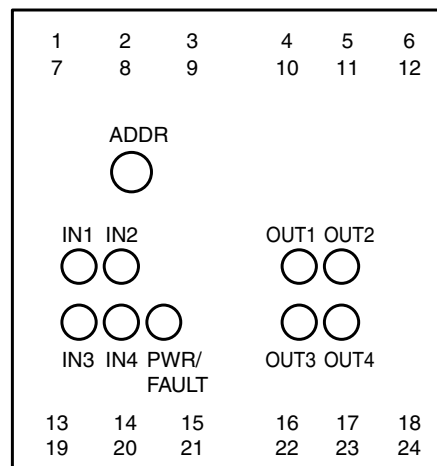
VAA-4EA-KF-ZE/R

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

Indicating / Operating means



## 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 operational voltage	$U_e$	26.5 ... 31.6 V from AS-Interface
Rated operational 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
Electrical 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
Lifetime	mechanical: 30 x 10 <sup>6</sup> switching cycles electrical: 1 x 10 <sup>6</sup> operations (30 V DC, 2 A, ohmic) 5 x 10 <sup>6</sup> operations (250 V AC, 2 A, cosφ = 1) 4.5 x 10 <sup>6</sup> 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 (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-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

AS-Interface handheld

## UPR-05

Universal Power Rail

## VAZ-PK-1,5M-V1-G

Connection cable module/hand-held programming device

## UPR-E

End cap