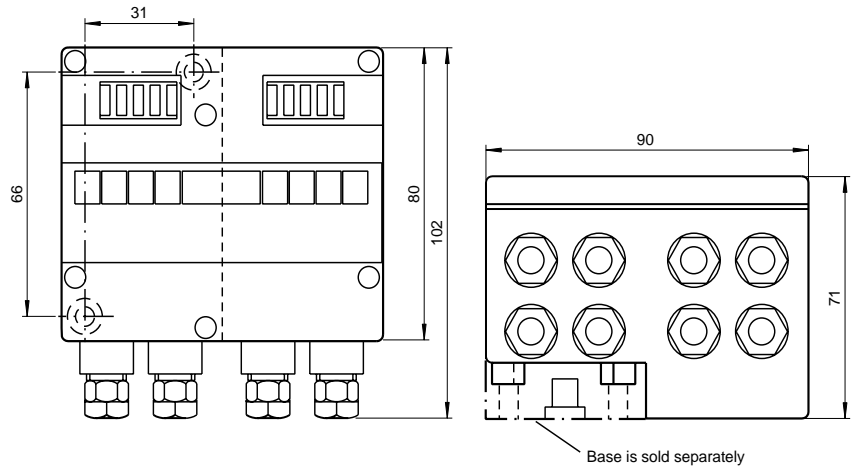


## AS-i sensor/actuator module



## Dimensions

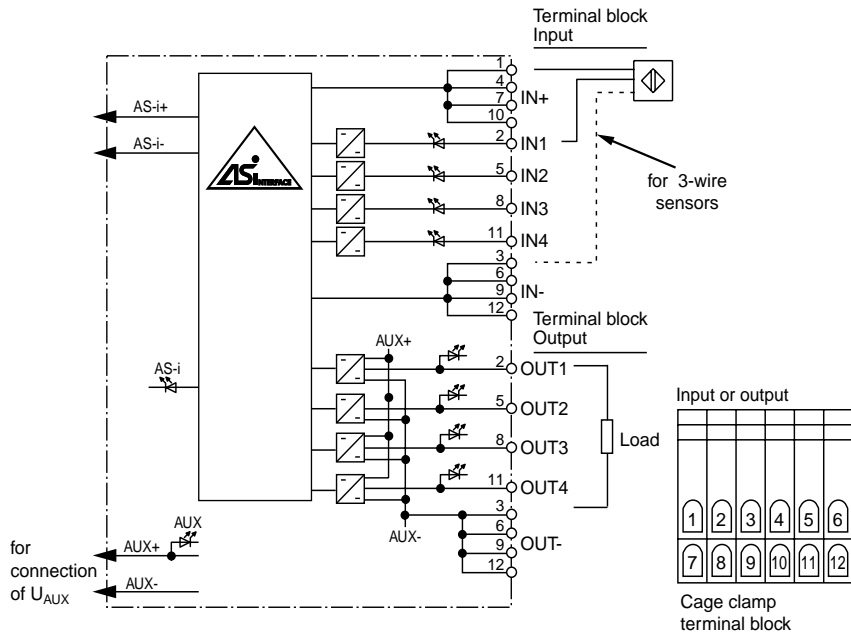


## Model number

VAA-4EA-G4-ZE/E2

G4 PG module IP67  
4 inputs (PNP) and 4 electronic outputs

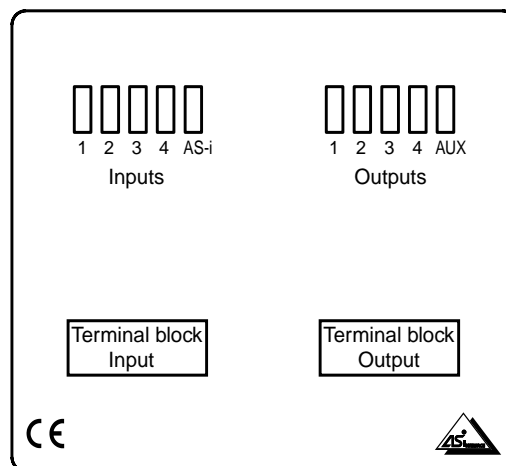
## Electrical connection



## Features

- AS-Interface certificate
- Protection degree IP67
- Flat or round cable connection (via standardised EEMS base, not included in the delivery package)
- Cable piercing method for flat cable
- Communication monitoring, turn-off
- Inputs for 2- and 3-wire sensors
- Power supply of outputs from the external auxiliary voltage
- Power supply of inputs from the module
- Function display for bus, ext. auxiliary voltage, inputs and outputs
- Monitoring of sensor overloads

## Indication/operating means



## Technical data

### General specifications

Slave type	Standard slave
<b>Indicators/operating means</b>	
LED AS-i	dual LED green/red green: AS-i voltage red: communication error or address 0 green/red flashing: overload sensor supply
LED AUX	ext. auxiliary voltage $U_{AUX}$ ; LED green
LED IN	switching state (input); 4 LED yellow
LED OUT	switching state (output); 4 LED yellow

### Electrical specifications

Auxiliary voltage $U_{AUX}$	24 V DC $\pm$ 15 % PELV (protection class 3 in accordance with VDE 0106/IEC 364-4-41)
Rated operational voltage $U_e$	26.5 ... 31.6 V from AS-Interface
Rated operational current $I_e$	$\leq$ 60 mA (without sensors)

### Input

Number/Type	4 inputs for 2- or 3-wire sensors (PNP), DC from AS-Interface
Supply	
Current loading capacity	$\leq$ 180 mA ( $T_B \leq 40$ °C), $\leq$ 140 mA ( $T_B \leq 60$ °C), short-circuit-proof
Switching point	OFF $\leq$ 1.5 mA ON $\geq$ 4.5 mA

### Output

Number/Type	4 electronic outputs, PNP
Voltage	ext. auxiliary voltage $U_{AUX}$ - 0.5 V
Current	2 A per output, 4 A total

### Ambient conditions

Ambient temperature	-25 ... 60 °C (248 ... 333 K)
Storage temperature	-25 ... 85 °C (248 ... 358 K)

### Mechanical specifications

Protection degree	IP67 according to EN 60529
Connection type	cable piercing method or terminal compartment flat cable yellow/flat cable black or standard round cable inputs/outputs: PG7 screwed connection and cage clamp terminals
Mass	350 g
Mounting	top hat section rail or screw mounting

### Programming instructions

Profile	S-7.F
IO code	7
ID code	F

### Programming instructions (bit configuration)

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)

Parameter bits	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

## VAA-4EA-G4-ZE/E2

### Function

The VAA-4EA-G4-ZE/E2 is an AS-Interface coupling module with four inputs and four outputs. Mechanical contacts and 2- and 3-wire sensors can be connected to the inputs. The sensors are supplied via the module. The outputs are electronic outputs, which can be loaded to 24 V DC and 2 A per output (total load < 4 A).

The IP67 rated G4-PG module is especially suitable for rough conditions. Sensors and actuators attach to PG cable glands and cage tension spring terminals thus making the installation especially user-friendly. For pre-addressing the module it can be plugged directly onto the adapter of the hand-held programming device VBP-HH1.

The current switching state of each channel is indicated by an LED, located on the module's top side. In the case of communication errors on the bus, the outputs are de-energised via an integrated watchdog, which can be deactivated by the parameter bit P0.

Both flat and round cables can be used for the AS-i transmission line and the external 24 V DC power supply. Use the U-G1FF base for the AS-i flat cable. The AS-Interface standardised EEMS interface, uses the cable piercing method to connect both the yellow and black flat cables.

Use the U-G1PP base for the round cable. The AS-i-cable as well as the external power supply may be connected within this base.

### Matching system components

#### U-G1FF

Base for connection to flat cable (EEMS; AS-i and external auxiliary voltage)

#### U-G1FFA

Base with addressing jack for connection to flat cable (EEMS; AS-i and external auxiliary voltage)

#### U-G1PP

Base for connection to round cable (EEMS; AS-i and external auxiliary voltage)

### Accessories

#### VAZ-G4-B

Blind plug PG7

#### VBP-HH1

Hand-held programming device

