Model Number

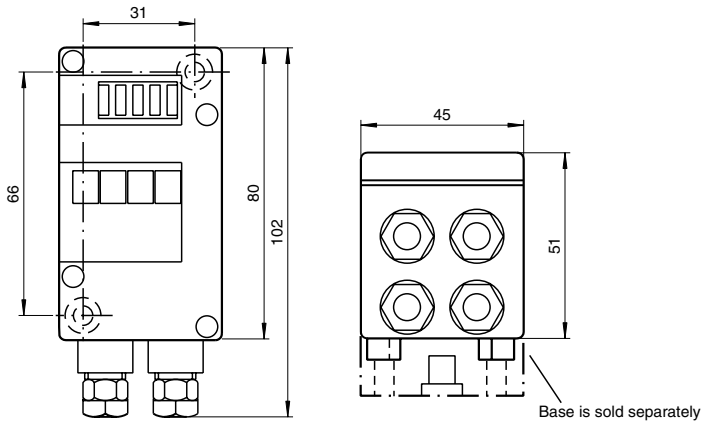
VAA-2EA-G4-ZE/E2

G4 module IP67
2 inputs (PNP) and 2 electronic outputs

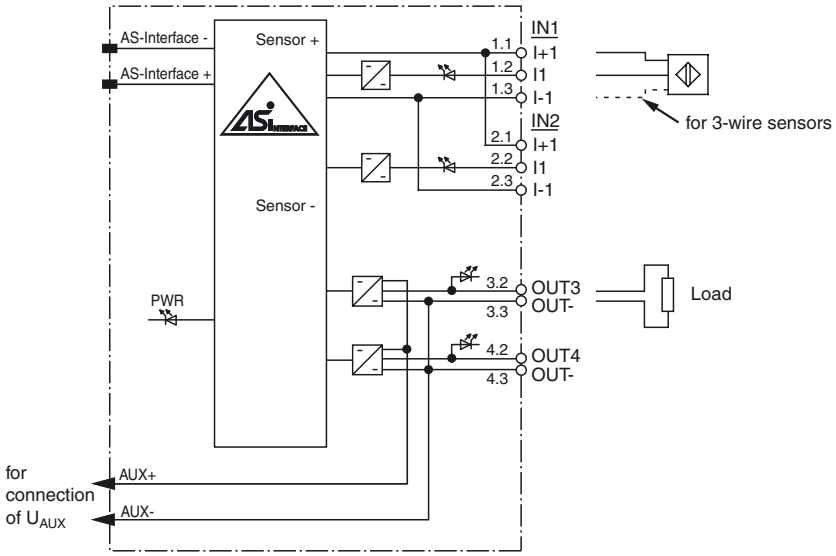
Features

- 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 and inputs
- Monitoring of sensor overloads

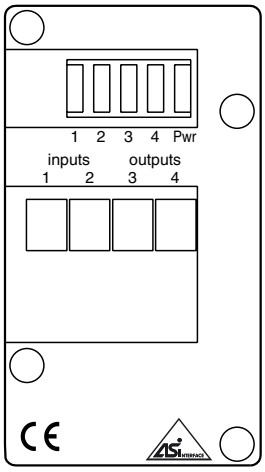
Dimensions



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		dual LED green/red green: AS-Interface voltage red: overload sensor supply
LED IN		switching state (input); 2 LED yellow
LED OUT		Switching state (output); 2 LED yellow
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 (without sensors) / max. 240 mA
Input		
Number/Type		2 inputs for 2- or 3-wire sensors (PNP), DC
Supply		from AS-Interface
Voltage		21 ... 31 V
Current loading capacity		≤ 180 mA (T_B ≤ 40 °C), ≤ 140 mA (T_B ≤ 60 °C), short-circuit proof
Input current		≤ 8 mA (limited internally)
Switching point		
0 (unattenuated)		≤ 1.5 mA
1 (attenuated)		≥ 4.5 mA
Output		
Number/Type		2 electronic outputs, PNP
Supply		from external auxiliary voltage U_{AUX}
Current		1.5 A per output
Voltage		≥ (U_{AUX} - 0,5 V)
Programming instructions		
Profile		S-3.F
IO code		3
ID code		F

Data bits (function via AS-Interface)	**input**	**output**
D0	IN1	-
D1	IN2	-
D2	-	OUT3
D3	-	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		IP67
Connection		cable piercing method or terminal compartment flat cable yellow/flat cable black or standard round cable inputs/outputs: screwed connection M12 x 1,5 and cage clamp terminals
Mass		180 g
Mounting		DIN rail or screw mounting
Compliance with standards and directives		
Standard conformity		
Protection degree		EN 60529

Function

The VAA-2EA-G4-ZE/E2 is an AS-Interface coupling module with two inputs and two 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 1.5 A per output (total load < 4 A).
The G4 module in IP67 is especially suitable for rough conditions. The connection to sensors and actuators is established via cable glands and cage tension spring terminals thus making the installation especially user-friendly. For pre-addressing the module, it can be directly plugged onto the adapter of the VBP-HH1 handheld programming device. An LED is provided for each channel, on the top of the module, to indicate the current switching status. In the case of communication errors on the bus, the outputs are de-energised via an integrated watchdog, which can be disabled by the P0 parameter bit.
The AS-Interface transmission cable and the external 24 V DC supply can be connected through flat cables or round cables. Use the U-G1FF for the AS-Interface flat cable. The connection to both cables is established using the AS-Interface standardised EEMS interface, i. e. the cable piercing method.
Use the U-G1PP base for a round cable. The U-G1PP base allows the AS-Interface-cable as well as the external power supply to be connected.

Accessories

VBP-HH1-V3.0
AS-Interface Handheld

VAZ-G4-B
Blind plug

U-G1FF
AS-Interface module mounting base

U-G1FFA
AS-Interface module mounting base

U-G1PP
AS-Interface module mounting base

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