Model number

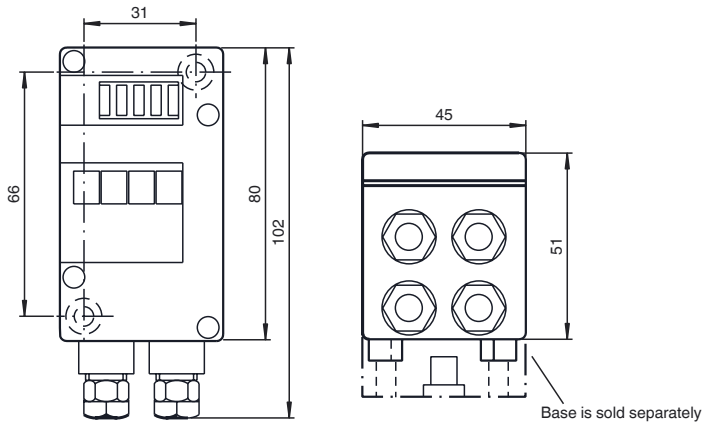
VAA-4E-G4-ZE

G4 module IP67
4 inputs (PNP)

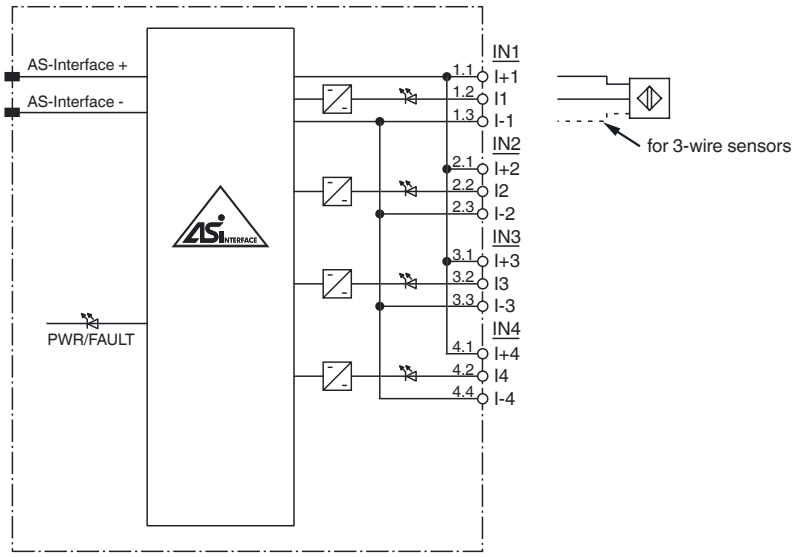
Features

- Protection degree IP67
- Flat or round cable connection (via standardized EMS base, not included with delivery)
- Cable piercing method for flat cable
- Inputs for 2- and 3-wire sensors
- Power supply of inputs from the module
- Function display for bus and inputs
- LED indicator for overload on sensor supply

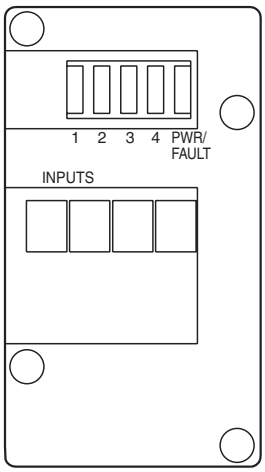
Dimensions



Electrical connection



Indicating / Operating means



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Technical data

General specifications		
Slave type		Standard slave
AS-Interface specification		V3.0
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
Electrical specifications		
Rated operating voltage	U_e	26.5 ... 31.6 V from AS-Interface
Rated operating current	I_e	≤ 40 mA (without sensors) / max. 190 mA
Protection class		III
Input		
Number/Type		4 inputs for 2- or 3-wire sensors (PNP), DC
Supply		from AS-Interface
Voltage		21 ... 31 V
Current loading capacity		≤ 150 mA (T_B ≤ 40 °C), ≤ 120 mA (T_B ≤ 60 °C), short-circuit protected
Input current		≤ 8 mA (limited internally)
Switching point		according to DIN EN 61131-2 (Type 2)
0 (unattenuated)		≤ 2 mA
1 (attenuated)		≥ 4 mA
Programming instructions		
Profile		S-0.0
IO code		0
ID code		0
ID1 code		F
ID2 code		E

Data bits (function via AS-Interface)	**input**	**output**
D0	IN1	-
D1	IN2	-
D2	IN3	-
D3	IN4	-

Parameter bits (programmable via AS-i)	**function**
P0	not used
P1	not used
P2	not used
P3	not used

Ambient conditions		
Ambient temperature		-25 ... 60 °C (-13 ... 140 °F)
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)
Mechanical specifications		
Protection degree		IP67
Connection		cable piercing method or terminal compartment yellow flat cable or standard round cable inputs: M12 x 1.5 cable gland and cage tension spring terminals
Material		
Housing		PA 6 GF30
Mass		180 g
Mounting		DIN rail or screw mounting
Compliance with standards and directives		
Directive conformity		
EMC Directive 2004/108/EC		EN 61000-6-2:2005, EN 61000-6-4:2007, EN 50295:1999
Standard conformity		
Noise immunity		EN 61000-6-2:2005, EN 50295:1999
Emitted interference		EN 61000-6-4:2007
Input		EN 61131-2:2007
Protection degree		EN 60529:2000
Fieldbus standard		EN 50295:1999, IEC 62026-2:2006

Notes

Do not connect inputs and outputs, which are supplied via the module from AS-interface or via auxiliary power, with power supply and signal circuits with external potentials.

Function

The VAA-4E-G4-ZE AS-Interface coupling module is a G4 module with 4 inputs. Mechanical contacts and 2- and 3-wire sensors can be connected to the inputs. The sensors are supplied via the module.
The IP67 rated G4 module is especially suitable for rough conditions. Sensors attach to 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.
Both flat and round cables can be used for the connection of the AS-Interface transmission line. Use the U-G1F base or the U-G1FF base for the AS-Interface flat cable. The AS-Interface cable is connected using the cable piercing method. The U-G1F base can also be used as IP67 AS-Interface distribution box. The U-G1FF base should be used, when modules with outputs are mounted in series with the module. The flat cable for external power supply can be placed in this base. The module does not access the supply line.
Use the U-G1P or the U-G1PP base for a round cable.These bases have the same functionality as the U-G1F or the U-G1FF bases.

Note:
An overloading of the sensor supply, e. g. short-circuit is signalled by a red/green flashing LED "PWR/FAULT" and reported to the AS-Interface master via the "Peripheral fault" function. Communication via the AS-Interface remains intact.

Accessories

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

VBP-HH1-V3.0
AS-Interface Handheld

VAZ-G4-B
Blind plug PG7

VAZ-G4-B1
Blind plug M12

Matching system components

U-G1F
AS-Interface module mounting base for connection to flat cable (AS-Interface)

U-G1FA
AS-Interface module mounting base with adressing jack for connection to flat cable (AS-Interface)

U-G1P
AS-Interface module mounting base for connection to round cable (AS-Interface)

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