



Model number

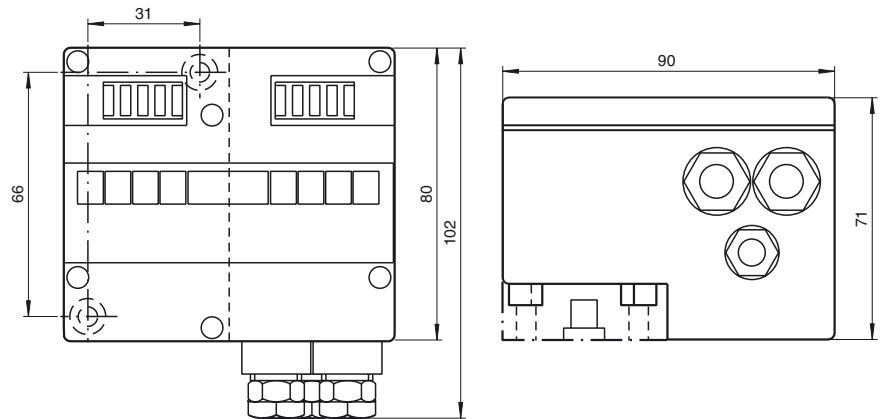
VBA-2A-G4-I

G4 module IP65
2 analog outputs (current)

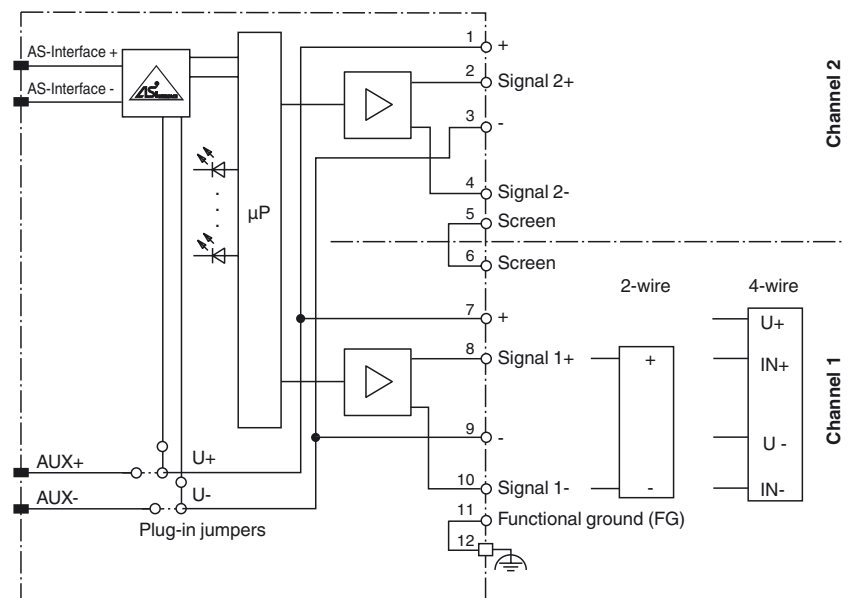
Features

- Degree of protection IP65
- Flat or round cable connection (via standardized EEMS base, not included with delivery)
- Cable piercing method for flat cable
- Function display for bus, external auxiliary voltage and outputs
- Power supply of outputs external or from the module, as required

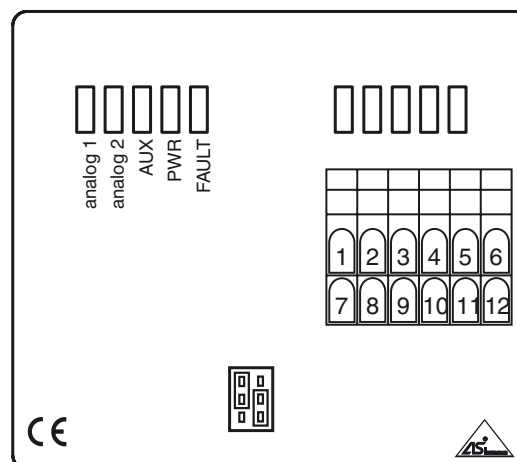
Dimensions



Electrical connection



Indicating / Operating means



Spring terminal block:

- | | |
|----------------|-----------------|
| 1: 24V ext. | 7: 24V ext. |
| 2: Sig.+ Ch. 2 | 2: Sig.+ Ch. 1 |
| 3: 0 V ext. | 9: 0 V ext. |
| 4: Sig.- Ch. 2 | 10: Sig.- Ch. 1 |
| 5: Shield | 11: FG |
| 6: Shield | 12: FG |

Plug-in jumper:



Power supply of outputs from the external auxiliary power



Power supply of outputs from the module (AS-Interface)

Technical data**General specifications**

Slave type	Standard slave
AS-Interface specification	V2.1
Required master specification	≥ V2.1
UL File Number	E223772

Functional safety related parameters

MTTF _d	145 a at 30 °C
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Indicators/operating means

LED FAULT	error display; LED red red: communication error red flashing: peripheral error
LED PWR	AS-Interface voltage; LED green
LED ANALOG	status output signal; LED green green: 0 mA ≤ I ≤ 23 mA green flashing: I > 23 mA (peripheral error)
LED AUX	ext. auxiliary voltage U _{AUX} ; LED green

Electrical specifications

Auxiliary voltage (output)	U _{AUX}	24 V DC ± 15 % PELV
Rated operating voltage	U _e	26.5 ... 31.6 V from AS-Interface
Rated operating current	I _e	≤ 80 mA
Protection class		III

Output

Number/Type	2 analog outputs (current), 0 ... 20 mA
Supply	from AS-Interface or from external auxiliary voltage as required U _{AUX}
Resolution	13 Bit / 1 µA

Directive conformity

Electromagnetic compatibility	
Directive 2014/30/EU	EN 62026-2:2013

Standard conformity

Degree of protection	EN 60529:2000
AS-Interface	EN 62026-2:2013

Programming instructions

Profile	S-7.3.5
IO code	7
ID code	3
ID2 code	5
Data bits (function via AS-Interface)	The transfer of the data value is based on AS-Interface Profile 7.3.

Parameter bits (programmable via AS-i) function

P0	not used
P1	projecting of the 2nd channel P1=1, channel 2 is projected P1=0, channel 2 is not projected
P2	Message of peripheral error P2=1, peripheral error is reported P2=0, peripheral error is not reported
P3	not used

Ambient conditions

Ambient temperature	0 ... 70 °C (32 ... 158 °F)
Storage temperature	-25 ... 85 °C (-13 ... 185 °F)

Mechanical specifications

Degree of protection	IP65
Connection	cable piercing method or terminal compartment yellow flat cable/black flat cable or standard round cable inputs/outputs: 2 x M16 x 1.5 cable glands and cage tension spring terminals, 1 x M12 x 1.5 cable gland (not used)
Material	
Housing	PA 6 GF30
Mass	350 g
Mounting	DIN mounting rail

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 VBA-2A-G4-I analogue module has two analogue current outputs 0 mA ... 20 mA. Measured value conversion and data transmission are performed asynchronously in accordance with AS-Interface profile 7.3. Depending on how the plug-in jumpers are wired, the outputs can be powered from the AS-Interface or the external auxiliary power through the black flat wire. The resolution of analog values is 13 bits.

The G4 module in IP65 is particularly suitable for hard field use. The connection to the outputs is established by screwed connections and cage-clamp terminals. This makes the installation especially user friendly. The module can be plugged directly onto the adapter of the VBP-HH1 of the hand held programming device for pre-addressing.

The connection to the AS-Interface transmission line and the external 24 V DC power supply can be made with flat wire or round cable. If AS-Interface flat wire is used, the lower part of the U-G1FF should be used. The contact to the two lines is made with the EEMS interface standardised for AS-Interface, i. e. using the insulation penetration technique.

For a round cable, the U-G1PP base should be used. Here as well, it is possible to connect both the AS-Interface lead and the external power supply in the base.

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-G1FF**

AS-Interface module mounting base for connection to flat cable (AS-Interface and external auxiliary power)

U-G1FFA

AS-Interface module mounting base with addressing jack for connection to flat cable (AS-Interface and external auxiliary power)

U-G1PP

AS-Interface module mounting base for connection to round cable (AS-Interface and external auxiliary power)