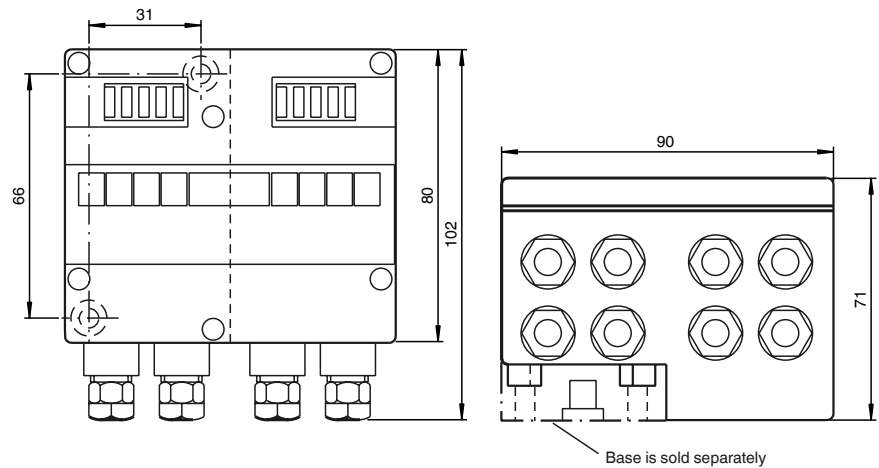
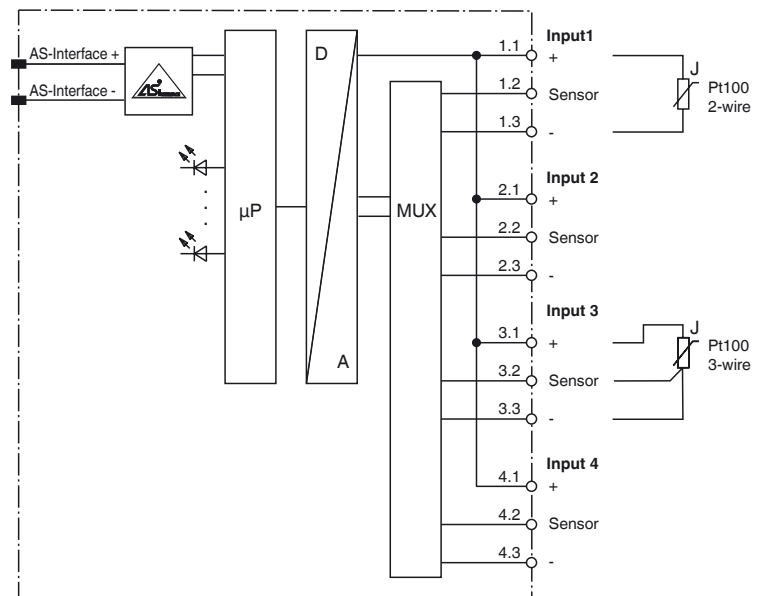




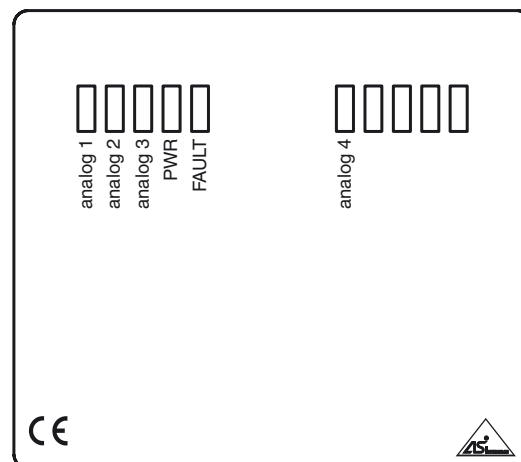
Dimensions



Electrical connection



Indicating / Operating means



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	150 a at 30 °C
-------------------	----------------

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 of input signal; LED green off: not connected (peripheral error) green: signal within measurement range green flashing: signal outside of measurement range (peripheral error)

Electrical specifications

Rated operating voltage	U _e	26.5 ... 31.6 V from AS-Interface
Rated operating current	I _e	≤ 80 mA
Protection class		III

Input

Number/Type	4 inputs for Pt100, 2- or 3-wire connection
Supply	from AS-Interface
Resolution	16 Bit / 0.1 °C

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.E
IO code	7
ID code	3
ID2 code	E

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 mains power frequency filter
P0=1, 50 Hz filter active
P0=0, 60 Hz filter active

P1/P2 Communication of the peripheral fault on measuring channels 1 to 4:

P1	P2	1	2	3	4
0	0	✓	–	–	–
0	1	✓	✓	–	–
1	0	✓	✓	✓	–
1	1	✓	✓	✓	✓

P3 configuration Pt100
P3=1, 2-wire connection
P3=0, 3-wire connection

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 or standard round cable inputs: M12 x 1.5 cable gland and cage tension spring terminals
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-4E-G4-Pt100 analogue module has four analogue inputs for Pt100 RTDs. The asynchronous transformation of measured values and the data transfer is accomplished in accordance with AS-Interface profile 7.3. The resolution of the analogue values is 16 bit or 0.1 °C. System disturbances are eliminated using a programmable filter (50 Hz/60 Hz).

The IP65 rated G4 module is especially suitable for use in hazardous environments. Connection to the measured-value transmitters is established by means of 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. Various bases are available for the module. Use the U-G1F base to connect to the AS-Interface flat cable, and the U-G1P base to connect to the round cable. The bases can, at the same time, be used as IP67 rated distributor box. Moreover, they both have two connection possibilities for AS-Interface cables. Output modules often have to be mounted in series with input modules. The outputs of the output modules are supplied externally with power. If the power is supplied via a flat cable, the power cable has to be mounted in the base of the input module. The U-G1FF base should be used in this case. The VBA-4E-G4-Pt100 then uses the AS-Interface cable instead of the power cable.

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 addressing jack for connection to flat cable (AS-Interface)

U-G1P

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