

AS-Interface sensor/actuator module VBA-4E-KE1-Z

- A/B node with extended addressing possibility for up to 62 nodes
- Housing with removable terminals
- Communication monitoring
- Inputs for 2-wire sensors and mechanical contacts
- Addressing jack
- Power supply of inputs from the module
- Function display for bus, external auxiliary voltage and inputs

KE1 switch cabinet module, 4 inputs

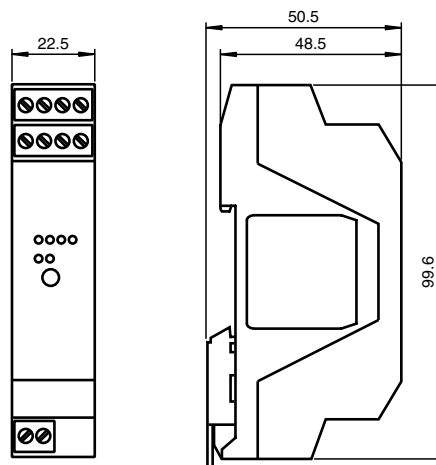


Function

The VBA-4E-KE1 AS-Interface coupling module is a cabinet module with 4 inputs. The housing, only 22.5 mm in width and 48.5 mm in height, takes up little place in the switch cabinet. The module is mounted by snapping onto the 35 mm DIN rail in accordance with EN 50022. Plug-in terminals are used for connection. 4-way terminal blocks (black) are used for the inputs. The AS-Interface is connected via a double terminal block (yellow).

The supply of the inputs and the connected sensors occurs internally via the module (from AS-Interface). An LED on the front control plate is used to display the current switching state for each input.

Dimensions



Technical Data

General specifications

Node type	A/B node
AS-Interface specification	V2.1
Required gateway specification	≥ V2.0
Profile	S-0.A.0
IO code	0
ID code	A
ID1 code	7
ID2 code	0
UL File Number	E223772

Indicators/operating means

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

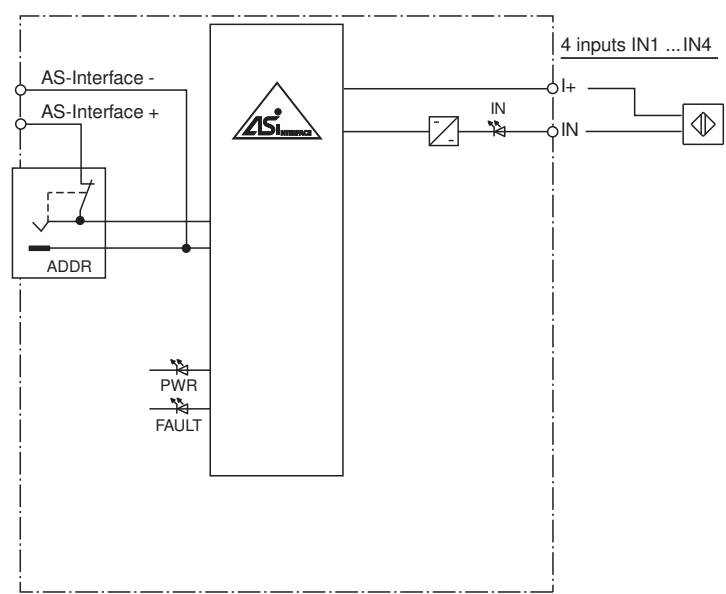
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

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Technical Data

LED FAULT		error display; LED red red: communication error or address is 0
LED PWR		AS-Interface voltage; LED green
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	≤ 25 mA (without sensors) / max. 60 mA
Protection class		III
Surge protection		U_e : Over voltage category III, safe isolated power supplies (PELV)
Input		
Number/Type		4 inputs for 2-wire sensors (PNP), DC or for mechanical contacts
Supply		from AS-Interface
Input current		≤ 8 mA (limited internally)
Switching point		according to DIN EN 61131-2 (Type 2)
0 (unattenuated)		≤ 2 mA
1 (attenuated)		≥ 4 mA
Signal delay		< 2 ms (input/AS-Interface)
Signal frequency		≤ 250 Hz
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 62026-2:2013 EN 61000-6-2:2001 EN 61000-6-4:2001
Standard conformity		
Degree of protection		EN 60529:2000
Input		EN 61131-2:2007
Emitted interference		EN 61000-6-4:2001
AS-Interface		EN 62026-2:2013
Noise immunity		EN 61000-6-2:2001
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)
Relative humidity		90 % , noncondensing
Pollution degree		2
Mechanical specifications		
Degree of protection		IP20
Connection		removable terminals rated connection capacity: rigid/flexible (with and without wire-end ferrules): 0.25 mm ² ... 2.5 mm ² for multiple-wire connection with two wires of equal cross-section: flexible with twin wire-end ferrules: 0.5 mm ² ... 1.5 mm ²
Material		
Housing		PA 66-FR
Mass		80 g
Mounting		DIN mounting rail

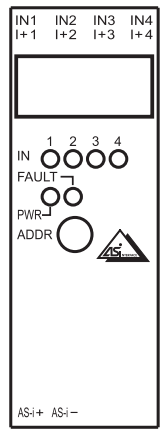
Connection



Connection

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.

Assembly



Programming

Data bits
(Function via AS-Interface)

Data bit	Input	Output
D0	IN1	-
D1	IN2	-
D2	IN3	-
D3	IN4	-

Parameter bit
(programmable via AS-Interface)

Programming

Parameter bit	Function
P0	not used
P1	Input filter P1=0 filter on, pulse suppr. ≤ 2 ms P1=1 filter off, default setting
P2	Synchronous mode P2=0 Synchronous mode on P2=1 Synchronous mode off, default setting
P3	not used

Accessories

	VBP-HH1-V3.0-KIT	AS-Interface Handheld with accessory
	VAZ-PK-1,5M-V1-G	Adapter cable module/hand-held programming device
	VAZ-CHAIN-BU/BN70MM/1,0-25	25-point wiring link for control cabinet modules with screw terminals