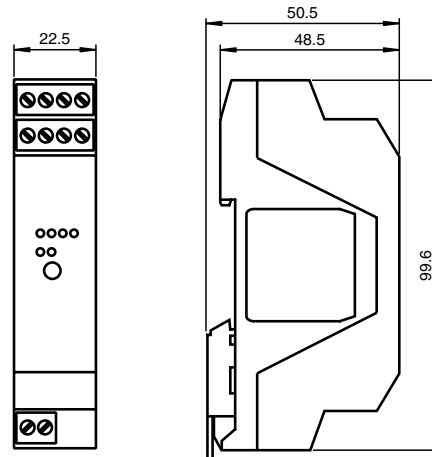
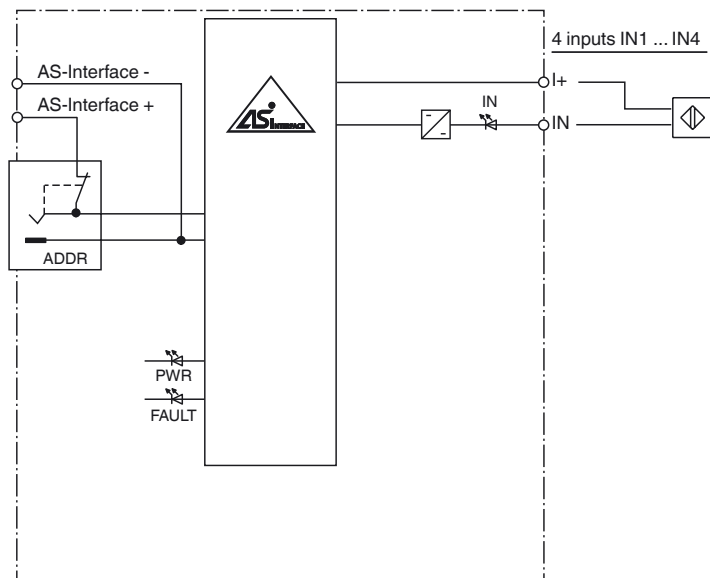




Dimensions



Electrical connection



Model number

VBA-4E-KE1-Z

KE1 switch cabinet module
4 inputs

Features

- A/B slave with extended addressing possibility for up to 62 slaves
- 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

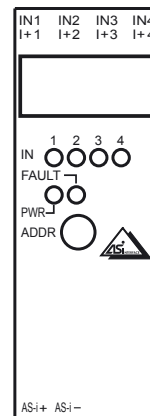
Function

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.

Indicating / Operating means



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Technical data**General specifications**

| | |
|-------------------------------|-----------|
| Slave type | A/B slave |
| AS-Interface specification | V2.1 |
| Required master specification | ≥ V2.0 |
| UL File Number | E87056 |

Functional safety related parameters

| | |
|--------------------------------|-------|
| MTTF _d | 730 a |
| Mission Time (T _M) | 20 a |
| Diagnostic Coverage (DC) | 0 % |

Indicators/operating means

| | |
|-----------|--|
| 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 |

Programming instructions

| | |
|----------|---------|
| Profile | S-0.A.0 |
| IO code | 0 |
| ID code | A |
| ID1 code | 7 |
| ID2 code | 0 |

| Data bits (function via AS-Interface) | Input |
|---------------------------------------|-------|
| D0 | IN1 |
| D1 | IN2 |
| D2 | IN3 |
| D3 | IN4 |

Parameter bits (programmable via AS-i) function

| | |
|----|--|
| P0 | not used |
| P1 | Input filter P1 = 0 input filter on, pulse suppression ≤ 2 ms P1 = 1 input filter off (default settings) |
| P2 | Synchronous mode P2 = 0 synchronous mode on P2 = 1 synchronous mode off (default settings) |
| P3 | not used |

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 |

Compliance with standards and directives

| | |
|---------------------------|---|
| Directive conformity | |
| EMC Directive 2004/108/EC | EN 61000-6-2:2001, EN 61000-6-4:2001, EN 50295:1999 |
| Standard conformity | |
| Noise immunity | EN 61000-6-2:2001 |
| Emitted interference | EN 61000-6-4:2001 |
| AS-Interface | EN 50295:1999 |
| Input | EN 61131-2:2007 |

Accessories**VBP-HH1-V3.0-KIT**

AS-Interface Handheld with accessory

VBP-HH1-V3.0

AS-Interface Handheld

VAZ-PK-1,5M-V1-G

Adapter cable module/hand-held programming device

Degree of protection

EN 60529:2000

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.

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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 4411
fa-info@de.pepperl-fuchs.com

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