

# Instruction Manual

## 1. Marking

AS-Interface Safety Module

VAA-2E-KE1-S, VAA-2E2A-KE1P-S/E2,  
VAA-2E2A-G12-SAJ/EA2L, VAA-2E2A-KE1-SE,  
VBA-4E1A-KE3-ZEJ/SR

Pepperl+Fuchs Group  
Lilienthalstraße 200, 68307 Mannheim, Germany

Internet: [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)

## 2. Target Group, Personnel

Responsibility for planning, assembly, commissioning, operation, maintenance, and dismantling lies with the plant operator.

The personnel must be appropriately trained and qualified in order to carry out mounting, installation, commissioning, operation, maintenance, and dismantling of the device. The trained and qualified personnel must have read and understood the instruction manual.

Prior to using the product make yourself familiar with it. Read the instruction manual carefully.

## 3. Reference to Further Documentation

Observe directives, standards, and national laws applicable to the intended use and the operating location.

The corresponding datasheets, manuals, declarations of conformity, EU-type examination certificates, certificates, and control drawings if applicable supplement this document. You can find this information under [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

For specific device information such as the year of construction, scan the QR code on the device. As an alternative, enter the serial number in the serial number search at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

If you use the device in safety-related applications, observe the requirements for functional safety. You can find these requirements in the functional safety documentation under [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

## 4. Intended Use

The device is only approved for appropriate and intended use. Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

The device is a switching device with inputs and/or outputs for safety-related and non-safety-related signals.

Use the device only within the specified ambient and operating conditions.

If you use the device in safety-related applications, observe the information for safety function and safe state.

## 5. Improper Use

Protection of personnel and the plant is not ensured if the device is not used according to its intended use.

## 6. Mounting and Installation

Do not mount a damaged or polluted device.

If you install the device in safety-related applications, observe the requirements for functional safety.

Observe the installation conditions for mounting the device.

The device is designed for mounting on a 35 mm DIN mounting rail according to EN 60715.

Mount the device in a way that the device is protected against mechanical hazard. Mount the device in a surrounding enclosure for example.

Ensure that the surrounding enclosure can only be opened with a tool.

The device fulfills a degree of protection IP20 according to IEC/EN 60529.

The device must be installed and operated only in a controlled environment that ensures a pollution degree 2 (or better) according to IEC/EN 60664-1.

If used in areas with higher pollution degree, the device needs to be protected accordingly.

Supply the device with a power supply that meets the requirements for safety extra-low voltage (SELV) or protective extra-low voltage (PELV).

Protect you from electric shock. Only connect the device to power supplies with parameters comply to the specifications in the datasheet.

Disconnect the device, before you plug or unplug the terminals.

Disconnect the device, before you plug or unplug the plugs.

### Requirements for Cables and Connection Lines

Observe the permissible core cross section of the conductor.

When using stranded conductors, crimp wire end ferrules on the conductor ends.

Use only one conductor per terminal.

When installing the conductors the insulation must reach up to the terminal.

Observe the tightening torque of the terminal screws.

Use conductors rated for a temperature of 90 °C or conductors whose temperature is suitable for the application.

## 7. Operation, Maintenance, Repair

If you operate the device in safety-related applications, observe the requirements for functional safety. In case of operating in low demand mode, plan appropriate intervals for the proof test.

Do not use a damaged or polluted device.

Do not repair, modify, or manipulate the device.

If there is a defect, always replace the device with an original device.

Disconnect the device, before you plug or unplug the terminals.

Disconnect the device, before you plug or unplug the plugs.

## 8. Delivery, Transport, Disposal

Check the packaging and contents for damage.

Check if you have received every item and if the items received are the ones you ordered.

Keep the original packaging. Always store and transport the device in the original packaging.

Store the device in a clean and dry environment. The permitted ambient conditions must be considered, see datasheet.

The device, built-in components, packaging, and any batteries contained within must be disposed in compliance with the applicable laws and guidelines of the respective country.