# **Instruction Manual / Original** Instructions

# 1. Marking

Relay module KFD2-RSH-1.2D.FL2, KFD2-RSH-1.2D.FL2-Y1

ATEX certificate: PF 17 CERT 4305 X

ATEX marking: 
II 3G Ex nC ec IIC T4 Gc [device in zone 2]

Relay module

KFD2-RSH-1.2D.FL3, KFD2-RSH-1.2D.FL3-Y1

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Internet: www.pepperl-fuchs.com

# 2. Target Group, Personnel

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

The personnel must be appropriately trained and qualified in order to carry out mounting, installation, commissioning, operation, maintenance, and dismounting 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 laws, standards, and directives 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.

For specific device information, scan the QR code on the device or enter the serial number in the serial number search at 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.

# 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 used in control and instrumentation technology (C&I technology). The device is designed for safety-related switching of load circuits.

Use the device only within the specified ambient and operating conditions. The device is designed for mounting on a 35 mm DIN mounting rail according to EN 60715.

Only use the device stationary.

The device is an electrical apparatus for hazardous areas of Zone 2. If you use the device in safety-related applications, observe the information for safety function and safe state.

### 5. Improper Use

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

The device is not suitable for isolating signals in power installations unless this is noted separately in the corresponding datasheet.

# 6. Mounting and Installation

Do not mount a damaged or polluted device.

Observe the installation instructions according to IEC/EN 60204-1.

Do not mount the device in the dust hazardous area.

Mount the device in a way that the device is protected against mechanical

The device fulfills a degree of protection IP20 according to IEC/EN 60529. The device must be installed and operated only in surrounding enclosures that are rated with the degree of protection IP54 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. The device must be installed and operated only in an environment of

overvoltage category II (or better) according to IEC/EN 60664-1. If you install the device in safety-related applications, observe the requirements for functional safety.

#### **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.

If the voltage is greater than 50 V AC or 120 V DC, switch off the voltage before connecting or disconnecting the device.

### Requirements for Equipment Protection Level Gc

Observe the installation instructions according to IEC/EN 60079-14.

The device must be installed and operated only in surrounding enclosures

- comply with the requirements for surrounding enclosures according to IEC/EN 60079-0,  $\,$
- are rated with the degree of protection IP54 according to IEC/EN 60529.

Connection or disconnection of energized circuits is only permitted in the absence of a potentially explosive atmosphere.

### Requirements for the Safety Function

Protect the relay contacts with a suitable current limitation against overcurrent.

Use the internal fuse for protection.

If you do not use the internal fuse, use an external current limitation with the same limit values.

# 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.

The device must not be repaired, changed, or manipulated. In case of failure, always replace the device with an original device.

If the voltage is greater than 50 V AC or 120 V DC, switch off the voltage before connecting or disconnecting the device.

The following safety instruction is symbolized via the warning marking on

Only change the replaceable fuse, when the device is de-energized. Do not touch the hot surface of the device. Let cool down the device surface before touching the device.

Observe the warning markings.

Do not remove the warning markings.

### Requirements for Equipment Protection Level Gc

Connection or disconnection of energized circuits is only permitted in the absence of a potentially explosive atmosphere.

Only change the replaceable fuse, when the device is de-energized.

## Requirements for the Safety Function

Do not disable the device.

Do not bypass the safety function.

# 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.

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.

