

# Instruction Manual

## 1. Marking

SMART Current Driver KCD2-SCD-1, KCD2-SCD-1.SP
---

Pepperl+Fuchs GmbH Lilienthalstraße 200, 68307 Mannheim, Germany Internet: 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 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](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 used in control and instrumentation technology (C&I technology) for the galvanic isolation of signals such as 20 mA and 10 V standard signals or alternatively for adapting or standardizing signals.

The device repeats the input signal from a control system to drive SMART I/P converters, electrical valves, and positioners located on the field side.

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

Only use the device stationary.

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.

## 6. Mounting and Installation

Do not mount a damaged or polluted 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.

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.

The device must be installed and operated only in an environment of overvoltage category II (or better) according to IEC/EN 60664-1.

Only connect supplies that provide protection against electric shock to power feed modules (e. g. SELV or PELV).

Only connect or disconnect the connections within the specified ambient temperature range.

Temperature range	-5 °C to maximum permissible ambient temperature
-------------------	--

If you are using the Power Rail, supply the Power Rail only via the corresponding power feed modules or power supplies. Do not supply the Power Rail via isolators.

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.

## 7. Operation, Maintenance, Repair

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

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.

## 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.