



- 1-channel
- Galvanically isolated output
- 24 V DC supply voltage
- SMART capable up to 7.5 kHz (-3 dB)
- EMC acc. to NAMUR NE 21
- Up to SIL2 acc. to IEC 61508

Input 0/4 mA ... 20 mA
Output 0/4 mA ... 20 mA
KFD2-STC4-1

Function

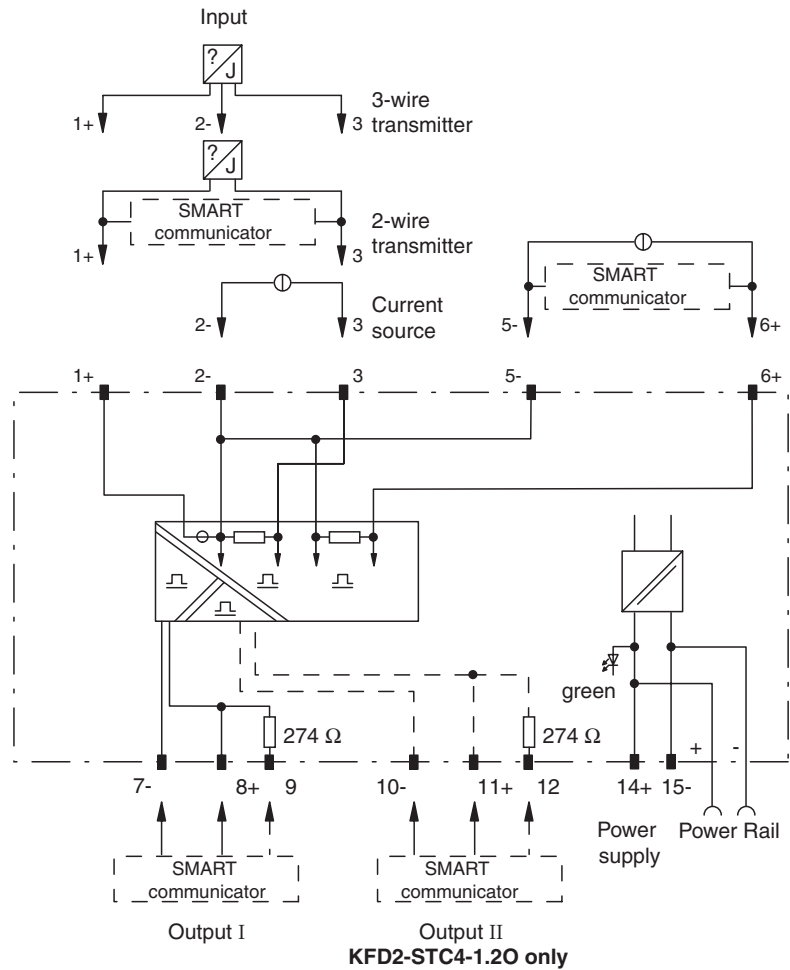
SMART transmitter power supplies provide a 2- or 3-wire SMART transmitter and transfer the analogue values. Digital signals may be superimposed on the analogue values, which will be transferred bidirectionally. Handheld terminals should be connected as shown in the block diagram. An internal resistor at terminal 9 (at terminals 9 and 12 with version 2O) is available, which may be used to increase the AC impedance for the HART signal.

SMART transmitter power supplies are delivered with terminal type KF-STP-**. Jacks are integrated in these terminals for the connection of the handheld units.

Application

- Power supply for SMART transmitters and transfer of the measurement current to the output
- for the transfer of a current source
- suited for the following SMART systems:
 ABB, Endress+Hauser, Emerson, Fuji, Smar, VEGA, Yokogawa

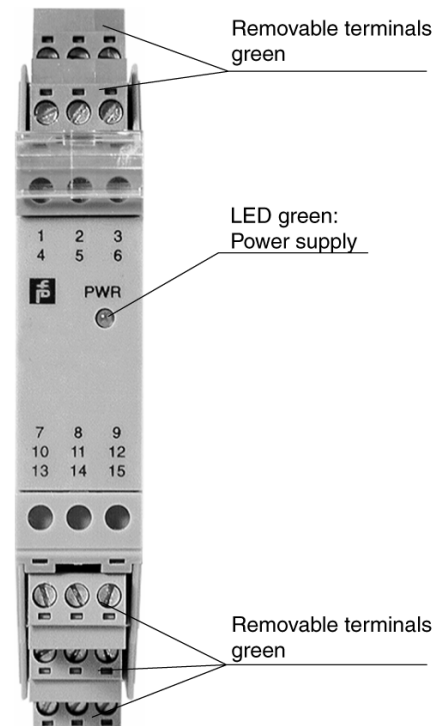
Connection



Composition

Front view

Housing type B2
 (see system description)



Release date 2010-01-04 14:20 Date of issue 2010-01-04 11:5400_ENG.xml

| | |
|----------------------------------|--|
| Supply | |
| Connection | Power Rail or terminals 14+, 15- |
| Rated voltage | 20 ... 35 V DC |
| Ripple | within the supply tolerance |
| Power consumption | 1.9 W |
| Input | |
| Connection | terminals 1+, 2-, 3 or 5-, 6+ |
| Input signal | 0/4 ... 20 mA |
| Input resistance | ≤ 64 Ω terminals 2-, 3 |
| Available voltage | ≥ 15.7 V at 20 mA terminals 1+, 3 |
| Output | |
| Connection | terminals 7-, 8+, 9 |
| Load | 0 ... 550 Ω |
| Output signal | 0/4 ... 20 mA (overload > 25 mA) |
| Ripple | ≤ 50 μA _{eff} |
| Transfer characteristics | |
| Deviation | at 20 °C (293 K), 4 ... 20 mA ≤ 20 μA incl. calibration, linearity, hysteresis, loads and fluctuations of supply voltage |
| Influence of ambient temperature | ≤ 20 ppm/K |
| Frequency range | bandwidth with 0.5 V _{pp} -signal 0 ... 7.5 kHz (-3 dB) bandwidth with 0.5 V _{pp} -signal 0.3 ... 7.5 kHz (-3 dB) |
| Electrical isolation | |
| Input/output | basic insulation according to EN 50178, rated insulation voltage 253 V _{eff} |
| Input/power supply | basic insulation according to EN 50178, rated insulation voltage 253 V _{eff} |
| Output/power supply | basic insulation acc. to EN 50178, rated insulation voltage of 50 V AC |
| Ambient conditions | |
| Ambient temperature | -20 ... 60 °C (253 ... 333 K) |
| Mechanical specifications | |
| Protection degree | IP20 |
| Mass | approx. 200 g |
| Dimensions | 20 x 119 x 115 mm (0.8 x 4.7 x 4.5 in) |

Supplementary information

Statement of Conformity, Declaration of Conformity and instructions have to be observed. For information see www.pepperl-fuchs.com.

Accessories

Power Rail PR-03

Power Rail UPR-03

Power feed module KFD2-EB2...

Using Power Rail PR-03 or UPR-03 the devices are supplied with 24 V DC by means of the power feed modules. If no Power Rails are used, power supply of the individual devices is possible directly via their device terminals.

Each power feed module is used for fusing and monitoring groups with up to 100 individual devices. The Power Rail PR-03 is an inset component for the DIN rail. The Power Rail UPR-03 is a complete unit consisting of the electrical inset and an aluminium profile rail 35 mm x 15 mm x 2000 mm. To make electrical contact, the devices are simply engaged.

The Power Rail must not be fed via the device terminals of the individual devices!