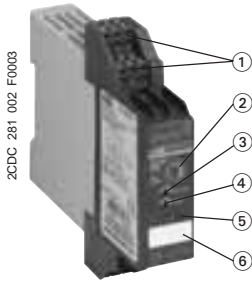


Analog standard signal converter CC-U/STD Ordering details

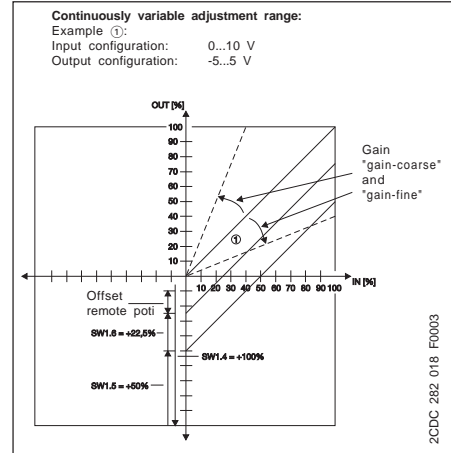
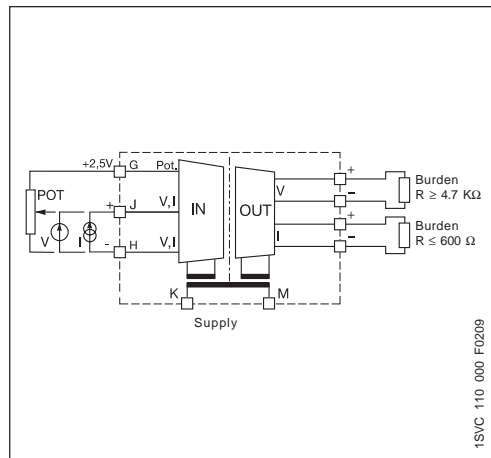


CC-U/STD

- ① Plug-in terminals
- ② Gain: Coarse adjustment
- ③ Gain: Fine adjustment
- ④ Offset adjustment
- ⑤ U: green LED - supply voltage
- ⑥ Marker

CC-U/STD universal signal converter with 3-way electrical isolation

- More than 120 configurations possible
- Configurable output signal response on input signal interruption (low fail safe / high fail safe)
- Adjustment and operating elements on the front-side
- Short-circuit proof signal outputs
- Plug-in connecting terminals for inputs, outputs and supply
- Very fast signal transmission enables use in control systems
- Approvals , ,



DIP switch settings

| Input | SW1 | | | | | | | | Gain | Coarse Type |
|-------------------|-----|---|---|---|---|---|---|---|-------|-------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| Potentiometer | | | | | | | | | A...D | C |
| 0...50 mV | | | | | | | | | A...D | C |
| 0...100 mV | | | | | | | | | 4...5 | 5 |
| 0...250 mV | | | | | | | | | 0...1 | 1 |
| 0...500 mV | | | | | | | | | 7...9 | 8 |
| 0...1 V | | | | | | | | | 3...4 | 3 |
| 0...2.5 V | | | | | | | | | 0 | 0 |
| 0...5 V | | | | | | | | | 5...7 | 6 |
| 0...10 V | | | | | | | | | 2 | 2 |
| 1...5 V | | | | | | | | | 7...9 | 8 |
| 2...10 V | | | | | | | | | 2...4 | 3 |
| -10...+10 V | | | | | | | | | 0 | 0 |
| 0...125 mV | | | | | | | | | 3...4 | 3 |
| 0...8 V | | | | | | | | | 3...4 | 3 |
| -22.5...+22.5 mV | | | | | | | | | B...F | D |
| -11...+11 V | | | | | | | | | 0 | 0 |
| 2.5...7.5 V | | | | | | | | | 5...7 | 6 |
| 3.33...9.99 V | | | | | | | | | 3...4 | 4 |
| 10...0 V | | | | | | | | | 2 | 2 |
| 100...0 mV | | | | | | | | | 4...5 | 5 |
| 0...1 mA | | | | | | | | | A...D | B |
| 0...20 mA | | | | | | | | | 2...4 | 3 |
| 4...20 mA | | | | | | | | | 4...5 | 4 |
| 10...50 mA | | | | | | | | | 0...1 | 1 |
| 20...4 mA | | | | | | | | | 4...5 | 4 |
| 20...0 mA | | | | | | | | | 4...2 | 3 |
| -0.45...+0.45 mA | | | | | | | | | B...F | D |
| -55...+55 mA | | | | | | | | | 4...6 | 5 |
| High fail safe *) | | | | | | | | | - | - |
| Low fail safe *) | | | | | | | | | - | - |
| No fail safe *) | | | | | | | | | - | - |

| Output | SW2 | | | | | |
|-----------------|-----|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 0...5 V | | | | | | |
| 0...10 V | | | | | | |
| 1...5 V | | | | | | |
| 2...10 V | | | | | | |
| -10...+10 V | | | | | | |
| -5...+5 V | | | | | | |
| -10...0 V | | | | | | |
| -5...0 V | | | | | | |
| 0...6.66 V | | | | | | |
| -10...-3.33 V | | | | | | |
| -5...1.66 V | | | | | | |
| 0...8 V | | | | | | |
| 0...4 V | | | | | | |
| -10...-2 V | | | | | | |
| -5...-1 V | | | | | | |
| 1.25...6.25 V | | | | | | |
| -7.5...-2.5 V | | | | | | |
| -3.75...-1.25 V | | | | | | |
| 1.66...8.33 V | | | | | | |
| -6.66...-6.66 V | | | | | | |
| -3.33...-3.33 V | | | | | | |
| -8...0 V | | | | | | |
| -4...0 V | | | | | | |
| 0...1 mA | | | | | | |
| 0...20 mA | | | | | | |
| 4...20 mA | | | | | | |
| 0...10 mA | | | | | | |
| 0...0.5 mA | | | | | | |
| 0...13.33 mA | | | | | | |
| 0...666 µA | | | | | | |
| 0...16 mA | | | | | | |
| 0...800 µA | | | | | | |
| 0...8 mA | | | | | | |
| 0...400 µA | | | | | | |
| 2.5...12.5 mA | | | | | | |
| 125...625 µA | | | | | | |
| 3.33...16.66 µA | | | | | | |
| 166...833 µA | | | | | | |
| 0.2...1 mA | | | | | | |
| 2...10 mA | | | | | | |
| 100...500 µA | | | | | | |

*) Detection of input signal interruptions:
 If the input signal circuit is interrupted, the output signal changes to the adjusted minimum value (low fail safe) or maximum value (high fail safe). If "No fail safe" is configured, input signal interruptions are not detected.

| Type | Supply voltage 50/60 Hz | Order code | Pack. unit pieces | Price 1 piece |
|----------|-----------------------------|---------------------|----------------------|------------------|
| CC-U/STD | 24-48 V DC / 24 V AC | 1SVR 040 000 R 1700 | 1 | |
| | 110-240 V AC / 100-300 V DC | 1SVR 040 001 R 0400 | 1 | |

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Analog signal converters CC-U/STD, CC-U/RTD, CC-U/TC Technical data

| Input circuits J-G-H | CC-U/STD | | | CC-U/RTD temperature sensors | CC-U/TC Thermocouples (IEC 584-1 and 2) |
|--|--|---|-------------------|---|--|
| | Current | Voltage | Potentiometer | | |
| Input signals | 0-20 mA 4-20 mA 10-50 mA 0-1 mA | 0-100 mV 0-1 V 0-5 V 1-5 V 0-10 V 2-10 V ± 10 V | 470 Ω ... 1 MΩ | PT10, PT100, PT1000 (IEL 751 and JICC 1604) | TC.K TC.J TC.T TC.S TC.E TC.N TC.R TC.B |
| Limitation of input signals | ± 55 mA | ± 11 V | 10 kΩ | - | - |
| Temperature range | - | - | - | Max. Temperature adjustable: 6-60 °C for PT1000 50-500 °C for PT100 500-850 °C for PT 10 | refer to temperature specs. of individual thermocouples |
| Influence of line resistance | - | - | - | 0.015 °C/Ω | < 0.01 % / 100 Ω |
| Gain adjustment range (univ. devices) | 0.9- 110 mA | 45 mV - 22 V | - | - | - |
| Offset adjustment range (univ. devices) | -137.5 % ... +62.5 % | | | ± 5 % | ± 10 % |
| Input impedance | for different ranges | | | - | - |
| without detection of input signal interruption | 51 Ω | 6 MΩ | 3 GΩ | - | - |
| with detection of input signal interruption | 51 Ω | 3.5 MΩ | 9.5 GΩ | - | - |
| Suppression at 50 Hz | - | - | - | - | > 40 dB |
| Common-mode rejection | - | - | - | 120 dB | 105 dB |
| Output circuit D-F A-C | Current | | | Voltage | |
| Output signals | 0-20 mA, 4-20 mA | | | 0-5 V, 1-5 V, 0-10 V, 2-10 V, ±10 V | |
| Output burden | ≤ 600 Ω | | | ≥ 4,7 KΩ | |
| Accuracy | ±0,1 % of full-scale | | | ±0,2 % of full-scale | ±0,1 % of full-scale |
| Temperature coefficient | ±150 ppm/°C | | | ±250 ppm/°C | ±200 ppm/°C at min offset ±400 ppm/°C at max. offset |
| Residual ripple | - | - | - | < 0,15 % | - |
| Response time | 200 μs | | | 10 ms | 200 ms |
| Transmission frequency | 1 kHz | | | 80 Hz | 2 Hz (bis -3 dB) |
| Supply circuits K - M | | | | | |
| Supply voltage | 24-48 V DC / 24 V AC | | | 110-240 V AC / 100-300 V DC | |
| Supply voltage tolerance | DC: -15 % ... + 15 % | | | AC: -15 % ... + 10 % | |
| Power consumption | 2 W at 24 V DC | | | 4.5 VA at 230 V AC | |
| Indication of operational states | | | | | |
| Supply voltage | U: green LED | | | | |
| Isolation data | | | | | |
| Test voltage between all isolated circuits | 1.5 kV | | | | |
| Electromagnetic compatibility | acc. to EN 61000-6-4, EN 61000-6-2 | | | | |
| General data | | | | | |
| Operating temperature | -20 °C ... +60 °C | | | | |
| Storage temperature | -40 °C ... +80 °C | | | | |
| Mounting position | any | | | | |
| Mounting on DIN rail | snap-on mounting / screw mounting with adapter | | | | |
| Wire size | solid wire | plug-connector with screw terminals 1.5 mm ² (16 AWG) | | | |
| | stranded wire | plug-connector with screw terminals 2.5 mm ² (14 AWG) | | | |

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