

BSRK TC/RTD signal isolator/temperature converter

Reference: AM1021

EAN13: -

HS code: 85364190



Product attributes:

Configuration: 1 In 1 Out, 1 In 2 Out, 2 In 2 Out

Input: PT100, PT1000, K

Output: 4-20 mA, 0-5 V, 0-10 V

Product features:

Voltage: 24 V DC

Waterproof grade: IP22

Construction: DIN

Insulation resistance: $\geq 100 \text{ M}\Omega$

Product description:

High-precision temperature signal converter for thermocouples (K, E, S, B, J, T, R, N) and resistance sensors (Pt100, Cu50, Cu100). The device converts the temperature signal to a standard current or voltage output (4-20 mA / 0-10 V) and provides galvanic isolation between input, output and power supply. Suitable for industrial control, measurement and automation.

Technical specifications

- **Input signal:** Thermocouple K, E, S, B, J, T, R, N / resistance sensor Pt100, Cu50 (depending on variant)
- **Output signal:** 4–20 mA, 0–10 V, 0–5 V, 0–10 mA, 0–20 mA (programmable) (depending on variant)
- **Isolation:** 3-way - input/output/power
- **Power supply:** DC 24 V $\pm 10\%$
- **Current consumption:** $\leq 70 \text{ mA}$ (1 input / 1 output), $\leq 100 \text{ mA}$ (2 inputs / 2 outputs)
- **Accuracy:** $\pm 0.2\%$ of full scale (optionally up to 0.1%)
- **Temperature drift:** 0.005% FS/ $^{\circ}\text{C}$ ($-20^{\circ}\text{C} \sim +55^{\circ}\text{C}$)
- **Insulation voltage:** 1500 V AC / 1 min
- **Insulation resistance:** $\geq 100 \text{ M}\Omega$ (between input, output and power supply)
- **Working temperature and humidity:** $-20^{\circ}\text{C} \sim +55^{\circ}\text{C}$, RH $\leq 80\%$
- **Dimensions:**
 - 1 In 1 Out, 1 In 2 Out: 12.5 x 110 x 118.9mm
 - 1 In 4 Out, 1 In 4 Out, 2 In 2 Out: 17.7 x 110 x 118.9 mm
- **Weight:** 0.3kg
- **Mounting:** 35 mm DIN rail
- **Housing:** ABS plastic
- **Certification:** CE, FCC, RoHS, Compliant with GB/T 18268 (IEC 61326-1)

Functions and features

- Support for thermocouples and resistance temperature detectors (RTDs)
- Programmable input and output range
- Three-way galvanic isolation guarantees measurement stability
- Fast response (approx. 0.3 s) and high signal accuracy
- Digital, fully intelligent control and high immunity to interference
- LED status indication: PWR (green), ALM (red - overload or input error)
- Mounting on a standard 35 mm DIN rail

Ideal for

- PLC and DCS control systems
- Industrial measurement and automation
- Temperature monitoring in laboratories and production processes
- Application integration with galvanic signal isolation

Package contents

- 1 x temperature signal converter

Variants

