



**88-01900136-5334B3B** (order number)

- TC input
- High measurement accuracy
- Galvanic isolation
- Programmable sensor error value
- For DIN form B sensor head mounting

**Stock version**

Input : thermocouple type K  
 Range : 0...+600°C  
 Output : 4...20mA

**Application**

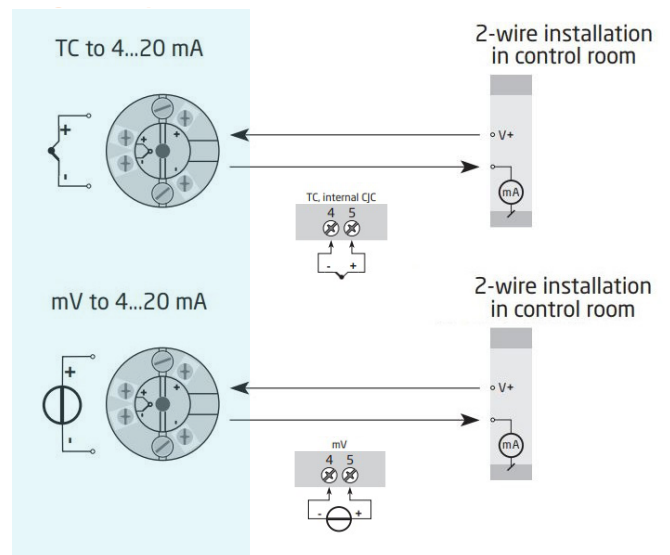
- Linearized temperature measurement with TC sensor.
- Amplification of bipolar mV signals to a 4...20 mA signal, optionally linearized according to a defined linearization function.

**Technical characteristics**

- Within a few seconds the user can program 5334B3B to measure temperatures within all TC ranges defined by the norms.
- Cold junction compensation (CJC) with a built-in temperature sensor
- Continuous check of vital stored data for safety reasons

**Mounting / installation**

- For DIN form B sensor head mounting.





### Environmental Conditions

Operating temperature..... -40°C to +85°C  
 Calibration temperature..... 20...28°C  
 Relative humidity..... < 95% RH (non-cond.)  
 Protection degree (encl./terminal)..... IP68 / IP00

### Mechanical specifications

Dimensions..... Ø 44 x 20.2 mm  
 Weight approx..... 50 g  
 Wire size..... 1 x 1.5 mm<sup>2</sup> stranded wire  
 Screw terminal torque..... 0.4 Nm  
 Vibration..... IEC 60068-2-6  
 2...25 Hz..... ±1.6 mm  
 25...100 Hz..... ±4 g

### Common specifications

#### Supply

Supply voltage..... 7.2...30 VDC  
 Internal power dissipation..... 25 mW...0.8 W

#### Isolation voltage

Isolation voltage, test /  
 working..... 1.5 kVAC / 50 VAC

#### Response time

Response time (programmable)..... 1...60 s  
 Voltage drop..... 7.2 VDC  
 Warm-up time..... 5 min.  
 Programming..... Loop Link  
 Signal / noise ratio..... Min. 60 dB  
 EEPROM error check..... < 3.5 s  
 Accuracy..... Better than 0.05% of selected  
 range  
 Signal dynamics, input..... 18 bit  
 Signal dynamics, output..... 16 bit  
 Effect of supply voltage change..... < 0.005% of span / VDC  
 EMC immunity influence..... < ±0.5% of span  
 Extended EMC immunity: NAMUR  
 NE21, A criterion, burst..... < ±1% of span

### Input specifications

#### Common input specifications

Max. offset..... 50% of selected max. value

#### TC input

Thermocouple type..... B, E, J, K, L, N, R, S, T, U,  
 W3, W5, LR

#### Cold junction compensation

(CJC)..... < ±1.0°C  
 Sensor error detection..... Yes  
 Sensor error current: When  
 detecting / else..... Nom. 33 µA / 0 µA

#### Voltage input

Measurement range..... -12...150 mV  
 Min. measurement range (span)..... 5 mV  
 Input resistance..... 10 MΩ

### Ordering details

GÜNTHER temperature transmitter GT 5334B3B 88-01900136-5334B3B

### Accessories

Configuration interface (Loop Link) 88-02970001-5909

### Output specifications

#### Current output

Signal range..... 4...20 mA  
 Min. signal range..... 16 mA  
 Load (@ current output)..... ≤ (Vsupply - 7.2) / 0.023 [Ω]  
 Load stability..... ≤ 0.01% of span / 100 Ω  
 Sensor error indication..... Programmable 3.5...23 mA  
 NAMUR NE43 Upscale/Downscale..... 23 mA / 3.5 mA  
 Common output specifications  
 Updating time..... 440 ms  
 of span..... = of the presently selected  
 range

### Observed authority requirements

EMC..... 2014/30/EU  
 EAC..... TR-CU 020/2011

### Production

PR electronics A/S, Denmark

### Approvals

ATEX 2014/34/EU..... KEMA 06ATEX0062X  
 IECEx..... DEK 13.0035X  
 INMETRO..... DEKRA 16.0013 X  
 EAC Ex TR-CU 012/2011..... RU C-DK.GB08.V.00410  
 DNV-GL Marine..... Stand. f. Certific. No. 2.4