GÜNTHER 2-wire programmable transmitter
GT 5333A

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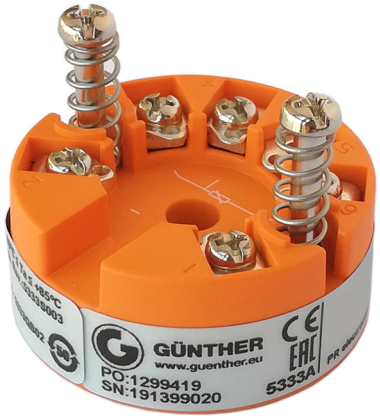


88-01900136-5333A (order number)

- RTD or Ohm input
- High measurement accuracy
- 3-wire connection
- Programmable sensor error value
- For DIN form B sensor head mounting

Stock version

Input : Pt100-3 wire
Range : 0...+150ºC
Output : 4...20mA

Application

- Linearized temperature measurement with Pt100...Pt1000 or Ni100...Ni1000 sensor.
- Conversion of linear resistance variation to a standard analog current signal, for instance from valves or Ohmic level sensors.

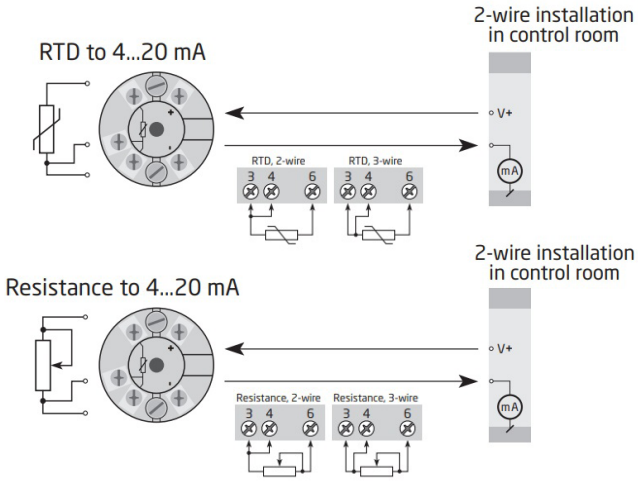
Technical characteristics

- Within a few seconds the user can program 5333A to measure temperatures within all RTD ranges defined by the norms.
- The RTD and resistance inputs have cable compensation for 3-wire connection.

Mounting / installation

- For DIN form B sensor head or DIN rail mounting with special fitting.

Connections



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 mm² 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..... 8.0...35 VDC
Internal power dissipation..... 25 mW…0.8 W

Response time
Response time (programmable)..... 0.33...60 s

Voltage drop..... 8.0 VDC
Warm-up time..... 5 min.
Programming..... Loop Link
Signal / noise ratio..... Min. 60 dB
Accuracy..... Better than 0.1% of sel. range
Signal dynamics, input..... 19 bit
Signal dynamics, output..... 16 bit
Effect of supply voltage change..... < 0.005% of span / VDC
EMC immunity influence..... < ±0.5% of span

Input specifications
Common input specifications
Max. offset..... 50% of selected max. value

RTD input
RTD type..... Pt100, Ni100, lin. R
Cable resistance per wire..... 10 Ω (max.)
Sensor current..... > 0.2 mA, < 0.4 mA
Effect of sensor cable resistance
(3-wire)..... < 0.002 Ω / Ω
Sensor error detection..... Yes

Linear resistance input
Linear resistance min....max..... 0 Ω...10000 Ω

Output specifications
Current output
Signal range..... 4…20 mA
Min. signal range..... 16 mA
Load (@ current output)..... ≤ (Vsupply - 8) / 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..... 135 ms
of span..... = of the presently selected range

Observed authority requirements
EMC..... 2014/30/EU
EAC..... TR-CU 020/201

Production
PR electronics A/S, Denmark

Approvals
INMETRO..... DEKRA 16.0014 X
DNV-GL Marine..... Stand. f. Certific. No. 2.4

Ordering details

GÜNTHER temperature transmitter GT 5333A	88-01900136-5333A

Accessories

Configuration interface (Loop Link)	88-02970001-5909
Metal clip for mounting the transmitter on a DIN rail	99-06879000-0000

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