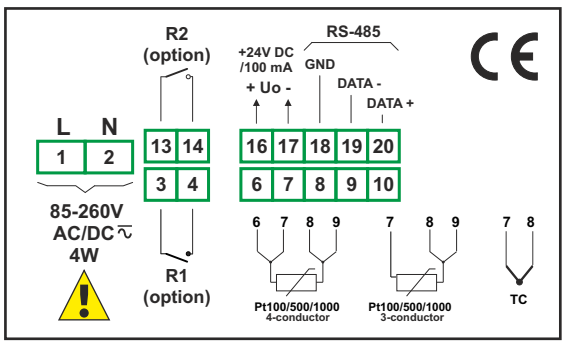
SRT-77

- **temperature meter with 2 displays**
- **input: thermoresistance or thermocouple**
- **0, 1 or 2 relay outputs (or OC type)**
- **power supply output: 24V DC**
- **RS-485 / Modbus RTU**

The **SRT-77** temperature meter has one input: thermoresistance (Pt100/500/1000) or thermocouple (K, S, J, T, N, R, B, E). Measurement is linearised by the polynomial characteristics. The device with thermocouple input has additional measurement range (-10 ÷ 90 mV) mainly for diagnostics of measurement circuits. The main advantage of regulator are two rows of display. The first one presents measuring value, second one - programmed values: max and min. 1 or 2 relay (or OC) outputs make it possible to control heating / cooling processes. The RS-485 enables data transmission in production process monitoring systems.

- programmable hystereses and delays of control outputs,
- password protected,
- programmable indication filtration,
- automatic recognition of 3 and 4-conductor connection (Pt inputs),
- automatic compensation of TC cold ends temperature,
- alarm diode and acoustic signal in case of sensor damage.

Examplary pin assignment



Ordering

SRT-77-1XXX-1-X-XX1

type of input:
3 : thermoresistance
A : thermocouple

number of outputs:
0
1
2

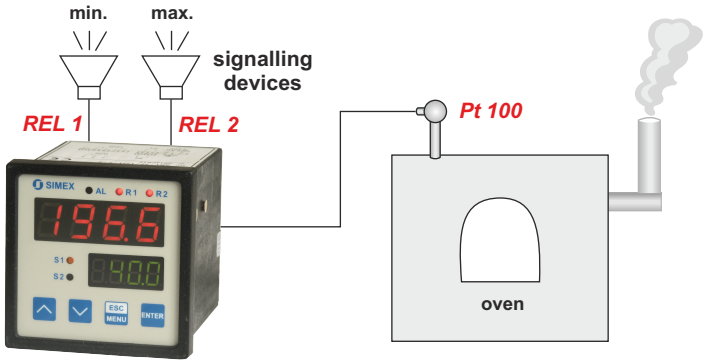
type of outputs:
0 : no output
1 : REL
2 : OC

power supply:
3 : 24V AC/DC
4 : 85V - 260V AC/DC

options:
00 : no options
01 : IP 65 frame
08 : operating temp. -20°C ÷ +50°C

Typical applications

1. Measuring of oven temperature in a boiler room with acoustic signalling when alarm states are overflow, readable indicating of alarm thresholds.



Technical data

Power supply: 19V ÷ 50V DC; 16V ÷ 35V AC or 85 ÷ 260V AC/DC, all separated
Power consumption: for 85 ÷ 260V AC/DC and 16V ÷ 35V AC power supply: max. 4,5 VA; 19V ÷ 50V DC power supply: max. 4,5 W
Display: LED, double 4 x 13 mm (red) and 4 x 10 mm (green)
Input:
thermoresistance: Pt100, Pt500, Pt1000 (automatic recognition of 3 and 4-conductor connection, resistance compensation of connecting conductors from 0 to 20 Ω at any conductor); measuring range: -100°C ÷ 600°C; resolution: 0,1°C
thermocouple: type K, S, J, T, N, R, B, E; measuring range: **K**: -200°C ÷ +1370°C; **S**: -50°C ÷ +1768°C; **J**: -210°C ÷ +1200°C; **T**: -200°C ÷ +400°C; **N**: -200°C ÷ +1300°C; **R**: -50°C ÷ +1768°C; **B**: +250°C ÷ +1820°C; **E**: -200°C ÷ +1000°C; resolution: 1°C, additional range -10 ÷ +90 mV
Accuracy: 0.1% @25°C
Stability: 50 ppm/°C
Outputs: 0, 1 or 2 relays 1A/250V AC ($\cos\varphi$=1) or OC 30mA/30VDC/100 mW
Transducer power supply output: 24V DC +5%, -10% / max. 100 mA, stabilized, not insulated from measuring inputs
Communication interface: RS-485, 8N1 and 8N2, 1200 bit/s ÷ 115200 bit/s, Modbus RTU (not galvanically insulated)
Operating temperature: 0°C ÷ +50°C (standard), -20°C ÷ +50°C (option)
Storage temperature: -10°C ÷ +70°C (standard), -20°C ÷ +70°C (with option **08**)
Protection class: IP 65 (front), available additional frame IP 65 for panel cut-out sealing; IP 20 (case and connection clips)
Case: board
Case material: NORYL - GFN2S E1
Case dimensions: 72 x 72 x 100 mm
Panel cut-out dimensions: 66,5 x 66,5 mm
Installation depth: min. 102 mm

Accessories

STD-77 Transparent door with moulded frame acc. to DIN 43700, lockable with security key.
Door and frame are made by injection moulding thus assuring an exact fit, an optimal choice of a material which is very strong and with no risk of corrosion; perfect seal-protective system IP 54 provided by all-round soft rubber sealing the moulding; door does not swing in or out sideways on opening; door-frame and front-frame can be exchanged.