

# SRT-77

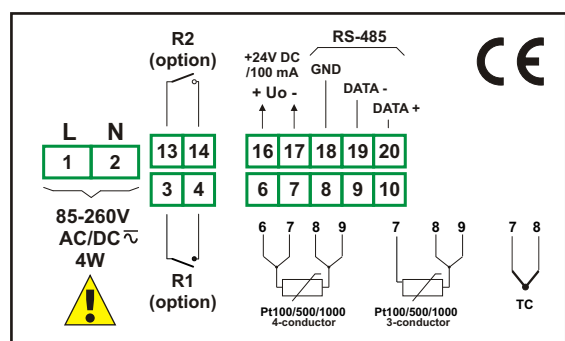
- ▣ temperature meter with 2 displays
- ▣ input: thermoresistance or thermocouple
- ▣ 0, 1 or 2 relay outputs (or OC type)
- ▣ power supply output: 24V DC
- ▣ RS-485 / Modbus RTU



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.

## Exemplary pin assignment



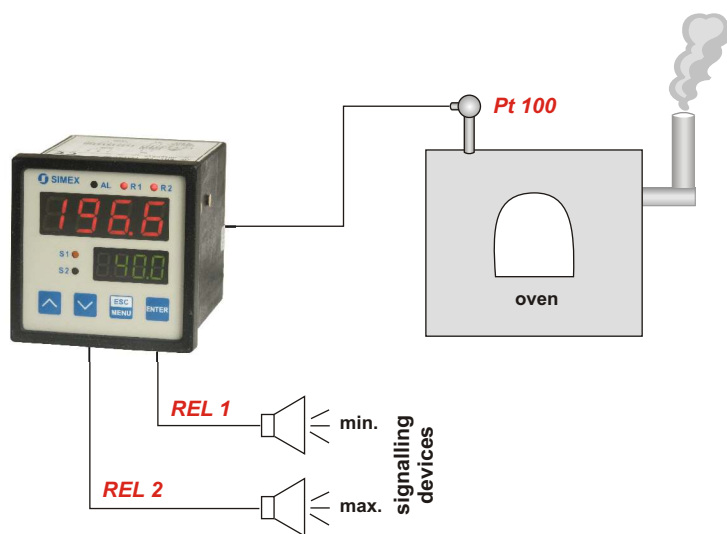
## Ordering

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

- options:**  
**00** : no options  
**01** : IP 65 frame
- power supply:**  
**3** : 24V AC/DC  
**4** : 85V - 260V AC/DC
- type of outputs:**  
**0** : no output  
**1** : REL  
**2** : OC
- number of outputs:**  
**0**  
**1**  
**2**
- type of input:**  
**3** : thermoresistance  
**A** : thermocouple

## 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 (cosφ=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  
**Storage temperature:** -10°C ÷ +70°C  
**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  
**Board thickness:** max. 5 mm