simex

SIMPAC'

SRT-73

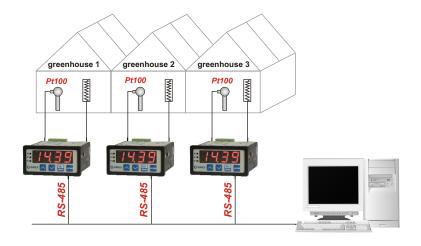
- temperature meter in a small case
- input: thermoresistance or thermocouple
- 0, 1 or 2 relay outputs (or OC type)
- two-coloured display (standard version)
- power supply output: 24V DC
- RS-485 / Modbus RTU

Easy programming and installation, small size and high reliability are basic advantages of the SRT-73 temperature meters. They have 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. 1 or 2 relay (or OC) outputs make it possible to control heating / cooling proceses. The RS-485 enables data transmission in production process monitoring systems.

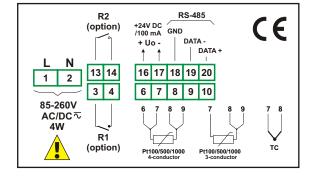
- programmable hystereses and delays of control outputs,
- password protected,
- programmable indication filtration,
- versions available with AC and DC power supply,
- automatic recognition of 3 and 4-conductor connection (Pt inputs),
- automatic compensation of TC cold ends temperature.
- alarm diode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

Typical applications

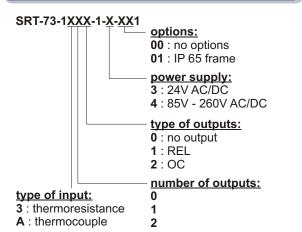
1. Temperature adjustment in greenhouses performed from the central computer via an RS-485 interface; process visualization possible.



Examplary pin assignment



Ordering



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, two-coloured (red-green), 4 x 13 mm (IP 40) - standard or LED, red, 5 x 9 mm (IP 65) - option

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 (depending on display size):

5 x 9 mm display: IP 65 (front), available additional frame IP 65 for panel cut-out

sealing; IP 20 (case and connection clips)

4 x 13 mm display: IP 40 (front); IP 20 (case and connection clips)

Case: board

Case material: NORYL-GFN2S E1 Case dimensions: 72 x 36 x 97 mm Panel cut-out dimensions: 66,5 x 32,5 mm

Installation depth: min. 102 mm Board thickness: max. 5 mm