

Universal process controller **LIM N3000**

Technical description

Characteristic

- PID control; ON/OFF
- double LED display: red for PV (18 mm), green for SV (13 mm)
- autotuning
- adjustable offset for the sensor
- programmable output
- sampling rate: 4 measurements per second
- one digital input for dry contact with 5 programmable functions
- measured value resolution: 12,000 levels
- heating function - ramping: 7x7 segments
- programmable soft start up to 9999 seconds
- remote setpoint input for 4-20 mA DC signal
- retransmission PV/SV
- sensor damage detection
- front panel: IP65
- USB interface for configuration

Input

- TC: J, K, T, N, R, S
- RTD: Pt100
- analog: (4 ÷ 20) mA, (0 ÷ 50) mV, (0 ÷ 5) V, (0 ÷ 10) V DC

Accuracy

- ±0,25% of range ±1 °C: for J, K, T
- ±0,25% of range ±3 °C: for N, R, S, B, E
- ±0,2% of range: for Pt100, (4 ÷ 20) mA, (0 ÷ 50) mV, (0 ÷ 5) V, (0 ÷ 10) V DC

Output I, II

- relay: SPDT 3 A/240 V

Output III, IV

- relay: NO 1,5 A/250 V

Output V

- output analog: (0 ÷ 20) mA, (4 ÷ 20) mA (550 Ω max.)
- SSR: 10 V/20 mA, digital I/O

Output VI

- digital output
- SSR 5 V/20 mA

Additional power source

- 24 V DC/25 mA (±10%)

Power source

- (100 ÷ 240) V AC/DC (±10%)
- (12 ÷ 24) V AC/DC
- 9 VA

Operating conditions

- temperature: (5 ÷ 50) °C
- humidity for T ≥ 30 °C RH_{max} = 80%
- T < 30 °C RH_{max} = [80 - (30-T)*3]%

Dimension [mm]

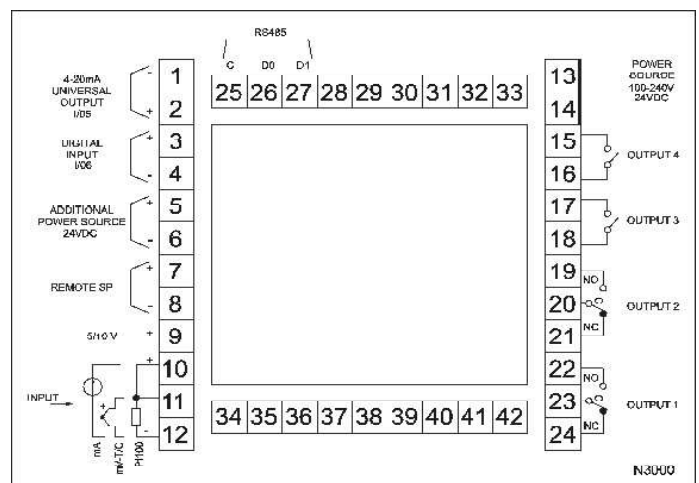
- 96x96x92; hole: 93x93

Additional functions

- RS485 interface with Modbus RTU protocol (optional)



Wiring diagram



Ordering code

Universal process controller	LIM N3000 - ... - ...
Power source: (100 ÷ 240) V AC/DC (12 ÷ 24) V AC/DC	4 5
Interface: none RS485 interface (optional)	0 1

Ordering example

Universal process controller LIM N3000-4-0