

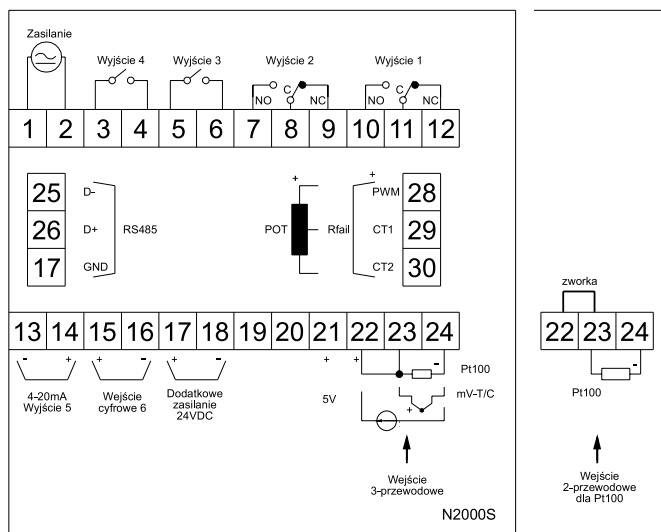
## Universal process controller LIM N2000S

### Technical description

<b>Characteristic</b>
<ul style="list-style-type: none"> <li>– PID control; ON/OFF</li> <li>– double LED display: red for PV and green for SV</li> <li>– autotuning</li> <li>– adjustable sensor</li> <li>– three-position control for valves (servo)</li> <li>– connecting a potentiometer to display % of valve opening</li> <li>– 5 control/alarm programmable outputs</li> <li>– heating function - ramping: 7x7 segments</li> <li>– programmable soft start</li> <li>– remote setpoint input</li> <li>– retransmission PV/SV</li> <li>– sensor damage detection</li> <li>– front panel: IP65</li> <li>– USB interface for configuration</li> </ul>
<b>Input</b>
<ul style="list-style-type: none"> <li>– TC: J, K, T, N, R, S, B, E</li> <li>– RTD: Pt100</li> <li>– analog: (4 ÷ 20) mA, (0 ÷ 50) mV, (0 ÷ 5) V, (0 ÷ 10) V DC</li> </ul>
<b>Accuracy</b>
<ul style="list-style-type: none"> <li>±0,25% of range ±1 °C: for J, K, T</li> <li>±0,25% of range ±3 °C: for N, R, S, B, E</li> <li>±0,2% of range: for Pt100, (4 ÷ 20) mA, (0 ÷ 50) mV, (0 ÷ 5) V, (0 ÷ 10) V DC</li> </ul>
<b>Output I, II</b>
– relay: SPDT 3 A/240 V
<b>Output III, IV</b>
– relay: NO 1,5 A/250 V
<b>Output V</b>
<ul style="list-style-type: none"> <li>– analog/universal output (0 ÷ 20) mA, (4 ÷ 20) mA (550 Ω max.)</li> <li>– SSR: 10 V/20 mA, digital input/output</li> </ul>
<b>Output VI</b>
– digital output
<b>Additional power source</b>
24 V DC/20 mA (±10%)
<b>Power source</b>
<ul style="list-style-type: none"> <li>(100 ÷ 240) V AC/DC (±10%)</li> <li>(12 ÷ 24) V AC/DC</li> <li>9 VA</li> </ul>
<b>Operating conditions</b>
<ul style="list-style-type: none"> <li>– temperature: (5 ÷ 50) °C</li> <li>– humidity for T ≥ 30 °C RH<sub>max.</sub> = 80%</li> <li>– humidity for T &lt; 30 °C RH<sub>max.</sub> = [80 - (30-T)*3]%</li> </ul>
<b>Dimension [mm]</b>
48x96x92; hole: 45,5x92,5
<b>Additional functions</b>
– RS485 comm with Modbus RTU protocol (optional)



Wiring diagram



TEMPERATURE CONTROLLERS

### Ordering code

Universal process controller	LIM N2000S - ... - ...
Power source: (100 ÷ 240) V AC/DC	4
(12 ÷ 24) V AC/DC	5
Interface: none	0
RS485 interface (optional)	1

### Ordering example

Universal process controller LIM N2000S-4-0