

## LUMEL - RE92 DUAL LOOP CONTROLLER

RE920100000E0  
1/4 DIN 2 LOOP TC 6R 230V

- Simple and user friendly
- Universal separated measuring inputs
- SMART PID algorithm
- Digital communication: RS-485 (standard), Ethernet (option)



### PRODUCT DESCRIPTION

The RE92 is an advanced dual loop controller for industrial use. It was designed for demanding industrial applications. RE92 can control two controlled objects independently or control two physical values in one object (e.g. in the twozone furnaces). Thanks to the universal measuring inputs, it can be used for controlling of temperature and other physical values (e.g. pressure, humidity). Every user can update controller's software individually, thus getting access to the additional features added by the LUMEL development team.

#### Modern Control Functions

- independent dual loop control
- PID control, on/off, three-step control of heating-cooling, and step-by- -step control
- innovative SMART PID algorithm with auto-tuning function (automatic selection of PID parameters)
- the source of control signal is one of the two inputs or the sum/difference of the signal from two inputs combined
- 4 sets of PID parameters and additional set for cooling (for each loop)
- 6 types of alarm with programmable hysteresis and memory (latch function)
- digital communication - RS-485 (standard), Ethernet (option)
- Gain Scheduling feature - automatic PID set switching, depending on the set temperature (when the object behaves decidedly differently in various temperatures)

#### Intuitive and User-friendly Interface

- 3.5" full-colour graphic screen with luminosity control
- menu available in English • password-protected regulator access (4 users, 3 access levels)
- signaling a state of binary inputs and two-state outputs

#### Reliable Control with Fixed Set-point

- 4 set point values switchable by the binary inputs (for each loop)
- soft-start function for set point values change, programmable increase/decrease
- also an additional input may serve as the source of set point value (input 3)

#### Advanced Programming Control

- 20 internal programs (10 programs per loop)
- 15 units per program • signaling up to 6 events per unit (two-state outputs)
- selection of PID parameters for any unit • iterations number setting (up to 9999 repetitions)