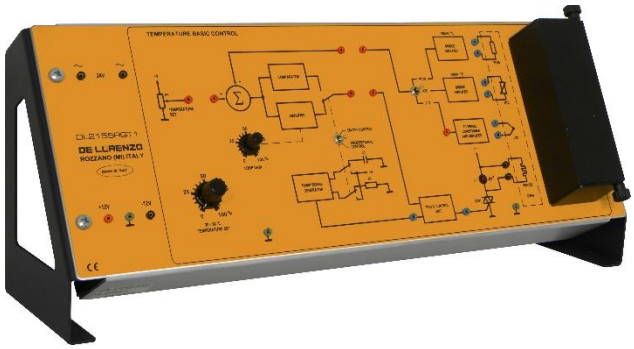
TEMPERATURE CONTROL
DL 2155RGT

This system has been designed for the study of a model of a temperature industrial control.

It is composed of two boards.

Temperature Basic Control
DL 2155RGT1



This board includes a small oven with a heating element and three temperature sensors (thermocouple, thermistor, and thermo-resistance) with relevant interface circuits.
Complete with error amplifier that can be confi gured for on-off or proportional control, and with a piloting circuit of the power stage with triac.
The board is supplied complete with a set of stackable, plug-in cables of suitable lengths and colours and with a training manual.

Experiments

- V = f(t°) characteristics of a thermocouple, with relevant linearization, of the thermistor and of the thermo-resistance
- Analysis of the operation of an on-off control
- Analysis of the operation of a proportional control

Necessary power supplies
24Vac, 1A, 50/60Hz and ± 15Vdc, 100mA

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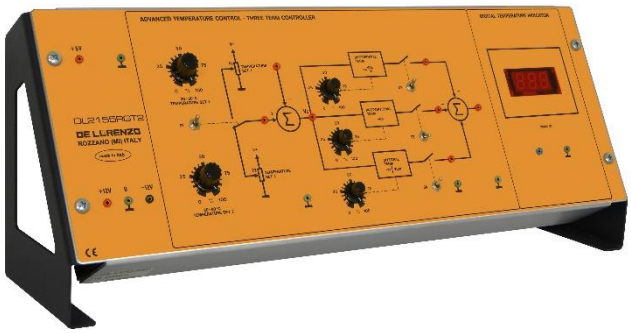
Advanced Temperature Control – PID Controller DL 2155RGT2



This board includes two reference signal generators, a comparison node and the three terms network (proportional, integral and derivative).
Complete with digital temperature indicator 100mV/°C.

This board is an option to the board DL 2155RGT1 since it uses its oven, the heating element and the temperature transducers.

The board is supplied complete with a set of stackable, plug-in cables of suitable lengths and colours and with a training manual.

Experiments

- Analysis of the operation of a proportional, proportional-derivative and proportional-integral control
- PID control circuits
- PID controllers calibration

Necessary power supplies
± 15Vdc, 100mA and +5Vdc, 150mA

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