

RE70 TEMPERATURE CONTROLLER

FEATURES:



PID
algorithm



Auto-
tuning



INPUTS:



OUTPUTS:

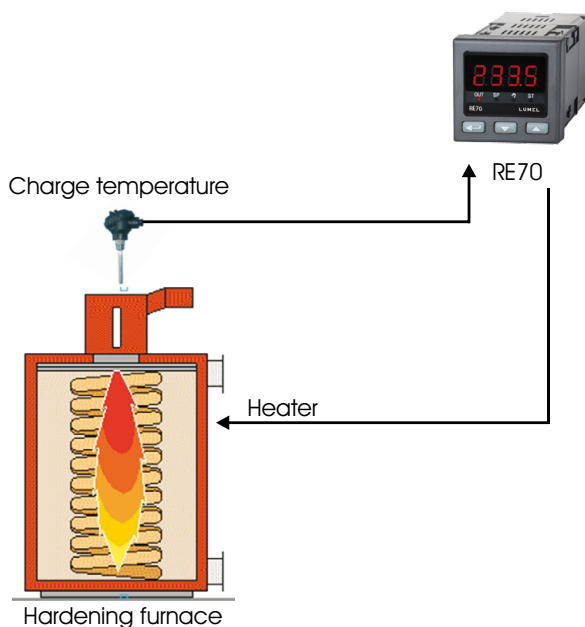


GALVANIC ISOLATION:



- Universal input for RTD and TC sensors.
- Relay output.
- Control of on/off type or PID with auto-tuning.
- Manual operating mode.

EXAMPLE OF APPLICATION



Temperature control in a hardening furnace.

INPUT

Input type	Designation	Range		Error
Pt100	Pt100	-200 .. 850°C	-328 .. 1563°F	0.3%
Pt1000	Pt1000	-200.. 850°C	-328 .. 1563°F	0.3%
Fe-CuNi	J	-50 .. 1200°C	-58 .. 2192°F	0.3%
Cu-CuNi	T	-50 .. 400°C	-58 .. 752°F	0.3%
NiCr-NiAl	K	-50 .. 1372°C	-58 .. 2501,6°F	0.3%
PtRh10-Pt	S	0 .. 1767°C	32 .. 3212,6°F	0.5%
PtRh13-Pt	R	0 .. 1767°C	32 .. 3212,6°F	0.5%
PtRh30-PtRh6	B	0 .. 1767°C	32 .. 3212,6°F	0.5%
NiCrSi-NiSi	N	-50 .. 1300°C	-58 .. 2372°F	0.3%

OUTPUT

Output type	Properties
Relay output	type SPDT (form C), max load: 5 A/230 V AC, max. 200,000 cycles for 5 A/230 V AC (resistive)

RE70 TEMPERATURE CONTROLLER

EXTERNAL FEATURES

Readout field	LED	9,3 mm, 4 digits
Overall dimensions	48 × 48 × 93 mm	
Weight	0.25 kg	
Protection grade	from frontal side: IP65	from terminal side: IP20

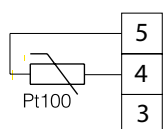
RATED OPERATING CONDITIONS

Supply voltage	230 V a.c. +/- 10%	frequency: 50 .. 60 Hz
Temperature	ambient: 0...23...50°C	storage: -20...70°C
Humidity	< 85% without condensation	
Operating position	any	

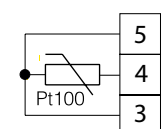
SAFETY AND COMPATIBILITY REQUIREMENTS

Electromagnetic compatibility	noise immunity	acc. to EN 61000-6-2
	noise emissions	acc. to EN 61000-6-4
Pollution level	2	
Installation category	III	
Maximal phase-to-earth operating voltage	for supply circuit, outputs: 300 V	for input circuits: 50 V
Altitude above sea level	< 2000 m	

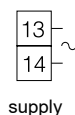
CONNECTION DIAGRAMS



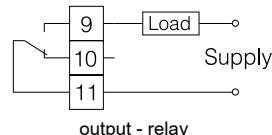
resistance thermometer Pt100 in a 2-wire system



resistance thermometer Pt100 in a 3-wire system

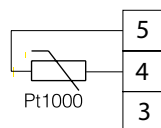


supply

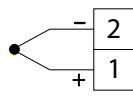


output - relay

Fig.2 Connection of supply and load circuit.



resistance thermometer Pt1000



thermocouple

Fig.1 Connection of input signals.

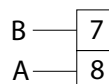


Fig.3 Interface RS-485 (for controller configuration).

ORDERING

Ordering Code	Description
RE70 00M0*	Temperature controller RE72, universal input for thermocouple and resistance thermometers, 1x relay output supply 230VAC, documentation and descriptions In Polish and English, test certificate

* Upon agreement, an option to order a calibration certificate for the product is available against payment. Then, in the execution code, in the place of the last character, enter the digit 2, eg **RE70 00M2**. The customer will then receive a standard test certificate and a calibration certificate (against payment).