

RE70 TEMPERATURE CONTROLLER

FEATURES:



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

INPUTS:



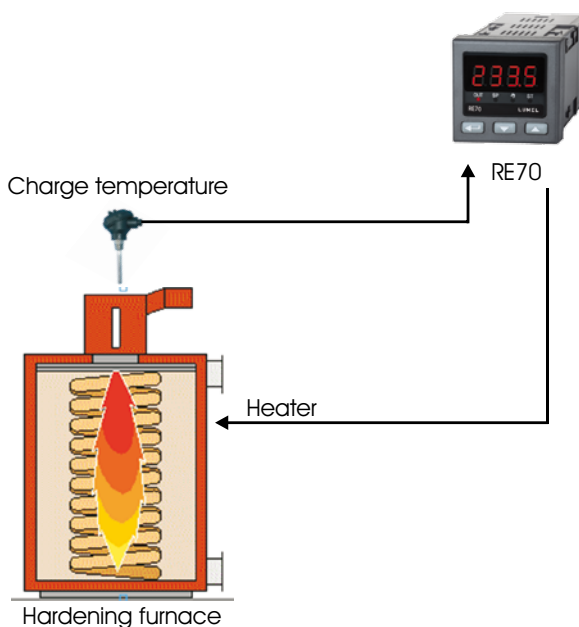
OUTPUTS:



GALVANIC ISOLATION:



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)

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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

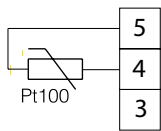
RATED OPERATING CONDITIONS

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	

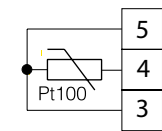
SAFETY AND COMPATIBILITY REQUIREMENTS

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	

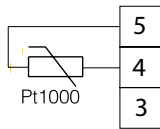
CONNECTION DIAGRAMS



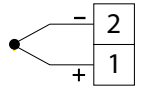
resistance thermometer Pt100 in a 2-wire system



resistance thermometer Pt100 in a 3-wire system

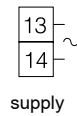


resistance thermometer Pt1000

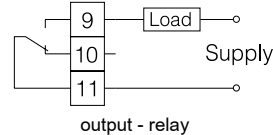


thermocouple

Fig.1 Connection of input signals.



supply



output - relay

Fig.2 Connection of supply and load circuit.

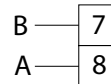


Fig.3 Interface RS-485 (for controller configuration).

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

For more information about LUMEL's products please visit our website:
www.lumel.com.pl

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