RE70 TEMPERATURE CONTROLLER

LUMEL

Features:

Password protection
PID algorithm
on/off algorithm
Auto-tuning
IP65
Auto

Inputs:

Outputs:

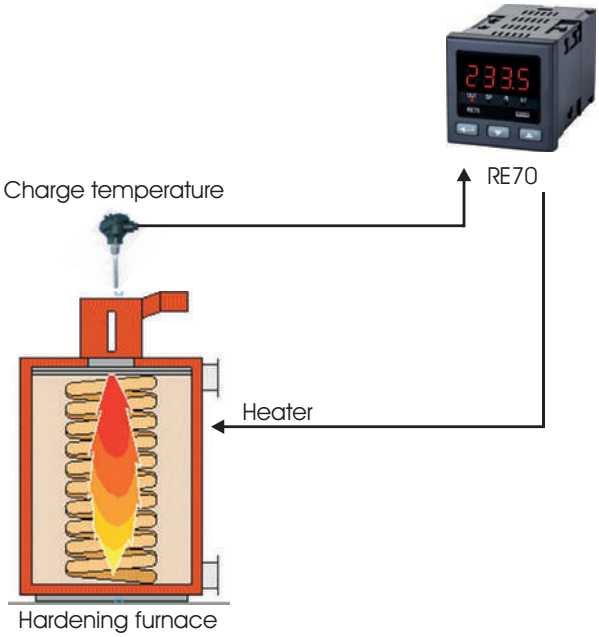
Galvanic isolation:

RS 485
Supply



- 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)

Export department:
+48 68 45 75 139/ 305/ 321/ 368
Fax: +48 68 32 54 091
e-mail: export@lumel.com.pl

LUMEL S.A.
ul. Słubicka 1
65-127 Zielona Góra
POLAND
WWW.LUMEL.COM.PL

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

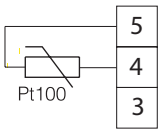
Rated operating conditions

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	

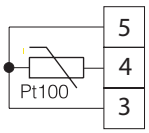
Safety and compatibility requirements

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	

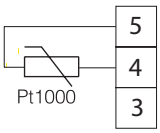
Connection diagrams



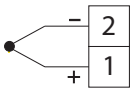
resistance thermometer Pt100 in a 2-wire system



resistance thermometer Pt100 in a 3-wire system



resistance thermometer Pt1000

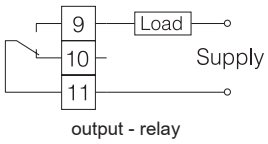


thermocouple

Fig.1 Connection of input signals.



supply



output - relay

Fig.2 Connection of supply and load circuit.

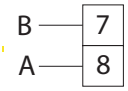


Fig.3 Interface RS-485 (for controller configuration).

Ordering

	RE70 -	XX	X	X
Version:				
standard		00		
custom-made*		XX		
Language:				
Polish			P	
English			E	
other*			X	
Additional quality requirements:				
without additional quality requirements				0
with an extra inspection quality certificate				1
acc. to customer's request*				X

*- only after agreeing with the manufacturer

Order example:

The code: **RE70 - 00 E 0** means:

RE70 - temperature controller of RE70 type

00 - standard version

E - user's manual in English

0 - without additional quality requirements.

See also



SSR relay, LU series.



RP power controller.



Temperature sensors.



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

Export department:
+48 68 45 75 139/ 305/ 321/ 368
Fax: +48 68 32 54 091
e-mail: export@lumel.com.pl

LUMEL S.A.
ul. Słubicka 1
65-127 Zielona Góra
POLAND
WWW.LUMEL.COM.PL