

RP1 SINGLE - PHASE POWER CONTROLLER

FEATURES:

- Phase control
- ON/OFF control
- Impulse control
- Soft Start
- I_{LIM}
- α_{LIM}



- Contactless power switching on.
- For power control of resistive and inductive load.
- Output current up to 125 A.
- Signalling of fuse damages.
- Trigger deceleration of "softstart" type.
- Control of the initial trigger angle value.
- Load current limitation.
- Trigger stoppage by an external signal.
- Alarming relay outputs.
- Control by an impulse, continuous or potentiometric signal.
- Phase, impulse, on/off control.

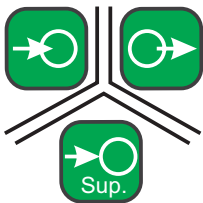
INPUTS:

-
-
- 0..10 V
- 0..20 mA

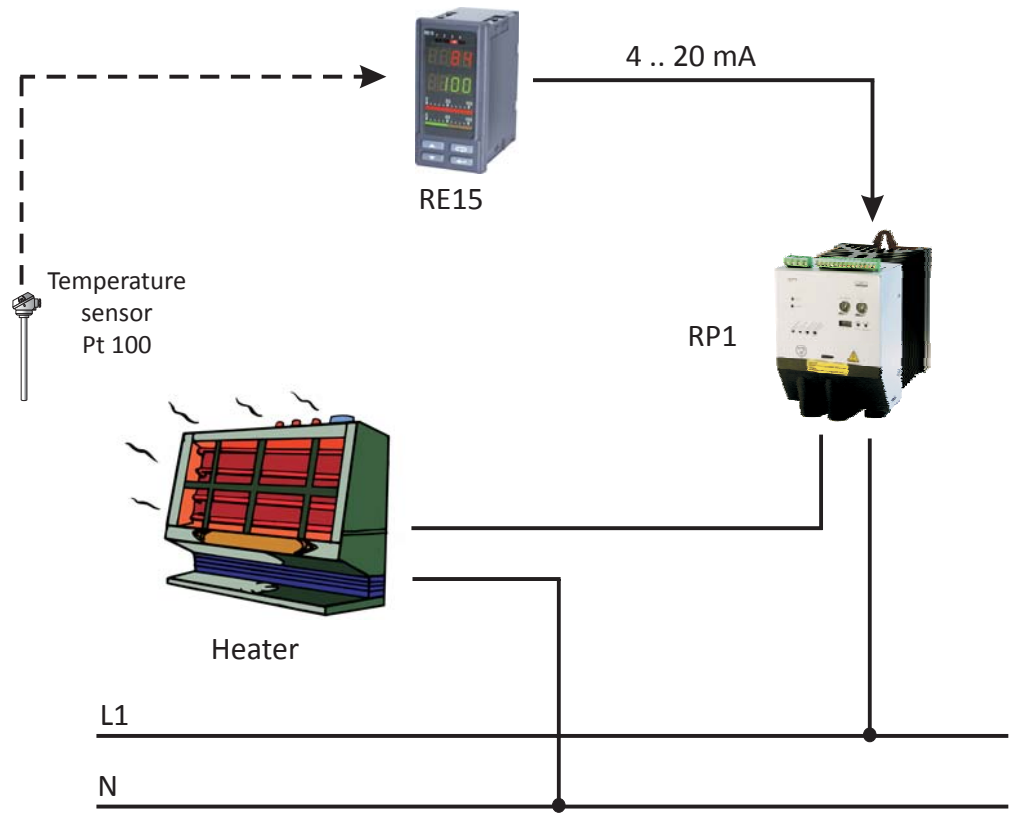
OUTPUTS:

- 125 A
- 2x

GALVANIC ISOLATION:



EXAMPLE OF APPLICATION



Control of single-phase heater.

INPUTS

Input type	Range	Remarks
potentiometric	0 .. 10 kΩ	
impulse	0/4 .. 32 V	R _{in} = 20 kΩ
continuous	0 .. 5 V	R _{in} = 20 kΩ
continuous	0 .. 10 V	R _{in} = 40 kΩ
continuous	0 .. 20 mA	R _{in} = 125 Ω
continuous	4 .. 20 mA	R _{in} = 125 Ω

OUTPUTS

Output type	Properties	Remarks
thyristor	25, 40, 70, 125 A, 20 .. 440 V, 50/60 Hz	
alarming relay PK1	60 mA, 350 V, R _{on} = 35 Ω	signaling of fuse damages
alarming relay PK2	60 mA, 350 V, R _{on} = 35 Ω	signaling of incorrect work state

Export department:
 English: +48 68 32 95 302 / 321 / 276 / 386 / 233
 German: +48 68 32 95 305
 French: +48 68 32 95 304
 Russian: +48 68 32 95 321
 Fax: +48 68 32 54 091
 e-mail: export@lumel.com.pl
 LUMEL S.A.
 ul. Sulechowska 1
 65-022 Zielona Góra
 POLAND
WWW.LUMEL.COM.PL

EXTERNAL FEATURES

Overall dimensions	135 x 201 x 199 mm 135 x 231 x 199 mm	
Weight	4.5 kg (version 125 A: 5 kg)	
Protection grade	from a casing side: IP20	from terminal side: IP10

RATED OPERATING CONDITIONS

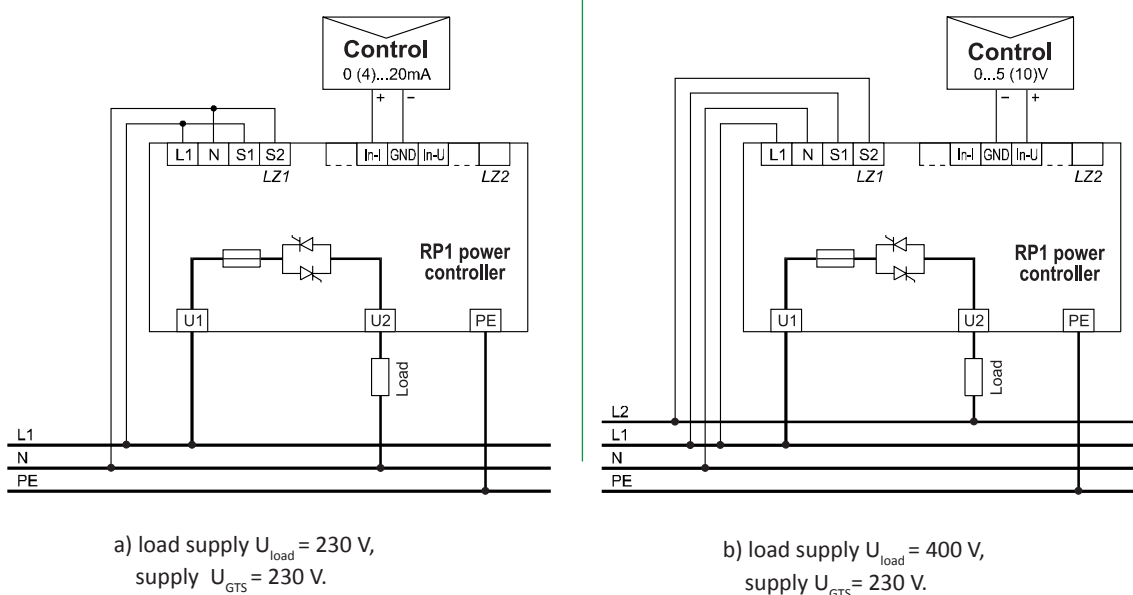
Supply voltage UWB	85 .. 115 .. 135 V a.c.	195 .. 230 .. 253 V a.c.
Temperature	ambient: 0 .. 40°C	storage: -25...55°C
Humidity	< 90 %	without condensation
Operating position	vertical	
External magnetic field	< 400 A/m	

SAFETY AND COMPATIBILITY REQUIREMENTS

Electromagnetic compatibility	noise immunity	acc. to EN 60947-4-3
	noise emissions	acc. to EN 60947-4-3
Pollution level	2	
Installation category	III	
Maximal phase-to-earth voltage	320 V for power circuits and supply, 50 V for other circuits	for input circuits: 50 V

CONNECTION DIAGRAMS

Fig.1. Connection of load in a single-phase system.



ORDERING

	RP1 -	X	X	X
Current range:				
maximal output current 25 A	load voltage:	1		
maximal output current 40 A	24 .. 400 V a.c.	2		
maximal output current 70 A	50/60 Hz	3		
maximal output current 125 A*		4		
Gate triggering system (GTS):				
supply voltage 85 .. 115 .. 135 V a.c.		1		
supply voltage 195 .. 230 .. 253 V a.c.		2		
Acceptance tests:				
without additional quality inspection requirements				8
with an extra quality inspection certificate				7
other requirements**				X

Ordering example:

The code: **RP1 - 3 - 2 - 8** means:

- RP1** - power controller of RP1 type
- 3** - input current 70 A, in the range of voltages supplying the load circuit: 24 .. 400 V
- 2** - voltage supplying the GTS system: 230 V
- 8** - without additional quality inspection requirements.

* the version RP1 for 125 A has a fixed fan
** after agreeing with the manufacturer

SEE ALSO:



Controllers.



Temperature sensors.

OUR OFFER



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German: +48 68 32 95 305
French: +48 68 32 95 304
Russian: +48 68 32 95 321
Fax: +48 68 32 54 091
e-mail: export@lumel.com.pl

LUMEL S.A.
ul. Sulechowska 1
65-022 Zielona Góra
POLAND
WWW.LUMEL.COM.PL