

# RP3 THREE - PHASE POWER CONTROLLER

## FEATURES:

- Phase control
- ON/OFF control
- Impulse control
- Soft Start
- I<sub>LIM</sub>
- α<sub>LIM</sub>



- Contactless power switching on.
- For power control of resistive and inductive load.
- Output current up to 450 A.
- Signaling of incorrect phase sequence.
- 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.

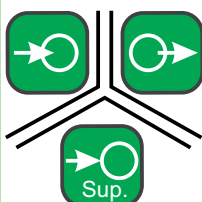
## INPUTS:

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

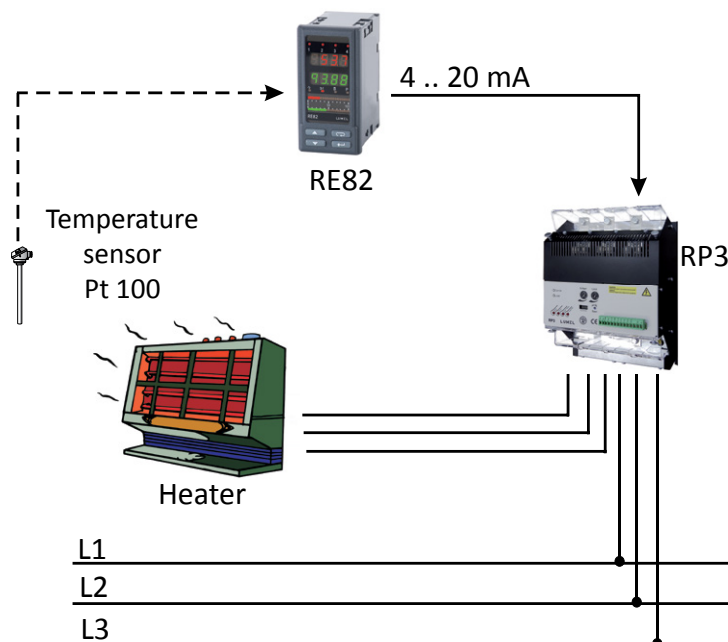
## OUTPUTS:

- 450 A
- 2x

## GALVANIC ISOLATION:



## EXAMPLE OF APPLICATION



Control of a three-phase heater.

### INPUTS

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

### OUTPUTS

Output type	Properties	Remarks
thyristor	40, 70, 125, 200, 300, 450 A	3 ~ 400 V, 50 Hz
alarming relay PK1	60 mA, 350 V, R <sub>on</sub> = 35 Ω	signaling of fuse damages, control error or incorrect supply connection
alarming relay PK2	60 mA, 350 V, R <sub>on</sub> = 35 Ω	signaling of work stoppage (STOP) or overflow of the admissible operation temperature

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## EXTERNAL FEATURES

Overall dimensions	212 x 318 x 177 mm 383 x 433 x 281 mm	version 40, 70, 125 A version 200, 300, 450 A
Weight	8.5 kg (version 200, 300, 450 A: 37 kg)	
Protection grade	from casing side: IP00	acc. to EN 60529

## RATED OPERATING CONDITIONS

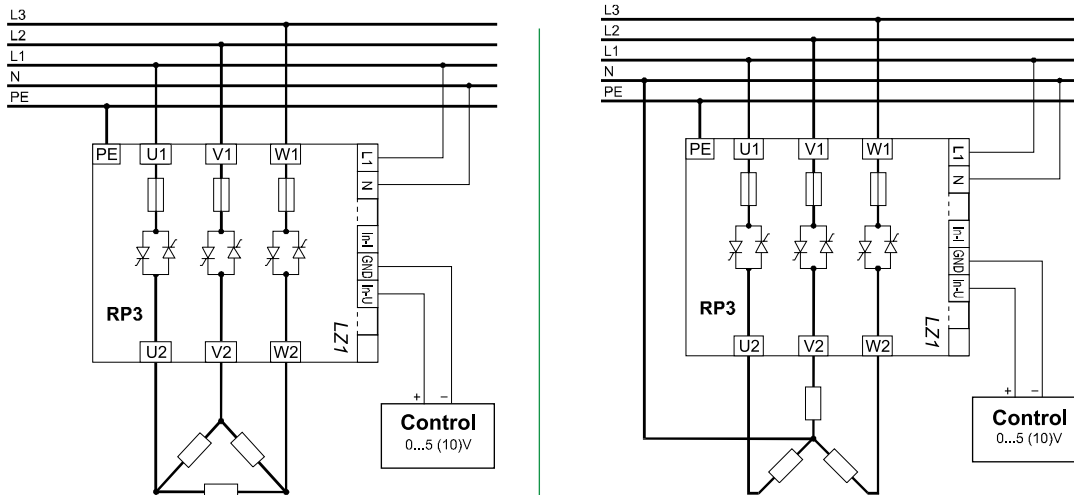
Supply voltage GTS	195 .. 230 .. 253 V a.c.	
Temperature	ambient: 0 .. 40°C	storage: -25...55°C
Humidity	< 90 %	without condensation
Operating position	vertical	
External magnetic field	< 400 A/m	

## 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 operating 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 3 and 4-wire system.



a) 3-wire load

b) 4-wire load

## ORDERING

RP3 -		X	X
<b>Current range:</b>			
maximal output current 40 A	load voltage:	1	
maximal output current 70 A	3 ~ 400V	2	
maximal output current 125 A	50/60 Hz	3	
maximal output current 200 A		4	
maximal output current 300 A		5	
maximal output current 450 A		6	
<b>Acceptance tests:</b>			
without additional quality inspection requirements		8	
with an extra quality inspection certificate		7	
other requirements*		X	

\* after agreeing with the manufacturer

### Ordering example:

The code: **RP3 - 2 - 8** means:

- RP3** - power controller of RP3 type
- 3** - input current 70 A, in the range of voltages supplying the load circuit: 3 ~ 400V
- 8** - without additional quality inspection requirements.

**SEE ALSO:**



Controllers.

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