

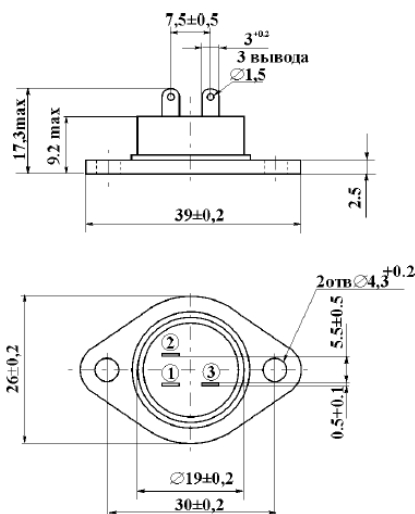
PPR (Phase Power Regulator) is a device designed for a power control in active and active-inductive loads: heaters, light bulbs, commutator motors.



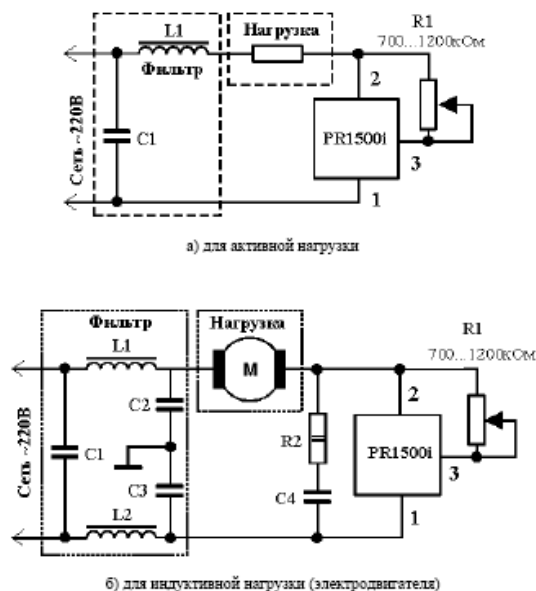
## Technical Parameters

Parameter	Value
Rated Power Supply Voltage, V	220±10%
Power Control Limit, % of rated	0...97
Max. Load Current, A	7
Max. Voltage between Metallic Package Header and Terminals, V	1500
Max. Operating Package Temperature, °C	+ 85
Min. Operating Package Temperature, °C	- 45
Max. Load Power, W	1500
Min. Load Power, W	60
Max. Voltage Amplitude between Leads 1 and 2, V, not more than	400
Voltage Drop between Leads 1 and 2 at Rated Current, V, not more than	2
Leakage Current in Off-condition, mA	2
Operability at Momentary Load Current, sec	
- at 15 A	6
- at 70 A	0,02

## External and Mounting Dimensions



## Connection Diagram



- a) for active load  
b) for inductive load (of a commutator motor)



## Operation Application Notes.

It is recommended:

1. to connect the load to the 2<sup>nd</sup> or 1<sup>st</sup> PPR lead.
2. to use the heat sink compound КПТ-8 or its counterpart for lowering the heat resistance while PPR mounting onto the radiator. The radiator option depends on the heat-exchange conditions, on the load current and on the peak values of the operating package temperature.
3. It is possible to use the PPR without a radiator when the load current is not more than 2A.

It is recommended:

4. to keep resistance of the outer control resistor within the limits of  $R1 = (700-1200) \text{ kOhm} / 0,25\text{W}$ .
5. to connect the RC-daisy chain parallel to the PPR leads 1-2 in order to maintain steady PPR operation with an inductive load of ( $\cos \varphi < 0,8$ ). The bogey values of the RC-daisy chain components are 100nF (400V) and 100 Ohm (2W). It is also recommended to connect parallel to the mentioned daisy chain a voltage suppressor (a voltage-variable resistor or limited diode) with protection voltage of 380 – 420V.
6. owing to the lead configuration to use the connection type Faston 2,8 x 0,5 or soldering for the lead connecting.
7. The lead soldering has to be done by the soldering alloy ПСО-61, the soldering temperature should be  $260 \pm 5 \text{ }^\circ\text{C}$ , the soldering duration should be not longer than 6 sec. and the spacing between the tin-plating point and the package has (depending on a lead length) to be not less than 3mm.
8. The connection of the capacitance load to the PPR is not allowed.
9. The lead bending is also not allowed.