

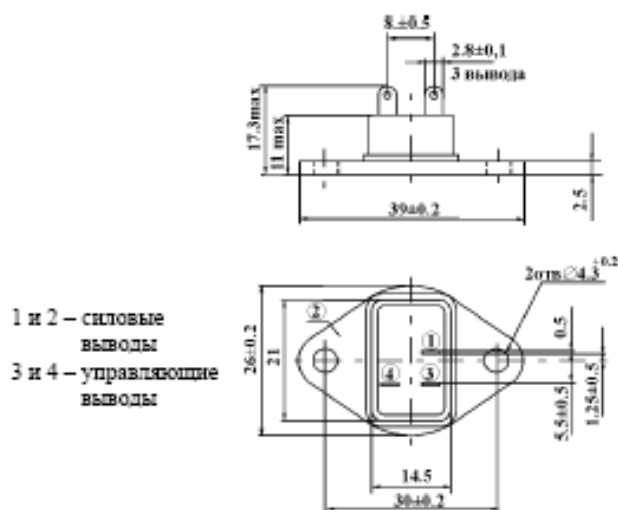
PPR (Phase Power Regulator) is a device designed for a power control in active and active-inductive loads: heaters, light bulbs, commutator motors.



Technical Parameters

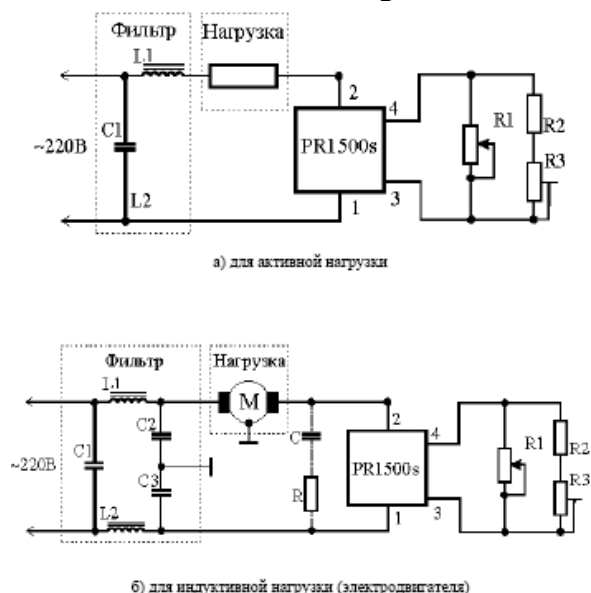
Parameter	Value
Power Supply Voltage, V	220±10
Power Control Limit, % of rated	0...96
Max. Load Current, A	7
Max. Operating Package Temperature, °C	+ 85
Min. Operating Package Temperature, °C	- 45
Max. Load Power, W	1500
Min. Load Power, W	60
Max. Voltage Amplitude between Leads 1 and 2 at Rated Current, 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	6
- at 15 A	0,02
- at 70 A	

External and Mounting Dimensions



1 and 2 – power leads
3 and 4 – control leads

Connection Diagram



a) for active load
b) for inductive motor load



Operation Application Notes.

It is recommended:

1. to connect the load to the 2nd or 1st 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, the load current and 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.
4. the recommended resistance of the outer control resistor is to be kept within the limits of $R1 = (700-1200) \text{ kOhm} / 0,25\text{W}$.

It is recommended:

5. for min. power setting to use the connection series of an additional resistor $R2=150 \text{ kOhm} / 0,25 \text{ W}$ and a trimmer $R3=(100-300)\text{kOhm} / 0,25 \text{ W}$ which should be connected parallel to the regulating resistor (see Connection Diagram).
6. to connect the RC-daisy chain parallel to the PPR leads 1-2 in order to maintain steady PPR operation with inductive load of ($\cos \varphi < 0,8$). The bogey values of 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 the protection voltage of 380 – 420V.

It is recommended:

7. Owing to the lead configuration to use the connection type Faston 2,8 x 0,5 or soldering for the lead connecting.
8. The lead soldering has to be done by the soldering alloy ПСО-61, the soldering temperature should be kept by $260 \pm 5 \text{ }^\circ\text{C}$, 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.
9. The connection of the capacitance load to the PPR is not allowed.
10. The lead bending is also not allowed.