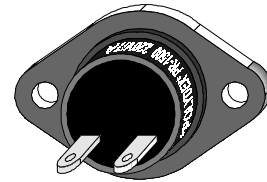


Phase Power Regulator PR1500



Purpose:

The phase power regulator PR1500 allows to control power in load from 0 to 97 % of maximum value.

In this modification the steel basis intended for strengthening to the radiator is an Anode electrode. The smooth monotonous regulation on small angles of conductance down to full cutoff is ensured.

By PR1500 it is possible to regulate:

- rotation speed of AC collector motor (electric tools, vacuum cleaners, electromixers, kitchen combines etc.);
- brightness of lighting incandescent lamps;
- power in electroheating equipment (heating system for living rooms, farm hothouses, electric soldering irons, etc.).

Technical Characteristics

Name of Parameter	Symbol	Value	Test Conditions
AC-voltage of Power Supply	U	~220V, 50Hz	
Maximum Power of Load	P_{max}	1500 W	$\alpha_{cond}=150^\circ$
Minimum Power of Load	P_{min}	60W	$\alpha_{cond}=150^\circ$
Continuos Current (RMS) at Condition $\alpha_{cond}=150^\circ$	I_c	7A 2,5A	$T_c=80^\circ C$ $T_c=100^\circ C$
Voltage (Amplitude) Switch-on State $\alpha=90^\circ$ (270°)	U_c	1,75V	$I=\pm 8A$
Range of Conductance Angle Regulation	$\alpha_{min} \dots$ α_{max}	$0^\circ \dots 150^\circ$	$T_c=80^\circ C$
Operation Temperature	T_c	$-40 \div +100^\circ C$	
Weight not more		15g	

Recommendations for Application

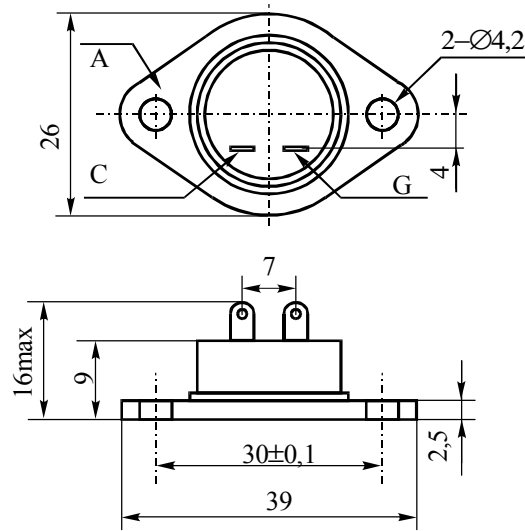
1. Do not allow to overflow the upper limit of operating temperature of case. It is recommended to mount steel basis of PR1500 on a heat-rejecting radiator. It is necessary to put heat-conducting ink between the mounting basis of the regulator and the radiator.
2. It is recommended to connect RC-circuit between anode and cathode of the regulator in the case of working on inductive load impedance (see fig.2).

Working of the regulator on capacitive load is not supposed.

3. Recommended value of variable resistor R1 is 1,0... 1,5 MOhm, dissipated power is 0,25V.
4. It is possible to obtain the lower limit of regulation range $\alpha_{min}=0$ with value $R1=1,5$ MOhm.
5. Decreasing of radiohandicapes level is ensured by using special filter (see fig.2).
6. Protection against electric shock should be ensured by construction of household device in which PR1500 is applied.

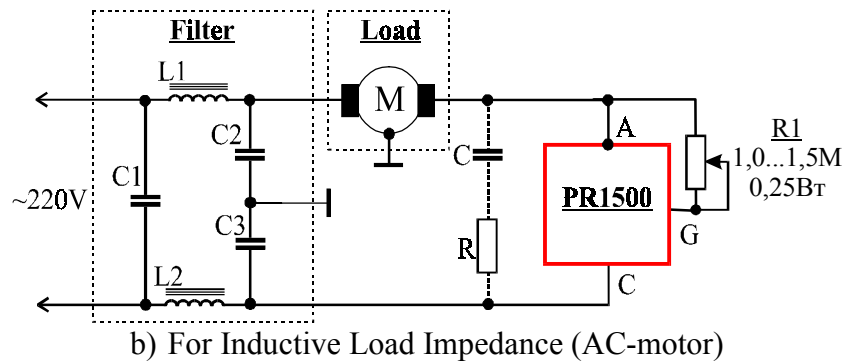
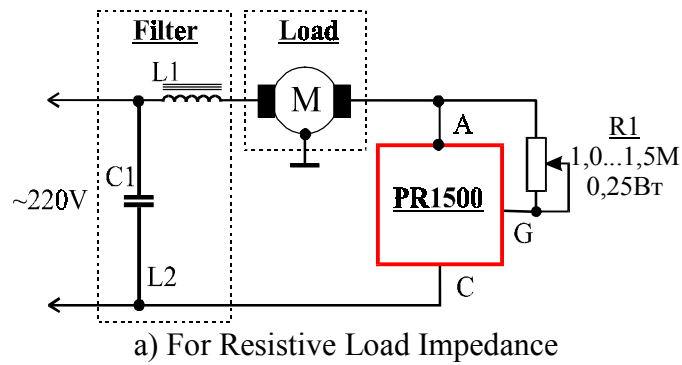
Dimension for Installation

Fig.1



Examples of Connections PR1500:

Fig.2



For technical support refer to the developer: pldx@glasnet.ru