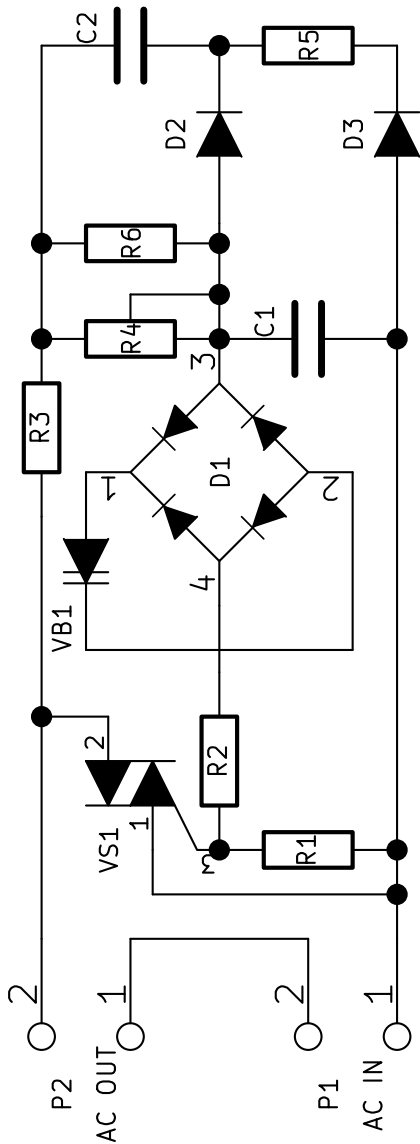


M139.1

AC 220V SCR Voltage Regulator 5kW

Electric scheme



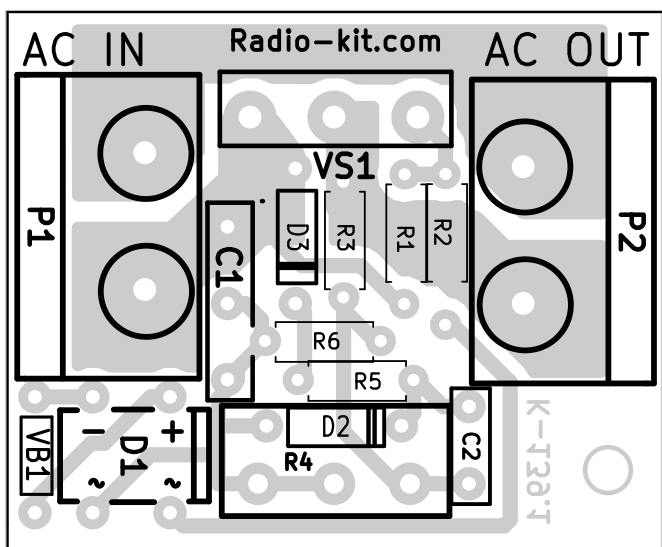
The kit includes:
 EN printed circuit board; components according to the list, instruction.
 Store under normal climatic conditions
 Shelf-life Unlimited

The set is intended for the manufacture of a power regulator. The device can be used to regulate the power of heating and lighting devices, alternating current collector electric motors, the maximum current of which does not exceed 25 A.

Specifications

Network voltage AC, B.....220
 Maximum load power, kW.....5
 Dimension PCB, mm.....36x45

Layout of components on a PCB



List of components

VS1	BTA41-600	R4	variable 3pin 500kOhm
VB1	DB3	R5	100 kOhm
D1	DB107	R6*	1.5 MOhm
D2, D3	1N4007	C1	0.15 μF x100 - 400V
R1	820 Ohm - 1 kOhm	C2	9100-10000 pF x 50V
R2	200 - 220 Ohm	P1, P2	Terminal blocks
R3	10 kOhm	K139.1	PCB

All resistors are 0.25 W.
 *By selecting resistor R6, you can change the lower limit of regulation (default is from zero)

When using a load with a power of more than 300 W, the triac must be installed on a radiator. The radiator area must be at least 400 cm²

Attention! Since the circuit elements do not have galvanic isolation from the power grid, electrical safety precautions must be observed when setting up and operating the device.