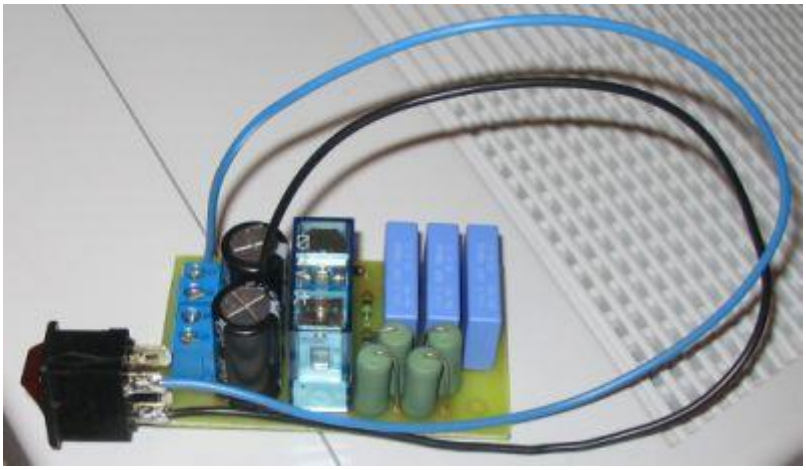
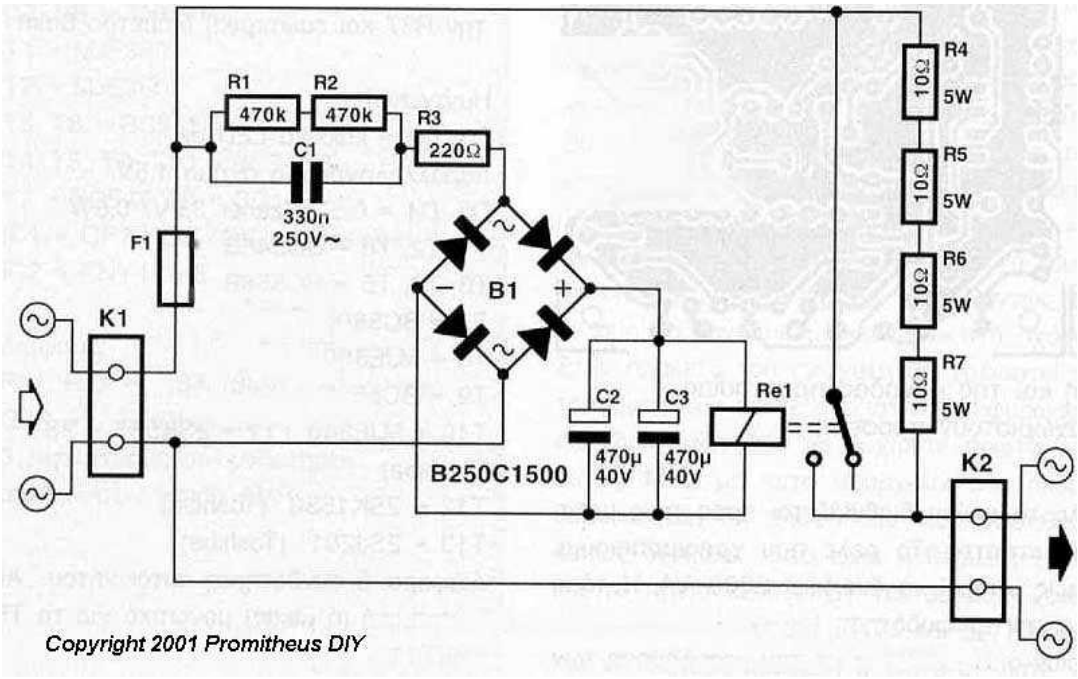


Soft Start for Power Supply

The circuit will limit the current through the supply wires to 5.5A for about 1.5sec. After that time the relay will close and the current flow won't be restricted anymore. This is a very interesting circuit if you have a large toroid with big electrolytic caps connected to the power supply, since these will act like short circuits for a small amount of time if they start charging. This unit is a delay unit that can be connected directly to the mains power supply. It´s not obligatory to use one but it is a good idea, specially if you have a big toroidal transformer larger than 300 VA. This unit has a delay circuit and for the delayed time the mains power is supplied through power resistors minimizing in this way the big inrush current due to big capacitors and big toroidal transformers in the power supply. When everything is stable it shorts the power resistors and supplies the mains power directly.



List of parts

R1, R2 470K 0.25W 1% mf

R3 220R 0.25W 1% mf

R4, R5, R6, R7 10R 5W

C1 330n 250V (for direct mains connection)

C2, C3 470uF 40V electr.

B1 B250C1500

Re1 24V (250V-8A contact)

F1 Depends on the amp

