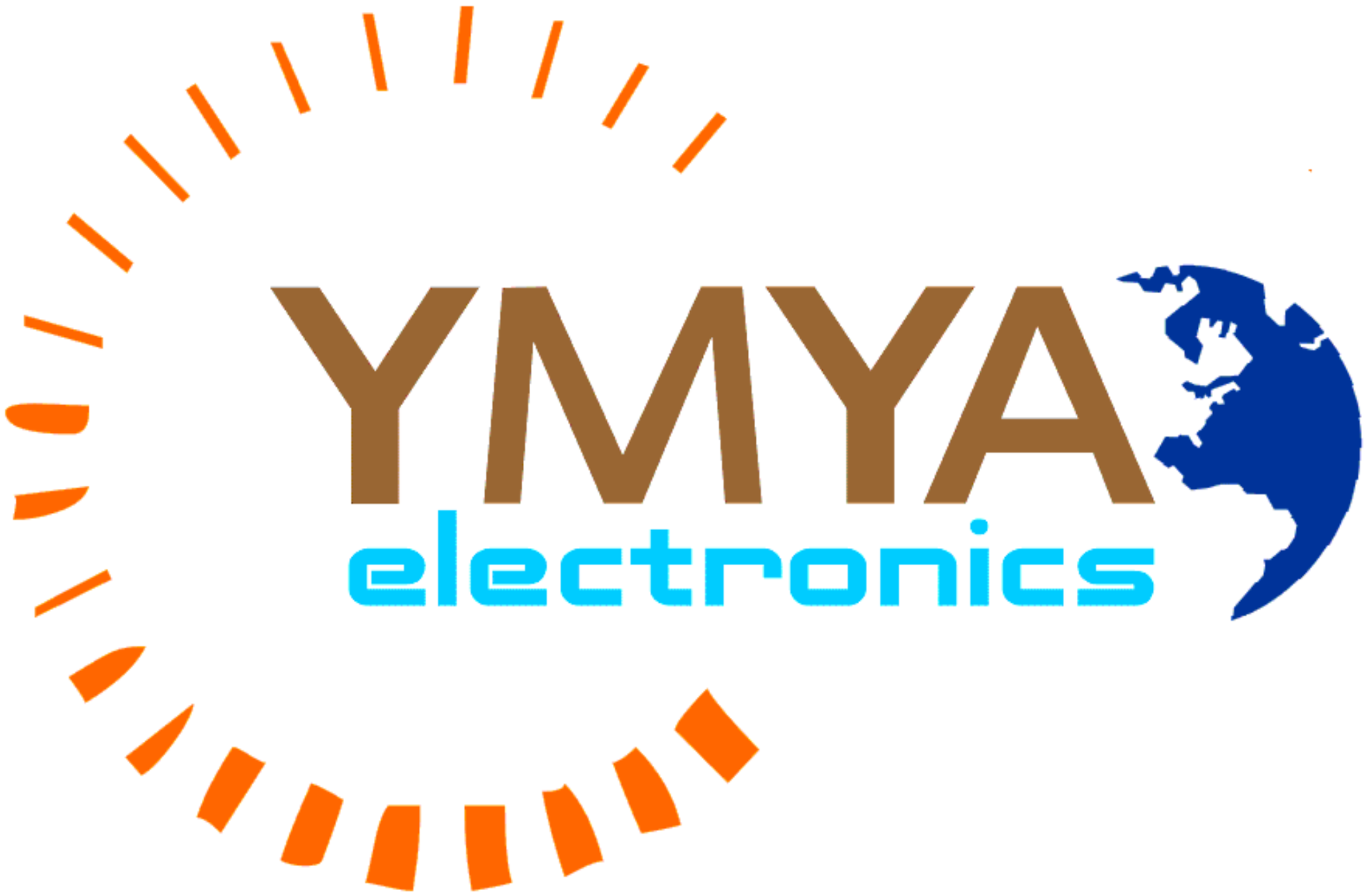
..:: MINI VARIABLE POWER SUPPLY ::..

Author : ***IZHAR FAREED***



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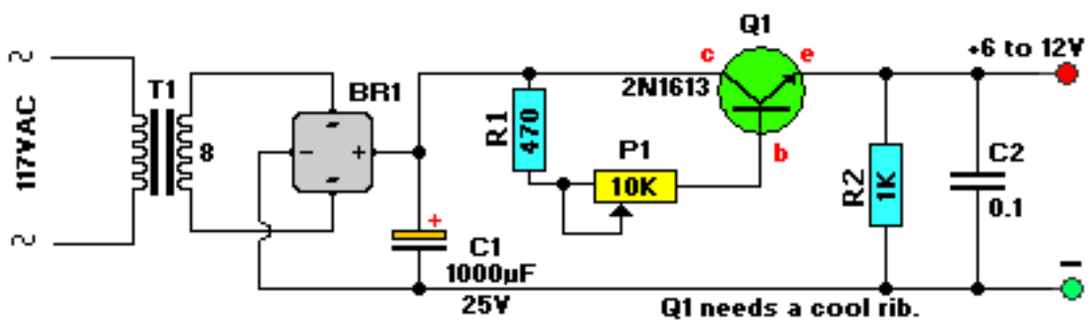
..:: CIRCUIT DIAGRAM ::..



..:: PARTS LIST and DESCRIPTION ::..

Parts List:

T1 = 115/8 VAC transformer. Center Tap not needed.
Q1 = 2N1613, NTE128, or substitute. (TO-39 case) On coolrib!
BR1 = 40V, 4A. (Check max current of your mini-drill and add 2A)
R1 = 470 ohm, 5%
R2 = 1K, 5%
P1 = Potentiometer, 10K
C1 = 1000uF, 25V, electrolytic
C2 = 0.1uF (100nF), ceramic

T1 steps down AC voltage from 115VAC (or 220VAC) to about 8VAC and is then rectified via bridge rectifier BR1 to about 11.52Vdc. C1 filters off the AC ripple. If you find the circuit output too noisy add another electrolytic capacitor over the output terminals. Value can be between 10 and 100uF/25V. The output voltage is variable with the 10K-potentiometer while keeping the current constant.

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