NEW CIRCUIT FOR ELECTRONIC CHOKE FOR TUBE LIGHT

100 watt lamp

AC supply 220 V

IN 4001

100 k ohms
4500 mF

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100 k ohms

Tube light
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When an AC Voltage is applied to a tube light fixture, the Voltage passes Through The Choke, The starter, AND the filament of the tube.

The filament light up and instantly warm up the tube the starter is made up of a discharge bulb with two electrodes next to it when electricity passes through it an electrical arc is created between the two electrodes this creates light however the heat from the bulb causes one of the electrodes ca bimetallic strip to bend making contact with the other electrode this stops the charged particles from creating the electrical arc that created light is however, now that the heat from the light is gone the bi metallic strip cools and bends away from the electrode, opening the circuit again.

At this paint the ballast ar choke “Kick’s back” it’s stored current, which again passes through the filament and ignites the tube light once again.

If the tube does not sufficiently charge up subsequent kicks are delivered by the choke due to rapid switching of the starters. So that finally the tube strikes.

A common problem associated with these types of fixtures is humming or buzzing the reason for this lies in the loosely fitted choke on the fixture which vibrates in accordance with the 50 are 60 hertz frequency of our ac mains and creates a humming sort of noise. Tightening the chokes screws may instantly eliminate the problem.

In my choke starter is absent when ac voltage is applied to tube light fixture as shown in figure certain amount of voltage is dropped by the 100 watts lamp seriously connected to this. the remaining voltage is rectified by the bridge rectifier the capacitor are used to filter the ripple component rectified voltage thus the pure dc voltage is across the tube filament. The bulb will grow brightly and continuously by off the circuit the capacitor in the circuit start to discharge so the circuit is difficult to on by connection the resistance parallel to capacitor to reduce the time content by connecting resistance parallel to the capacitor we can easily on off the circuit in this circuit no hamming buzzing starter flicker and noise.
Advantages of the Product:

1. Cost is less
2. no transformer
3. No flicker
4. no starter
5. no noise
6. no hamming
7. no buzzing
8. power con is only 25 watts
9. 25 watts power equal to 40 watts
10. low power loss
11. low head loss
12. instant- starting
13. cheap and best
14. power saving
15. good performance