TECHNICAL DESCRIPTION

This is a kind of integral energy saving lamp that is composed of a piece of energy saving tube and an electronic ballast.

* RECTIFICATION

Rectifier converts power supply from AC to DC and also it is a full wave bridge rectifier with large filter capacitor(s) to protect the circuit against line transients. It also attenuates any EMI (Electro Magnetic Interference) noise generated by the high frequency source that feeds the tube.

* INVERTER

Inverter changes the DC supply into high frequency AC. It employs the half bridge-voltage fed topology for inverting. It consists of two transistors connected in series across the output of the rectifier circuit. A train of pulses is created for voltage and current by this inverter switch circuit. The power switch is controlled by a small staturabe core transformer.

* OUTPUT

The energy saving tube is the load of output section. It is in series with a LC resonance circuit. It feeds back the high frequency through the control circuit to synchronies the inverter frequency.

The LC resonance circuit provides the high voltage which strikes the tube during startup. Once the tube are on, the LC resonance circuit will generated the tube working voltage which is less than the voltage of startup.

Energy Saving Lamps Rating

MODEL	VOLTAGE SUPPLY	ELECTRICITY CURRENT	POWER CONSUMPTION
TLE-11W	120V 60Hz	200mA	11W
TLE-13W	120V 60Hz	220mA	13W
TLE-15W	120V 60Hz	250mA	15W
TLE-20W	120V 60Hz	310mA	20W
TLE-23W	120V 60Hz	350mA	23W
TLE-25W	120V 60Hz	380mA	25W