



DESCRIPTION

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---Electricity-saving Device for Fluorescent Tube Lamps ---

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The device is invented to save 20% to 40% electricity energy for fluorescent tube lamps with inductive ballast, which are widely used in the world currently. I estimated that there are about 10 millions units of such tube lamps lighting every working day in Singapore.

This device can be realized by analog circuits or digital circuit. The main principle is to control power by adjusting current wave symmetrically which is outstandingly different with the method of single phase-angle control. Further more, the circuits realized is much more economical and practical than the difficult and expensive way.

1. Main advantages

1.1. Electricity-saving rate is adjustable from 20% to 40% according to customer need.

1.2. The dimension of finished device is small as that of two matchboxes.

1.3. It can lower the working temperature of ballast and total set of fluorescent tube lamps, which will prolong life span of them.

1.4. It does not change frequency (50Hz or 60Hz) of power supply and not interfere other electronic devices.

1.5. It can be put easily into mass production due to low cost and stable function. Low cost can guarantee low price for marketing, which will make the products suitable for the popular price of the existing tube lamps.

2. Main parameters

2.1. Voltage: AC220V/240V;

2.2. Electricity-saving Rate: 20% to 40%;

2.3. Powers for Tube Lamps: Normal 18W, 20W, 36W, 40W, and others;

2.4. Work Environment: In Door;

2.5. Usage: For all fluorescent tube lamps with inductive ballasts.

3. The Meaning for environment protection

3.1. This device can prolong life span of ballast and tube set, which directly reduce the number of scrapped parts, especially tube itself that has pollutants inside.

3.2. This device reduces electricity-generating energy and relevant fules, which will directly reduce pollutant emission.

3.3. To reduce other relevant industrial materials exhausting;

3.4. It will help to realize 'Green Lights' that is widely recommended now, especially in USA.

For all the above, this device possesses an active meaning to protect the environment we live in.

by XU Jian