

Power Saving Lamp contra Bulb



Since January 2009, in various European countries, the use of energy - saving lamps is required. Other countries already signaled its intention to launch the regulation for energy – Saving lamps in the coming months as well.

It considered the economic aspect for the consumer, and show some advantages, but it is also important to know the disadvantages!

From the previously used light bulb only 5% of the power was converted into light. 95% of the energy has been implemented through the visible helical tungsten wire in heat.

This power loss was generating inside the gas filled glass bulb a temperature of up to 3.000°C. The "new" energy - saving lamps promise a performance utilization and more light output up to 25% with low heat load.

These are miniaturized fluorescent housing which is controlled by an electronic unit in the base which bring mercury atoms to emit light they turn on the fluorescent layer of glass and thereby constitute depending on phosphor mixture of different light shades

This switching process involves a considerable amount of energy and generates high-frequency conducted and not conducted interference with harmonic formation in the power grid.

Light Colors in Kelvin	Description
2700	extra-warm white
2900	Warm white
4000	Neutral white
6500	Daylight
8000	Indirect Daylight Daylight (sky blue)

Bajog electronic GmbH

der EMV - Spezialist

**Ministries of Environment and advocate of energy-saving bulbs promise:
"Saving electricity with energy saving lamps"**

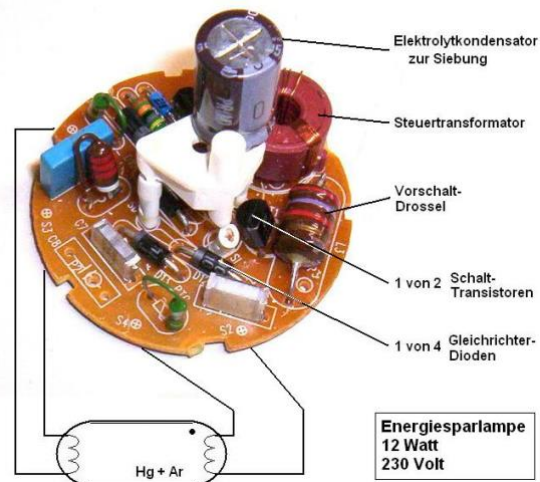
Thanks to improved technology energy bulbs are using up to 80 percent less electricity than incandescent bulbs.

A bulb with 11 or 15 watt lights as bright as an incandescent lamp with 60 watts!
As lower the wattage, as less current is needed for the light.

With a burn time of 10,000 hours energy saving lamp saves compared to conventional bulb € 100 current cost

What is to know about this technology?!

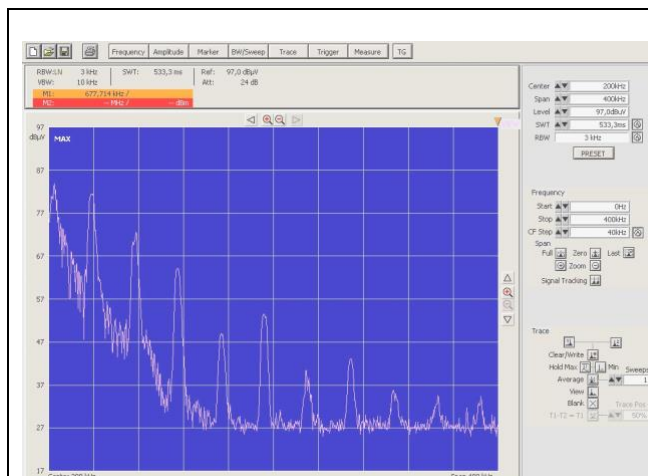
Diese Taktung birgt einen erheblichen Energieanteil und erzeugt hochfrequente leitungsgebundene und nicht leitungsgebundene Störungen mit Oberwellenbildung im Versorgungsnetz.



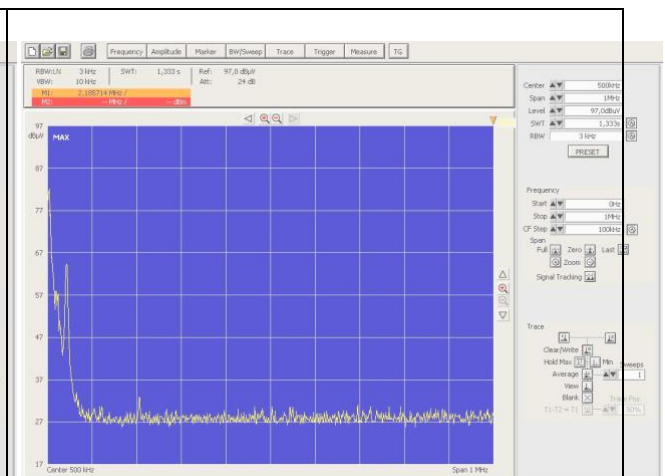
The ignition and the subsequent continuous operation are pulsed sharply by the pedestal electronics. This alternating current is clocked at about 45KHz.

A similar principle is also placed in electronic ballasts bands of light application.

This clock switching contains a amount of energy and generates high-frequency conducted and not conducted interference with harmonic formation in the power grid..



Pic. 1 shows the noise part of one saving lamp



Pic. 2 shows the reduced noise level with the right filter

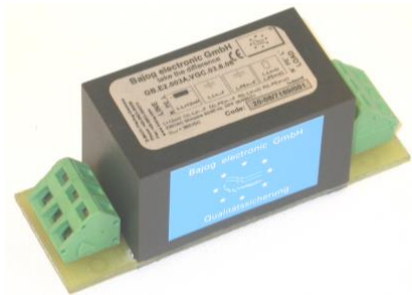
Bajog electronic

der EMV - Spezialist

It is not difficult to imagine about the total emission in the power grid by using many of these energy saving lamps.

Hereby the power grid itself becomes the source of interference and is no longer confined locally to the root cause, namely, the energy - saving light bulb.

There are also increasing reports of people who suffer physically because of radiated emission on present symptoms such as migraine and nervous general conditions.



The economic advantage of using energy - saving lamps have also has the mentioned disadvantages, which can be easily compensated by appropriate suppression.



Alphafilter und Vorschalt-Sicherheitsmodul sind die Lösung für eine sichere Entstörung von Energie -Sparlampen und Vorschaltgeräten.

Alpha filters and ballasts security module are the Solution for reliable suppression of energy-saving lamps and ballasts.