



## Save energy with dimmers.

The cost of the energy sources and the effects of global warming are becoming one of the main issues of the future. Neon lit signs can contribute to such a purpose in a very simply way: reducing the brightness in excess during night time. It can be achieved just using a special control gear between the mains and the array of magnetic transformers.

Below a brief figure is given just for reference:

A sign – with 16 transformers 5000/100 - requires a total input current of 40 A  
Instead of running the lamps at 100 mA it is suggested to reduce the current down to 75 mA during nighttime operation:

Average night time usage = 10 hours at 75 mA

It means to reduce by 25% at 40 A the power consumption, i.e. 10 ampere, for 365 days;

In terms of power the saving is:

$230 \text{ volt} \times 10 \text{ ampere} \times 10 \text{ hrs} = 23.000 \text{ watt hour} = 23 \text{ kWh}$

assuming the electricity cost equal to 0.14 Euro, the saving is:

$0.14 \text{ €} \times 23 \text{ kWh} = 3.22 \text{ € day}$

or  $3.22 \text{ €} \times 365 \text{ days} = 1175.3 \text{ € annum.}$

It leads to a reduction of 4870 Kg of CO<sub>2</sub>.

In case of running the lamps to 50 mA the saving would be double (2350,00 € annum and 9,740 kg of CO<sub>2</sub>.)

The luminous flux at 50 mA would be reduced of 40% achieving an environmental benefit not negligible.