



bee

EFFICIENCY  
SAVING  
ENVIRONMENT

**Choose savings**  
for your home,  
switch to **Bee!**



Permanent energetic efficiency  
system for domestic use.

# bee

## Energy efficiency system for domestic users.

A one of a kind permanent energy efficiency system that reduces household consumption by 10% to 30%. It is contained in a small box, easily installed, without any modification to the electrical system, by an electrician in line to the meter to protect all utilities.

### the **problem**

Electric-electronic appliances etc. (in compliance with the IEC 60038 standard) are designed to work at a nominal three-phase voltage 400 V (between 360 and 440 V). In reality, the input voltage varies continuously and often exceeds 440. This means that electrical-electronic devices consume more than necessary and are inefficient. In addition to external disturbances and the electrical network, the use of devices that combine the work of resistance and inductive loads (for example electric motors, discharge lamps, etc.) generate peaks and "harmonics" on the network which further pollute the voltage and internal frequency.

### how to **save**

Bee is a mains stabilizer / conditioner based on an autotransformer and an "L-C" filter. The autotransformer regulates the voltage at a constant value of 380 v (optimal voltage value for all users); the "L" filter attenuates harmonic and spurious frequency disturbances generated by switching equipment, so that the mains frequency is perfectly at 50Hz. The "C" filter lowers the reactive currents absorbed by the inductive loads making the supply of energy to the equipment constant and stable. Therefore, thanks to the constant voltage, 50Hz sinusoidal frequency and almost zero reactive current, users work more efficiently by saving on absorbed power.

From tests carried out in the laboratory and on customer systems, the use of Bee can generate energy savings of up to 30%. Bee in addition to reducing consumption, increases the efficiency and average life of users. Bee does much more than a phase plug, in fact it filters the current, regulates the frequency, regulates the voltage.





# Why choose **bee** to save money



1. Reduction of energy consumed from 10% to 30%
2. The longevity of users increases
3. Users are at optimum voltage and work more efficiently
4. The consumers are protected from damage caused by overvoltages
5. No direct investment, it re pays off immediately with the savings generated in the bill
6. The cost of the box is 100% deductible
7. The current is filtered by disturbances coming from the external network and generated by the internal one
8. Installation by a qualified electrician (in 20 minutes)
9. No modification of the existing electrical system
10. 5 year guarantee

## Technical features

Rated input voltage	190 – 270V
Nominal frequency	49÷51Hz
Nominal single-phase output voltage	230-240V
Adjustment accuracy	+/-5%
Variation of the load	0% to 100%
Power factor of the load	Not decisive
Waveform at the output	Perfectly sinusoidal
Full load	98%
Working environment temperature	-25°C ÷ +45°C
Cooling down	Not decisive
Relative humidity	≤95%
Degree of protection	IP45
Dimensions 4 Kva single-phase	240x190x90
Dimensions 7 Kva single-phase	300x220x180

To guarantee the safety of the device, it is recommended to place it in the part of the system protected by the appropriate switches, in accordance with the dedicated CEI standards. It is recommended not to obstruct the aforementioned openings and not to place other objects at a distance of less than 50 cm from them, to ensure proper ventilation and consequent stabilization of the internal temperature of the device.



energy efficiency division



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It is written ESE,  
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as easy as  
saving energy

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