## WHY A NANOMAG GENERATOR WITH PM TECHNOLOGY?

**NOMINAL power, or the power that a generator** can produce for a longer period of time, this is the power of the generator as designated power, keep in mind that this is 90% of the maximum power, some companies advertise this power which is pure distortion of competition. We state as an example that 4.2 KW generator, during a short time can give you a power of 4200 + 400 watts = 4600 watts, this generator is best used for a maximum power of 4000 watts, so in lamps expressed 40 lamps of 100 watts, also because the operating curve of your engine skyrockets at full load.

**Tax types**
In the previous example, the lamps are the LOAD of the generator. A 4200 Watt generator can handle a maximum load of no more than 4600 Watts.

**Resistance load**
The "lamps" example is called a RESISTANCE type of load and the required POWER, is easy to understand. Other RESISTANCE types of load are things like toasters, convection ovens, hobs, curling irons, coffee makers, stereos and TVs. RESISTANCE LOAD is usually used in appliances without an electric motor. Resistance load = 1 x Power.

**RESISTANCE & REACTIVE LOAD: Another**
cake is with the reactive load, this usually involves an electric motor. Some household appliances such as cooking fires and refrigerators have internal fans that operate intermittently, therefore additional power is needed to start the fan. Another example is power tools. A device or tool with a REACTIVE load may require up to three times more power (KW) to START than it needs when walking.

**Resistance**
loads:The equation shows the relationship between WATTS, VOLTS and AMPS in a PURE RESISTANCE LOAD. If you know one of the two variables, the third can be calculated. Example: You want a generator to power a 1000 Watt floodlight. The device is 220V and requires 1000 Watts of power. Using the equation, we can calculate that the floodlight will draw 4.3 AMP electric current. For Reactive loads, the equation shows only a general relationship between Watts, Volts and AMP, because the power requirements for REACTIVE loads change with the Control conditions. Reactive load = Volt x AMP = Watt

**Reactive loads:**
To determine the choice of the right generator for REACTIVE load types, you need to consider the 3 ways of control: START PHASE – the electric motor needs more power to start. The power requirement can be up to 5 X the rated starting powerOPERATION- the power required to run the electric motor once it is started. LOAD – When the electric motor is under load and more torque needs to be provided. However, this is not applicable for most household appliances.

# WITH THE NANOMAG GENERATORS YOU HAVE LITTLE OR NO ACCOUNT OF THE REACTIVE LOAD