

NEWSLETTER

A way to stay in contact

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VA or Watt? How to use these data.

For the correct sizing of a UPS, the VoltAmpere and Watt measuring units must both be taken into consideration, but sometimes their distinction generates a certain confusion among the end users.

In fact, the power supplied by the electronic equipment can be expressed with both these units of measurement. The Watts indicate the "active power", while the VoltAmpere refer to the "apparent power", that is to say the product between the voltage applied to the equipment and the current supplied to it. Both units of measurement have their use: the power in Watt is used to define the power purchased by an electricity supply company; the VA one is instead used to size the wiring sections and the switch capacity in an electrical circuit. In computer and electronic equipment the power values in Watt and VA can differ significantly, and the power in VA is always higher than in Watt. Their ratio is called "Power Factor", and is expressed in numerical values (eg 0.8) or percentages (eg 80%).

This power factor can vary, even significantly, depending on the type of power supply used within the various equipment. Even the UPSs have different power factors depending on the power output, those small power single-phase, usually have a low power factor also to remain competitive with prices, while the high power 3-phase usually have a power factor of 0.9 or 1.0 To correctly size a UPS, you need to know both the Watt and VA data. Most often they can be deduced from the plates affixed to the equipment to be protected. But sometimes it can happen that the latter only report values in VA. In this case it is important to correctly size the UPS avoiding to take into consideration only the value in VA, as doing so could run the risk of exceeding the power in Watt supplied by the UPS, overloading the system. Instead, it is necessary to use an approach that foresees a reasonable margin of the power of the UPS with respect to the power in VA expressed by the load. This will ensure correct and reliable system operation.

Elsist to provide its UPS at University of Ferrara

Elsist was chosen to supply its UPS to the University of Ferrara.

A modular 3-phase UPS from the Polaris 10kVA series and 10 minutes autonomy will be installed to protect critical loads in a technical laboratory.



"For us it is a matter of pride to be able to provide our systems to this prestigious university - says Silvano Valeri - Italian commercial director, Industry sector - Moreover, the University of Ferrara joins the other universities that have already selected our products, demonstrating the reliability and convenience of our range. "

The first order of UPS from Spain

The new Spanish partner B + W ELECTRONIC SYSTEMS purchased the first 10kVA FLEXIBLE series UPS for a video installation of a luxury hotel in the Canary Islands.



"We are very pleased to have received this order after a very short time since the beginning of the collaboration with B + W, a sign of the professionalism of our partner and the interest of the Iberian market - says Bruno Montrasio, Export manager of Elsist - The Spanish market is for sure interesting,

and we hope this good start is confirmed also in the future. We are optimistic because we know we can count on a valid partner and on the competitiveness of our range ".

Elsist products working as frequency converters

The type of operation of the on-line UPS Elsist is VFI (Voltage and Frequency Independent according to classification EN / IEC62040-3) "which guarantees an output voltage towards the loads filtered and stabilized, not dependent on the input power supply network. This means that the voltage supplied to the output is obtained from the input voltage through two stages in series. The first (rectifier) performs a conversion from alternating voltage to DC voltage, while the second (inverter), through an inverse process, regenerates the alternating output sinusoid starting from DC voltage. This double stage allows to completely filter out any disturbances or anomalies of the input network.



The UPSs are also able to operate with both frequency ranges required, 50Hz and 60Hz, automatically adapting their operation according to the input frequency. In particular applications, however, the UPS must be able to operate as a frequency converter, that is, maintaining different input frequencies and output frequencies, without any kind of synchronism, for example:

50Hz input - 60Hz output

60Hz input - 50Hz output

The Elsist products in the catalog with these characteristics are included in the series: MISSION, POLARIS and TRI-ONE, characterized by the suffix "CF".

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