

Electrical System In Portugal

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Portugal's electrical system is based on 400/480 volt 50 Hertz 3 phase or 220/230 volts 50 Hertz single phase & the vast majority of ordinary households use the single phase supply system which means that whilst it's virtually the same as that in the UK, South Africa and many other countries it's significantly different to the USA (which works on 110 volts) & this means that appliances from countries that work on those vastly different voltages will only work in Portugal if they are equipped with dual voltage facility or with a transformer & transformers often tend to reduce either lifespan and/or efficiency & the only way to be sure of individual appliances is to check the classification plate on the back of the individual unit.

There are also other factors that can play a part in how well modern electrical goods will work here & cable sizes for similar functions are sometimes smaller than many other countries.

Portugal also works on an unusual supply system of offering consumers a choice of 'Potencia' connections which translates to a choice of the size of connection (such as 3.45kVA or 6,9 kVA etc) & the larger the 'potencia' the more you pay per unit which is one of the major reasons that lights dim slightly or circuit breakers trip out when a 'large' load is put on the circuit & this can be cured (or at least the effect reduced) by stepping up to a higher 'potencia' & you do this by contacting your supplier who will send an engineer to upgrade your main circuit breaker.

The method of wiring in Portugal is also different to many other countries & an example of that is whereas a UK plug system is usually wired as a ring circuit & will carry up to 32 Amps, the Portuguese plug circuits are wired as radial circuits with a maximum capacity of just 16 Amps. So, if your kitchen appliances (for example), are all on the same circuit then it can lead to a drop in power if too many are on at the same time.

When coming from another country that has a different plug system then you have the choice of either changing the plug itself or buying adaptors & it's always better to change the plug than to use any kind of adaptor as adaptors mean more electrical contacts & the more contacts you have, the more you have to go wrong & when buying new plugs or any other electrical item for that matter, it's always better to try to buy best quality than to buy lowest price for the obvious reason.