

PQE 1000 Line®

Line voltage

During the 1960s two types of line voltages were available for wall outlets in the European mainland: 127V and 220V. During the 1950s and 1960s connections in private homes were converted to 220 Volt in many countries. But still many countries had various voltages on the mains.

In order to streamline all the various voltages used in Europe (within the CENELEC Agreement) all the mains were gradually change to 230 Volt.

This was a compromise between the continental 220V and the British 240V.

At the present time, the Grid Code in the Netherlands is 230V (+6%/-10%). Every piece of equipment developed for the European market must function well between 207V and 253V. New equipment is designed to be used with 230V, but this higher voltage can damage older equipment and dimmers.

The stronger current that runs through these appliances generates heat and causes them to breakdown prematurely.

With increasing the voltage to 230, the tension between the phases in high voltage connections was also raised and it is now 400V (previously 380V) Moreover, you pay more because you use more power than necessary to have your equipment run properly.

In practice, it emerges that right now in many places in the Netherlands tension measures on the grid is above 230V and in some places even 240V. You inadvertently use more kW's, your CO2 emissions are going up, you wear your equipment faster and you pay more needlessly!

Application: Voltage optimisation

Voltage optimisation means that you use the higher voltage delivered to you more effectively. With the PQE 1000 Line®, Power Quality Europe has the solution for the negative impact of high grid voltage. The PQE 1000 Line® was developed by Power Quality Europe.

The PQE 1000 Line® is an energy saving system that reduces the voltage supplied by the electricity company (230/240 Volt or 400/410 V) to a level of 215/220 Volt or 375/380 Volt. All your equipment can work perfectly well on the 'old' voltage. Power Quality Europe will install the PQE 1000 Line® in your transformer and you will see the following benefits:

- Your kWh consumption drops
- Your CO2 emission drops
- Your equipment lasts longer
- You pay less for your electricity



The PQE 1000 Line® is an energy-saving system that is applied to Ohm loads and/or inductive loads. As a result, it reduces the used power (kW) and kWh consumption in a reliable and responsible manner. The PQE 1000 Line® is centrally installed at the secondary side of a transformer or main distribution panel and/or on the appropriate declining groups of these main distribution panels