Phases Dynamic Balancer

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Abstract

Most of the current domestic installations are single phase, with contracted power equal to or less than 15 kW and with a potential difference of 230 V. When consumption is expected to be higher you choose to use three different alternating currents with a difference voltage of 400 V between them, which are called phases. This enables the subdivision of the installation in different single-phase circuits, fed independently with the neutral installation. These couples have, in turn, a difference in voltage of 230 V. The neutral is common for all three phases so that, if the system is balanced, no current flows through it. The problem with these installations is that they are designed to work in an offset manner, using phase loads, and simultaneously an equal amount of energy consumed by the three phases of the network. Connection to each of the phases makes independent single-phase loads or disturbance of the operation of the original phase circuit and, consequently, the corresponding increases in consumption, heating of engines, etc.

References

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