

*power quality, power factor,
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THE INFLUENCE OF POWER QUALITY OF THE MAINS ON OPERATION CHARACTERISTICS OF AN UNCONTROLLED AND CONTROLLED INDUCTION MOTOR

The paper deals with the influence of power quality indices: the voltage distortion, the voltage unbalance and the voltage dip in the mains on operation characteristics of an induction motor directly fed from both the source and the frequency converter, and their comparing. There are mainly investigated energy characteristics as motor efficiency and motor power factor depending on the motor load in the paper. It is also shown that permitted power quality levels of both the voltage distortion and unbalance, especially in the case of the controlled drive, does not influence the induction motor operation characteristics a lot.

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