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# STEP-BY-STEP CALCULATION OF REACTIVE POWER COMPENSATION IN ELECTRICAL NETWORKS BASED ON THEIR DECOMPOSITION

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## Abstract

Method calculation of reactive power compensation, based on decomposition of electric network, in the article was development, which allows to do this calculation step-by-step in the individual subsystems of electric network taking into account the influence of other subsystems. This method is based on the decomposition of function reduction of active power losses, which allows to simplify the calculation of reactive power compensation for all electric networks on the whole. The analysis of decomposition of electric network is carried out and the example of calculation of reactive power compensation in an electric network based on decomposition is shown. References 7, figures 5, tables 2.

*Key words*: decomposition, reactive power compensation, electric networks.

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