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Phase Shift Elements Used to Start Single Phase Induction Motor

Abstract:

The paper analyzes the classical phase shift elements used in the various fields of electrotechnics. It is indicated the importance of these elements of an active, inductive and capacitive character being of a higher reliability than the elements based on the power electronics. It has been shown mathematically how the shift phase elements influence the values of the magnetic flux and the closed current through the circuit with the respectively phase element. The mathematical interpretation is accompanied by explanations of a physical nature, which makes the connection between the theory and the practical application of the phase shift elements.