Keynote Speaker

Squirrel-cage Induction Motor with Voltage Unbalance Compensation for Power System Application

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Abstract

A large number of squirrel-cage induction motors have been used in power system application such as power plant, factory and steel mills name a few because they are durable and cheaper than other types of AC motors. The induction motors are often driven directly by connecting to power grid source. However, it has possible to be damaged by voltage unbalance caused by increase of shingle-phase load, unbalance impedance on feeder or harmonic current caused from other equipment. In this talk, I will talk about a squirrel-cage induction motor with voltage unbalance compensation from a view point of AC motors. It can solve voltage unbalance problems by itself and keep driving performance during voltage unbalance period. The proposed approach is expected to solve many persistent problems such as overload current, local heating, noise, vibration and stalling when unbalanced voltage occurs.