Induction Motor Analysis Using LabVIEW

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Abstract : Proposed paper dealt with the modelling and analysis of induction motor based on the mathematical expression using the graphical programming environment of Laboratory Virtual Instrument Engineering Workbench (LabVIEW). Induction motor modelling with the mathematical expression enables the motor to be simulated with the various required parameters. Owing to the invention of variable speed drives study about the induction motor characteristics became complex.In this simulation motor internal parameter such as stator resistance and reactance, rotor resistance and reactance, phase voltage, frequency and losses will be given as input. By varying the speed of motor corresponding parameters can be obtained they are input power, output power, efficiency, torque induced, slip and current.

Keywords : induction motor, LabVIEW software, modelling and analysi, electrical and mechanical characteristics of motor