



IS 996 : 2009-Single Phase a.c. Induction Motors for General Purpose

Single phase AC induction motors are widely used in everyday applications, providing effective and efficient solutions for a variety of needs. Their **reliability**, cost-effectiveness, and simplicity make them a preferred choice in many residential and light commercial applications. Users expect them to be robust, able to withstand the rigors of regular use in applications like **fans, compressors, washing machines, and small pumps**. Users also look for **energy efficiency, low noise levels**, smooth **starting torque and running torque**, stability of load torque and thermal and **overload protection** in the motors.

Indian Standard 996 covers single-phase AC induction motors for general purpose, encompassing **capacitor-start, capacitor-start-capacitor-run, shaded pole**, and **split-phase** types. It specifies requirements and tests for motors with voltage ratings up to and including 250V and output up to and including 2200W, featuring **insulation classes B, F, and H**.

The standard specifies performance and safety requirements which cover **mounting types**, enclosure types, cooling methods, torques (**breakaway, pull-up, pull-out**), **temperature rise limits**, performance values (**full-load speed**, current, efficiency, power factor), insulation resistance, high- voltage withstand, moisture proofness, leakage current, winding resistance measurement, noise level, and over-speed test. The standard also specifies marking and connection diagrams, test procedures (type, routine, and acceptance), and guidelines for selecting **fan duty motors**.