

IS 12615 : 2018 - Line Operated Three Phase a.c. Motors (IE CODE)

“Efficiency Classes and Performance Specification”

The Indian Standard 12615:2018 covers three-phase AC induction motors. This Indian Standard specifies the efficiency classes and performance requirements of the line-operated induction motors, which is one of the major energy consumption equipment in the industrial landscape. The standard covers induction motors with different configurations such as power ratings from 0.12kW to 1000 kW, 2 to 8 poles, and voltages up to and including 1000V at 50 Hz.

The standard excludes certain motor types like those with over 10 poles, integrated frequency converters, and submersible motors. Energy efficiency classes (IE2, IE3, IE4) are central to the standard, defining minimum efficiency levels for various motor configurations. The standard details test procedures and requirements for performance parameters like earthing, dimensions, insulation Resistance, winding resistance, locked rotor torque, locked rotor current, full load current, momentary overload, and temperature rise.