(PREVIEW)

Indian Standard

ENERGY EFFICIENT INDUCTION MOTORS – THREE PHASE SQUIRREL CAGE

1 SCOPE

1.1 This standard covers the requirements and performance of energy efficient, 3 phase squirrel cage induction motors in 2, 4, 6 and 8 poles for all frame sizes up to 315 L, having output ratings as specified in IS 1231 for continuous duty (SI) operation, at rated voltage and frequency of 415 volts, 50Hz.

1.2 The performance of motors designed for operation on voltage, other than rated voltage of 415 V or up to 650 V, shall be in accordance with the relevant performance Tables 1 to 4 except the full load current values. The full load current will vary in the inverse proportion to the voltage in comparison to the values specified in the above-referred tables.

1.3 To conform to this standard and eligible to be considered as energy efficient, the motors shall meet the norms specified in Tables 1 to 4 when read with 4 related to site conditions as applicable. All performance values are subjected to tolerance specified in IS 325.

2 REFERENCES

The standards listed in Annex A are necessary adjuncts to this standard.

ANNEX A

(Clause 2)

LIST OF REFERRED INDIAN STANDARDS

IS No.	*Title*
325 : 1996	Three-phase induction motors *(first revision)*
900 : 1992	Code of practice for installation and maintenance of induction motors *(second revision)*
1231 : 1974	Dimension of three-phase foot-mounted induction motors *(third revision)*
1885 (Part 35) : 1993	Electrotechnical vocabulary: Part 35 Rotating machines *(first revision)*
2223 : 1983	Dimensions of flange mounted ac induction motors *(first revision)*
2254 : 1985	Dimensions of vertical shaft motors for pumps *(second revision)*

3043 : 1987	Code of practice for earthing *(first revision)*
4029: 1967	Guide for testing three-phase induction motors
4691 : 1985	Degrees of protection provided by enclosure for rotating electrical machinery *(first revision)*
4722 : 2001	Rotating electrical machines *(second revision)*
4728 : 1975	Terminal marking and direction of rotation for rotating electrical machinery *(first revision)*
4889 : 1968	Method of determination of efficiency of rotating electrical machines
6362 : 1995	Designation of methods of cooling of rotating electrical machines *(first revision)*
8789 : 1996	Values of performance characteristics for three-phase induction motors *(first revision)*
12065 : 1987	Permissible limits of noise level for rotating electrical machines
12075 : 1987	Mechanical vibration of rotating electrical machines with shaft heights 56 mm and higher-measurement, evaluation and limits of vibration severity *(superseding* IS 4729)
12615 : 1989	Energy efficient, three-phase, squirrel cage induction motors
12802 : 1989	Temperature-rise measurement of rotating electrical machine