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JIS C 4212 : 2000

(JEMA)

Low-voltage three-phase squirrel-cage high-efficiency induction motors

ICS 29.160.30

Descriptors : squirrel-cage motors, three-phase motors, performance testing

Reference number : JIS C 4212 : 2000 (E)

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of International Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal of establishing a Japanese Industrial Standard from the Japan Electrical Manufacturers' Association (JEMA) with a draft of Industrial Standard based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

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1 Scope This Japanese Industrial Standard specifies low-voltage three-phase squirrel-cage high-efficiency induction motors of continuous rating at a frequency 50 Hz or 60 Hz exclusively or 50 Hz/60 Hz in common, at a voltage not exceeding 600 V with a protection system IP2X (protected type) or IP4X (totally enclosed type) which are used in a place where the coolant temperature is not exceeding 40 ℃ and of which efficiency is higher than that of low-voltage three-phase squirrel-cage induction motors for general purpose (JIS C 4210) (hereafter referred to as "motors").

Remarks : The details of protection systems, IP2X and IP4X are as given in JIS C 4034-5.

2 Normative references The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 0401-1 *ISO system of limits and fits—Part 1: Bases of tolerances, deviations and fits*

JIS B 0401-2 *ISO system of limits and fits—Part 2: Tables of standard tolerance grades and limit deviations for holes and shafts*

JIS B 0902 *Driving and driven machines—Shaft heights*

JIS B 1001 *Diameter of clearance holes and counterbores for bolts and screws*

JIS B 1301 *Keys and their corresponding keyways*

JIS C 4034-5 *Rotating electrical machines—Part 5: Classification of degrees of protection provided by enclosures of rotating electrical machines (IP code)*

JIS C 4210 *Low-voltage three-phase squirrel-cage induction motors for general purpose*

IEC 60072-1 *Dimensions and output series for rotating electrical machines—Part 1: Frame numbers 56 to 400 and flange numbers 55 to 1 080*

3 Ratings

3.1 Rated voltages The rated voltages shall be as stated in table 1.

Table 1 Rated voltages

Unit : V

Rated voltage			
200	220	400	440