

**JB**

**INDUSTRY STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

**JB/T 7565.4-2004**

Replacing JB/T 5338-1991

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**Specification of flameproof three-phase induction motors - Part  
4: YB2 series flameproof (Ex d II C T1-T4) three-phase induction  
motors (frame size 63 to 355)**

隔爆型三相异步电动机技术条件 第4部分：YB2系列隔爆型（ExdIICT1～T4）三  
相异步电动机（机座号63～355）

**(English Translation)**

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### 1 Scope

This standard specifies the YB 2 flame-proof (Exd II CTI-T4) three-phase asynchronous motor in terms of type, basic parameters and dimension, technical requirements, test methods, inspection rules and requirements for marking and packaging.

This standard is applicable to flame-proof (ExdIICTI-T4) three-phase asynchronous motor (frame size 63-355) (hereinafter referred to as motor) and used by motors derived from this series for reference.

### 2 Normative References

The following standards contain provisions which, through reference in this part of JB/T 7565, constitute provisions of this part. For dated reference, subsequent amendments to (excluding correction to), or revisions of, any of these publications do not apply. However, the parties coming to an agreement based on this standard are encouraged to investigate whether the most recent editions of the standards indicated below apply. For undated references, the latest editions of the normative documents referred to apply.

GB/T 191 Packaging - Pictorial Marking for Handling of Goods (GB/T 191-2000, eqv ISO 780:1997)

GB 755 Rotating Electrical Machines - Rating and Performance (GB 755-2000, idt IEC 60034-1:1996)

GB/T 1032 Test Procedure for Three-phase Induction Motors

GB 3836.1 Electrical Apparatus for Explosive Gas Atmospheres - Part 1: General Requirements (GB 3836.1-2000, eqv IEC 60079-0:1998)

GB 3836.2 Electrical Apparatus for Explosive Gas Atmospheres - Part 2: Flameproof Enclosure "d" (GB 3836.2-2000, eqv IEC 60079-1: 1990)

GB/T 4772.1 Dimensions and Output Series for Rotating Electrical Machines - Part 1: Frame Numbers 56 to 400 and Flange Numbers 55 to 1080 ( GB/T 4772.1-1999, idt IEC 60072-1:1991)

GB/T 4942.1 Classification of Degrees of Protection Provided by Enclosures of Rotating Electrical Machines (IP Code) (GB/T 4942.1-2001, idt IEC 60034-5:1991)

GB 10068 Mechanical Vibration of Certain Machines with Shaft Heights 56mm and Higher - Measurement, Evaluation and Limits of Vibration Severity (GB 10068-2000, idt IEC 60034-14: 1996)

GB/T 10069.1 Measurement of Airborne Noise Emitted by Rotating Electrical Machinery and the Noise Limits - Engineering Method for the Measurement of Airborne Noise (GB/T 10069.1-1988, neq ISO1680-1:1986)

GB/T 12665 Requirements of Damp-heat Testing of Electrical Machine for Service in General Environmental Condition

JB/T 9615.1 Test Methods of the Interturn Insulation on Random Wound Winding for AC Low-voltage Machines

### 3.1

The motors shall be made into flameproof type according to the requirements of GB 3836.2, and the explosion-proof marks are ExdIICT1, ExdIICT2, ExdIICT3, ExdIICT4.

### 3.2

Motor enclosure protection level is IP 55.

### 3.3

The cooling method of motors is IC4II.

### 3.4

Construction and mounting type of motor are IMB3, IMB5, IMB6, IMB7, IMB8, IMB14, IMB34, IMB35, IMV1, IMV3, IMV5, IMV6, IMV15, IMV18 and IMV36 and the motor shall be manufactured according to those specified in Table 1.

Table 1

Frame size Construction and mounting type (IM)

63~71 B3, B5, B6, B7, B8, B14, B34, V1, V3, V5, V6, V18

80~112 B3, B5, B6, B7, B8, B14, B34, B35, V1, V3, V5, V6, V15, V18, V36

132~160 B3, B5, B6, B7, B8, B35, V1, V3, V5, V6, V15, V36

180~280 B3, B5, B35, V1

315~355 B3, B35, V1 3.5 Rating of the motor is continuous based on continuous duty (S1).

### 3.6

The rated frequency of motors is 50Hz , and the rated voltages are 380V, 660V and 380V/660V. The motors with power of 3kW or below shall be of Y-connection, and the rated voltage is 380V.

### 3.7

Motors shall be manufactured according to the following rated powers:

0.12kW, 0.18kW, 0.25kW, 0.37kW, 0.55kW, 0.75kW, 1.1kW, 1.5kW, 2.2kW, 3kW, 4kW, 5.5kW, 7.5kW, 11kW, 15kW, 18.5kW, 22kW, 30kW, 37kW, 45kW, 55kW, 75kW, 90kW, 110kW, 132kW, 160kW, (185kW), 200kW, (220kW), 250kW, (280kW), 315kW.

**Note:** The above specifications in brackets are not recommended.

### 3.8

The corresponding relation between the frame size and rotating speed/power of motors shall be in accordance with those specified in Table 2.

Table 2