

ICS 29.160.01

CCS K20



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

GB/T 12351-2008

Replacing GB/T 12351-1990

**Environmental technical requirements of rotating electric
machines for tropical use**

热带型旋转电机环境技术要求

Issued on: June 13, 2008

Implemented on: March 1, 2009

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

Table of Contents

Foreword	I
1 Scope	1
2 Normative references	1
3 Motor type climate protection and use of environmental conditions	1
4 Technical requirements	4
5 Test methods	7

Foreword

This standard replaces GB/T 12351-1990 "tropical rotary motor ambient technical requirements."

This standard compared with the original GB/T 12351-1990, there are major differences between.

--- Reference standard was updated;

--- Increased "leakage current 4.2.5" clause;

--- 4.3.3 adds provisions relating to motor parts natural outdoor exposure test;

--- Deleted Appendix A, the contents of a direct reference to GB/T 9286 "Paints and varnishes cut test" relevant "content."

The standard proposed by China Electrical Equipment Industrial Association.

This standard by the National Standardization Technical Committee of the motor rotation.

This standard was drafted. China Electric Apparatus Research Institute.

The main drafters of this standard. Yan Jinglian, Liao Guoqing.

This standard replaces the standards previously issued as follows.

Tropical rotary motor ambient technical requirements

1 Scope

This standard specifies the protection of the motor type, environmental conditions, technical requirements, test methods, inspection rules and signs.

This standard applies to the rotary motor tropics stationary use.

Tropical rotating motor (including large, medium, small and low-power motors, hereinafter referred to as motor) shall comply with the provisions of this standard. Where this standard Regulations and instructions for those who have not, shall comply with the provisions of GB 755-2000, GB/T 5171-2002 and special technical conditions of the corresponding product.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent

Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research

Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB 755-2000 rotating motor fixed and performance (idt IEC 60034-1.1996)

GB/T 2423.4-1993 electric and electronic products environmental testing procedures Test Db. Damp heat test, cyclic (eqv IEC 60068-2-78. 1985)

GB/T 2423.16-1999 Environmental testing for electric and electronic products Part 2. Test methods Test J and guidance. Mould growth (Eqv IEC 60068-2-10. 1988)

GB/T 2423.17-1993 electric and electronic products environmental testing procedures Test Ka. Salt mist (eqv IEC 60068-2-11. 1981)

GB/T 4798.3-2007 application of electric and electronic products environmental conditions - Part 3. Stationary use at weather protected locations (IEC 60721-3-3.2002, MOD)

GB/T 4798.4-2007 application of electric and electronic products environmental conditions - Part 4. No fixed workplace climate protection use (IEC 60721-3-4.1995, MOD)

GB/T 4942.1-2006 overall structure of the rotary motor protection (IP code) Classification (IEC 60034-5.2000, IDT)

GB/T 5171-2002 General technical requirements for small power motors

GB/T 9286-1998 Paints and varnishes cut test (eqv ISO 2409.1992)

GB/T 13384-1992 mechanical and electrical products packaging General technical conditions

GB/T 16422.1-2006 Plastics - Methods of exposure to laboratory light sources - Part 1. General (ISO 4892-1.1999, IDT)

JB/T 4159-1999 General technical requirements for tropical electrical products

3.1 Climate Protection type

Climate protection type motor is divided into.

- a) type of tropical heat, weather protected locations (TH); humid tropical type, non-weather protected locations (THW);
- b) tropical dry heat type, weather protected locations (TA); tropical dry heat type, non-weather protected locations (TAW);
- c) Tropical common type, weather protected locations (T); tropical ordinary, non-weather protected locations (TW).

3.2 Use of environmental conditions

Environmental conditions include. weather conditions (K), the special climatic conditions (Zh --- heat radiation, Za --- ambient air flow, Zw --- except

Rain outside water), biological conditions (B), chemically active material conditions (C), the mechanical condition of the active substance (S) and mechanical conditions (M), a total of Six.