

ICS 27.180
CCS F 11



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

GB/T 19960.1-2005

Replacing GB/T 19960.1-2005; GB/T 19960.2-2005

**Wind energy generation systems - General technical
specification and test method of wind turbines
(English Translation)**

Issued on: April 25, 2024

Implemented on: November 1, 2024

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

Preface
1 Scope
2 Normative references
3 Terms and definitions
4 General technical requirements for units
5 Technical requirements for unit components and systems
6 Test methods
7 Inspection Rules
8 Markings, labels, instructions for use
9 Packaging, transportation and storage
10 Others
Appendix A (Informative) Test report format and content
Reference

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting:

This document replaces GB/T 19960.1-2005 "Wind turbines - Part 1: General technical requirements" and GB/T 19960.2-

2005 Wind turbine generator systems Part 2: General test methods: Similar to GB/T 19960.1-2005 and GB/T 19960.2-2005 in addition to structural adjustments and editorial changes, the main technical changes are as follows:

--- Changed the scope of application (see Chapter 1, Chapter 1 of GB/T 19960.1-2005 and GB/T 19960.2-2005);

--- Changed the terms and definitions (see Chapter 3, Chapter 3 of GB/T 19960.1-2005);

--- Changed the general technical requirements for units (see Chapter 4, Chapter 4 of GB/T 19960.1-2005);

--- Changed the technical requirements for unit components and systems (see Chapter 5, Chapter 5 of GB/T 19960.1-2005);

--- The test method has been changed, the test conditions have been refined, and the test

content and methods have been changed (see Chapter 6, GB/T 19960.2-2005 Chapters 3, 4, and 5 of the);

--- Changed the inspection rules (see Chapter 7, Chapter 7 of GB/T 19960.1-2005);

--- Changed the signs, labels and instructions for use (see Chapter 8, Chapter 8 of GB/T 19960.1-2005);

--- Changed packaging, transportation and storage (see Chapter 9, Chapter 9 of GB/T 19960.1-2005);

--- Deleted the product quality assurance period (see Chapter 10 of GB/T 19960.1-2005):

1 Scope

This document specifies the general technical requirements, test methods, inspection rules, marking, labeling, use and maintenance of wind turbines and their components and systems:

Instructions for use, packaging, transportation, storage, etc:

This document applies to large horizontal axis grid-connected wind turbines (hereinafter referred to as "units"):

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document:

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document:

GB/T 311.1 Insulation coordination Part 1: Definitions, principles and rules GB/T 997 Classification of structural types, installation types and terminal box positions of rotating electrical machines (IM code) GB/T 1094.16 Power transformers Part 16: Transformers for wind power generation GB/T 2900.53 Electrical terminology Wind turbine generator system GB/T 3906 3:6kV~40:5kV AC metal-enclosed switchgear and control equipment GB 4715 Point-type smoke detectors GB 4716 Point-type heat-sensing fire detector GB 4717 Fire alarm controller GB/T 4942 Protection degree of rotating electrical machine integral structure (IP code) Classification GB/T 5226.1 Electrical safety of machinery Electrical equipment of machinery Part 1: General technical requirements GB 5226.3 Safety of machinery - Electrical equipment of machinery - Part 11: Voltages above 1000V a.c. or 1500V d.c. but not exceeding Technical conditions for 36kV high voltage equipment GB/T 6404.1 Acceptance specification for gear units Part 1: Test specification for airborne noise GB/T 6404.2 Acceptance specification for gear units Part 2: Determination of mechanical

vibration of gear units during acceptance tests GB/T 9969 General principles for instructions for use of industrial products GB/T 11022 Common technical requirements for high voltage AC switchgear and controlgear standards GB 16806 Fire linkage control system GB/T 17626.1 Electromagnetic compatibility test and measurement technology - General introduction to immunity test GB/T 17626.2 Electromagnetic compatibility test and measurement technology Electrostatic discharge immunity test GB/T 17626.3 Electromagnetic compatibility test and measurement technology Radio frequency electromagnetic field radiation immunity test GB/T 17626.4 Electromagnetic compatibility test and measurement technology Electrical fast transient pulse group immunity test GB/T 17626.5 Electromagnetic compatibility test and measurement technology Surge (impact) immunity test GB/T 17626.6 Electromagnetic compatibility test and measurement technology - Immunity to conducted disturbances induced by radio frequency fields GB/T 17626.12 Electromagnetic compatibility test and measurement technology Part 12: Ringing wave immunity test GB/T 17626.18 Electromagnetic compatibility test and measurement technology Damped oscillation wave immunity test GB/T 18380.35 Fire tests for electric and optical cables under fire conditions Part 35: Fire tests for vertically mounted bundled wires and cables