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

GB/T 11026.8-2025

Replacing GB/T 11026.8-2014

**Electrical insulating materials - Thermal endurance properties -
Part 8: Determination of thermal endurance indices(TI and RTI)
of an insulating material using the fixed time frame method
(English Translation)**

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Table of Contents

Preface	
Introduction	
1 Scope	
2 Normative References	
3 Terms, Definitions, Symbols, and Abbreviations	
3.1 Terms and Definitions	
3.2 Symbols and Abbreviations	
4 FTFM Procedures	
4.1 Principles of FTFM Procedures	
4.2 FTFM Objectives	
5 TI determination	
5.1 Aging Process	
5.2 Aging time and aging temperature	
5.3 Sample	
5.4 Diagnostic Tests	
5.5 Destination Selection	
5.6 Determination of Initial Performance Values	
5.7 Aging conditions	
5.8 Aging Process	
6 Calculation Procedure	
6.1 General Principles	
6.2 Calculation Accuracy	
6.3 Derivation of Temperature Equivalent Performance Values	
6.4 Regression Analysis (Relationship between Temperature and Time)	
6.5 Statistical Tests	
6.6 Heat resistance (Figure 13)	
7 Calculation and Requirements of Results	
7.1 Heat resistance calculation	
7.2 Results Report	
8 Report	
9 RTI confirms	
10 Other symbols	

11 Test Procedure
11.1 Selection of Benchmark EIM
11.2 Selection of Diagnostic Tests for Prolonged Aging Process
11.3 Aging Procedure
12 Calculation Procedure
12.1 General Principles
12.2 Input data
12.3 RTI
12.4 Confidence Limit
12.5 Extrapolation
13 Results and Reports
13.1 Statistical and Numerical Experiment Results
13.2 Results
13.3 Report
Appendix A (Normative) Judgment Flowchart
Appendix B (Normative) Judgment Table
Appendix C (Informative) Statistical Table
Appendix D (Informative) Recommended Aging Time and Temperature
D.1 TI determination
D.2 RTI determined
Appendix E (Informative) Atlas
Appendix F (Normative) Statistical significance of the difference between two regression estimates
Appendix G (Informative) Computer Programs
G.1 General Provisions
G.2 Data File
References

Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents". Drafting.

This document is Part 8 of GB/T 11026 "Heat Resistance of Electrical Insulation Materials". GB/T 11026 has already published the following parts.

---Part 1: Aging Procedures and Evaluation of Test Results;

- Part 2: Selection of Test Judgment Criteria;
- Part 3: Procedures for calculating heat resistance characteristic parameters;
- Part 4: Aging Oven - Single Chamber Oven;
- Part 5: Precision ovens with aging temperatures up to 300°C;
- Part 6: Aging Ovens - Multi-chamber Ovens;
- Part 7: Determining the Relative Temperature Index (RTI) of Insulating Materials;
- Part 8: Determining the heat resistance index (TI and RTI) of insulating materials using the fixed time limit method;
- Part 9: Guidelines for calculating heat resistance using simplified procedures;
- Part 10: Guidelines for accelerating the determination of the relative heat resistance index (RTEA) based on activation energy calculations using analytical experimental methods.

This document replaces GB/T 11026.8-2014 "Electrical Insulation Materials - Heat Resistance Part 8: Determination of Insulation Materials by Fixed Time Limit Method".

The heat resistance index (TI and RTE) of the material, compared with GB/T 11026.8-2014, has undergone major technical changes except for structural adjustments and editorial modifications. The following is a simplified version.

- a) The standard "GB/T 11026.1-2003" has been changed to "GB/T 11026.1" (see 4.1, 7.2.2 and 13.3, and 4.1.1, 7.2.2 and 13.3 in the 2014 edition);
- b) The standard "GB/T 11026.3-2006" has been changed to "GB/T 11026.3-2025" (see 13.1, 2014 edition).
- c) The standard "GB/T 21223-2007" has been changed to "GB/T 21233" (see 6.1.1, 2014 version of 6.1.1);
- d) The standard "IEC 60216-5" has been changed to "GB/T 11026.7-2025" (see Chapter 9, 2014 edition, 13.2);
- e) The term and definition of "electrical insulation materials" have been added (see 3.1.1);
- f) The term "estimated heat resistance index" has been changed to "estimated temperature index" (see 3.1.2, 3.1.1 in the 2014 version);
- g) The term "Materials to be Evaluated" has been changed to "EIM to be Evaluated" (see 3.1.5, 3.1.4 in the 2014 version);
- h) The term "benchmark material" has been changed to "benchmark EIM" (see 3.1.8, 3.1.7 in the 2014 version);

- i) The term "relevant time" has been changed to "relevant time of RTI" (see 3.1.10, 3.1.9 in the 2014 version);
- j) Changed "Relevant Time" to "TI Relevant Time" (see 3.1.11, 3.1.10 in the 2014 version);
- k) The term "relative heat resistance index" has been changed to "relative temperature index" (see 3.1.19, 3.1.18 in the 2014 version);
- l) The term "Relative Heat Resistance Index (RTE)" has been changed to "Relative Temperature Index (RTI)" (see full text, 2014 edition).
- m) The definition of "temperature index" has been changed (see 3.1.23, 3.1.22 in the 2014 version);
- n) Added "TI's report format derived for time periods other than 20000h" (see 7.2.2);
- o) The format for presenting experimental results in the "Results" section has been changed (see 13.2, 2014 version 13.2);
- p) The term "Dataset (ATE)" in Appendix F has been changed to "Dataset (ATI)" (see Appendix F, Appendix F of 2014).

This document is modified to adopt IEC 60216-6:2022 "Electrical insulating materials - Heat resistance - Part 6: Determination of the heat resistance index (TI and RTI) of insulating materials by the fixed time limit method".

The technical differences between this document and IEC 60216-6:2022, and the reasons therefor, are as follows.

- a) IEC 60216-1:2013 (see Chapter 1) has been replaced with the normatively referenced GB/T 11026.1 to improve operability;
- b) IEC 60216-2 (see Chapters 1 and 5) has been replaced with the normatively referenced GB/T 11026.2 to improve operability;
- c) IEC 60216-4-1 (see 5.7.1) has been replaced with the normatively referenced GB/T 11026.4 to increase operability;
- d) IEC 60216-4-2 (see 5.7.1) has been replaced with the normatively referenced GB/T 11026.5 to increase operability;
- e) IEC 60216-4-3 (see 5.7.1) has been replaced with the normatively referenced GB/T 11026.6 to increase operability;
- f) IEC 60212 (see 5.7.2) has been replaced with the normatively referenced GB/T 10580 to increase operability;
- g) IEC 60493-1 (see 6.1.1) has been replaced with the normatively referenced GB/T 21223.1 to increase operability;