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**NATIONAL STANDARD OF THE
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**Test methods for electroheating installations - Part 12: Infrared
electroheating installations**

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Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Scope of the device under test	3
4.1 Energy considerations	3
4.2 Intermittent device	4
4.3 Continuous device	4
5 Test types and general test conditions	4
5.1 General requirements	4
5.2 Test item	5
5.3 Test conditions	5
5.4 Infrared analog load	6
6 measurement	6
6.1 General requirements	6
6.2 Time resolution	6
6.3 Measurement of electrical parameters	6
6.4 Temperature measurement	6
7 Technical test	7
7.1 Device performance dependent on supply voltage	7
7.2 Energy consumption and time of cold start operation	7
7.3 Power consumption during thermal steady-state operation	7
7.4 Power consumption of holding operation	8
7.5 Energy consumption and time of closing operation	8
7.6 Energy consumption in routine maintenance operations	8
7.7 Energy Consumption in Normal Work	8
7.8 Cumulative energy consumption and peak power consumption	9
7.9 Net production capacity	9
7.10 Energy efficiency transferred to charge	9
7.11 Expected operating scope	9
7.12 Uniformity of processed workpiece	10
7.13 Infrared radiation distribution in the heating chamber	10
8 Equipment efficiency	10

8.1 General requirements	10
8.2 Infrared conversion efficiency	10
8.3 Electric heating efficiency	11
8.4 Power usage efficiency	11
8.5 Energy consumption of the workpiece	12
Appendix A (Normative Appendix) Energy Conversion Efficiency	13
Appendix B (Normative Appendix) Uniformity of Workpiece	16
Appendix C (informative appendix) Measurement of radiation distribution in the device ...	18
Reference	19

Foreword

GB/T 10066 has 12 parts.

---GB/T 10066.1 Test methods for electric heating and electromagnetic treatment devices
Part 1.General parts;

---GB/T 10066.2 Test methods for electric heating and electromagnetic treatment devices
Part 2.Direct electric arc furnace;

---GB/T 10066.3 Test method of electric heating device Part 3.Core induction furnace and
coreless induction furnace;

---GB/T 10066.31 Test methods for electric heating and electromagnetic treatment devices
Part 31.Induction diathermy device;

---GB/T 10066.4 Test method for electric heating equipment Part 4.Indirect resistance
furnace;

---GB/T 10066.5 Test methods for electric heating devices Part 5.Plasma equipment for
electric heating and electrochemistry;

---GB/T 10066.6 Test methods for electric heating and electromagnetic treatment devices
Part 6.The output power of industrial microwave heating devices

test methods;

---GB/T 10066.7 Test method for electric heating device Part 7.Electric heating device with
electron gun;

---GB/T 10066.8 Test methods for electric heating devices Part 8.Electroslag remelting
furnace;

---GB/T 10066.9 Test methods for electric heating devices Part 9.Determination of output
power of high-frequency dielectric heating devices;

---GB/T 10066.11 Test method of electric heating device Part 11.Submerged arc furnace;

---GB/T 10066.12 Test methods for electric heating devices Part 12.Infrared electric heating devices.

This part is Part 12 of GB/T 10066.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

This part replaces GB/T 10066.12-2006 "Test Methods for Electric Heating Devices Part 12.Infrared Heating Devices", and

Compared with GB/T 10066.12-2016, the main technical changes are as follows.

---Replace GB 5959.1-2005 with GB/T 5959.1-2019, delete other normative references, add

GB/T 5959.12-2020 (see Chapter 2, Chapter 2 of the.2006 edition);

---Modified "Terms and Definitions" (see Chapter 3, Chapter 3 of the.2006 edition);

---Added the relevant content of simulated load (see 3.3.2);

--- Increase the "range of devices under test", set "energy considerations", "intermittent devices" and "continuous devices" 3 articles (see Article 4 chapter);

--- Deleted the cold test items (see.2006 version 6.1 and 7.1);

---This section focuses on energy consumption, energy efficiency measurement and radiation distribution measurement, and deletes electric shock protection measures test and insulation resistance measurement.

Test items such as the amount, insulation and withstand voltage test [see.2006 edition 6.2a)~i), and 7.2.1~7.2.8];

---Integrate other test items and merge them into 13 test items of "technical test";

---Added the normative appendix A energy conversion efficiency, normative appendix B workpiece uniformity, and informative appendix C radiation inside the device

Distribution measurement.

This section uses the redrafting method to modify and adopt IEC 62693.2013 "Test Methods for Infrared Electric Heating Devices of Industrial Electric Heating Devices".

The technical differences between this part and IEC 62693.2013 and the reasons are as follows.

---Regarding normative reference documents, this section has made adjustments with technical differences to adapt to my country's technical conditions and adjustments.

The situation is collectively reflected in Chapter 2 "Normative Reference Documents", and the specific adjustments are as follows.

* Replace IEC 60519-1.2010 with GB/T 5959.1-2019 which is equivalent to adopting international standards;

* Replace IEC 60519-12.2013 with GB/T 5959.12-2020 which is equivalent to adopting international standards.

This section has made the following editorial changes.

--- Amend the standard name to "Test Methods for Electric Heating Devices Part 12. Infrared Electric Heating Devices".

This part was proposed by China Electrical Equipment Industry Association.

This part is under the jurisdiction of the National Industrial Electric Heating Equipment Standardization Technical Committee (SAC/TC121).

Drafting organizations of this section. Xi'an Electric Furnace Research Institute Co., Ltd., National Infrared and Industrial Electric Heating Product Quality Supervision and Inspection Center, Dalian Li

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Introduction

The "Test Methods for Electric Heating Devices" specifies the test methods for different types of electric heating devices, and the special test method standards for infrared electric heating devices.

Must be one of them.

This part also includes the test methods for electric furnaces within the scope of IEC 60397 [3], provided that the infrared radiation is predetermined in such equipment

Heat transfer mode, this assumption is valid when the actual or processing temperature is higher than 700 degrees C, it has nothing to do with the rated temperature of the electric furnace.

This part only relates to the test of infrared equipment and devices. The test of the performance of the infrared transmitter is specified in IEC 62798.

Because infrared devices are usually manufactured by other companies rather than the