

ICS 17.220
CCS A 55

JJF

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

JJF 1540-2015

**Calibration specification for online testers of winding
temperature rise
(English Translation)**

Issued on: June 15, 2015

Implemented on: September 15, 2015

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine**

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Introduction

This specification based JJF 1071-2010 "National Calibration Specifications writing rules" establishment.

The drafting of this specification with reference to the use of the relevant provisions of the following national standards. GB 755 fixed and rotary motor of Energy; Part 1 GB 4706.1 Safety of household and similar electrical appliances. General requirements; GB 9706.1 Medical Electrical equipment - Part 1. General requirements for safety.

The specification for the first time to develop.

Online Winding Temperature Calibration Specification

1 Scope

This specification applies to power frequency (50Hz or 60Hz) line winding temperature rise tester under conditions (hereinafter referred to as test Tester) calibration resistor function. This specification does not apply to online inverter winding temperature rise tester calibration.

2. References

This specification refers to the following documents.

GB 755 rotary motor fixed and performance.

Part 1 GB 4706.1 Safety of household and similar electrical appliances. General requirements.

GB 9706.1 Medical Electrical Equipment Part 1. General requirements for safety.

For dated references, only the edition applies to the specification; undated reference documents Member, the latest edition (including any amendments) applies to this specification.

3 Overview

Tester is a measure of motors and transformers and other electrical products in the charged state of the work for electronic winding temperature rise Equipment, mainly by the DC current source, filter, A/D converters, optical isolators and microcontrollers and other components, Winding temperature measurement is widely used in medical electronics, home appliances and farm equipment and other products.

Tester belong to resistance measuring instrument, its working principle is the direct current output by the constant current source to test internal winding, A voltage signal is amplified, after A/D conversion and the CPU into the display circuit, respectively measured electrical windings no pressure loading and loading resistance value obtained at power measured winding temperature resistance method (calculation formula see Appendix D) Working

temperature rise for some time.

4 Metrological characteristics

4.1 DC Resistance

Tester DC resistance measurement range of 0.1ohm ~ 10kohm, the maximum permissible error does not exceed $\pm 0.2\%$.

4.2 load voltage change rate on in winding the charged state, the applied voltage variation of resistance tester indication of the impact does not exceed $\pm 0.2\%$.

Note: All the above technical indicators are not used for determining eligibility for reference only.

5 calibration conditions

5.1 Environmental conditions Ambient temperature. $20\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$;

Relative humidity. 35% ~ 75%.

5.2 Power supply

a) voltage. $220\text{V} \pm 22\text{V}$;