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JJF

NATIONAL METROLOGY TECHNICAL SPECIFICATION OF THE

PEOPLE'S REPUBLIC OF CHINA

JJF 1768-2019

Rules of Metrology Testing for Energy Efficiency of Heat Pump Water Heaters

热泵热水机（器）能源效率计量检测规则

(English Translation)

Implemented on: December 27, 2019

Issued by: State Administration for Market Regulation

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Introduction

In order to standardize the energy efficiency measurement and inspection work of heat pump water heaters (heaters) that implement energy efficiency label management, according to According to the requirements of JJF 1261.1-2017 "Energy Efficiency Measurement and Testing Rules for Energy-using Products", this specification is formulated.

This specification is released for the first time.

Energy efficiency measurement of heat pump water heater Detection rules

1 Scope

This specification stipulates that it is driven by an electric motor, adopts a vapor compression refrigeration cycle, and uses air as a heat source to provide hot water Energy efficiency measurement requirements, measurement testing procedures, measurement testing methods, and measurement of heat pump water heaters (appliances) for the purpose Test results evaluation criteria and test reports, etc.

This specification is applicable to the energy efficiency measurement supervision and testing of heat pump water heaters (appliances). For entrusted testing, please refer to this specification.

Row. Units that produce and sell heat pump water heaters (appliances) can also conduct inspections with reference to this specification.

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This specification does not apply to water source heat pump water heaters.

The heat pump water heater (device) to be tested should be a product that has passed the self-inspection of the manufacturer, or imported or sold by the seller.

Merchandise for sale.

2 Reference documents this specification refers to the following documents.

JJF 1261.1-2017 Energy efficiency measurement and testing rules for energy-using products GB/T 2829-2002 Periodic Inspection Attribute Sampling Procedure and Table (Applicable to the Inspection of Process Stability) GB/T 21362-2008 Commercial or industrial heat pump water heaters and similar uses GB/T 23137-2008 Household and similar heat pump water heaters GB 29541-2013 Heat pump water heater (heater) energy efficiency limit value and energy efficiency grade for dated reference documents, only the dated version applies to this specification; for undated references the latest version (including all amendments) is applicable to this specification.

3 Terms and units of measurement the following terms and measurement units apply to this specification.

3.1 Primary heating heat pump water heater (device) instantaneousheatpumpwaterheater the initial cold water flows through the heat exchanger inside the heat pump water heater (heater) once to reach the heat pump heat set by the user Water machine (apparatus).

3.2 Circulating heating heat pump water heater (device) circulatingheatpumpwaterheater the initial cold water flows through the heat exchanger in the heat pump water heater (heater) several times and gradually reaches the heat pump water heater (heater) of the set temperature.

3.3 Static heating heat pump water heater (device) staticheatpumpwaterheater Through the direct or indirect contact of the heat exchanger with the water, the heated water side gradually reaches the set temperature in the form of natural convection the temperature of the heat pump water heater.

3.4 Heatingcapacity

Under the specified test conditions and conditions, the heat provided by the heat pump water heater per unit time to the heated water is calculated.

The unit of measure is W.

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