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JJF

NATIONAL METROLOGY TECHNICAL SPECIFICATION OF THE

PEOPLE'S REPUBLIC OF CHINA

JJF 1766-2019

Rules of Metrology Testing for Energy Efficiency of Water Chilling Packages

冷水机组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

To standardize the energy efficiency measurement of vapor compression cycle chilled water (heat pump) units that implement energy efficiency label management in accordance with the requirements of JJF 1261.1-2017 "Energy Efficiency Measurement and Testing Rules for Energy-using Products", this specification.

This specification is released for the first time.

Energy efficiency of chillers Measurement and detection rules

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1 Scope

This specification specifies the vapor compression cycle chilled water (heat pump) unit (hereinafter referred to as "cold water" Unit") energy efficiency measurement requirements, measurement testing procedures, measurement testing methods, measurement testing results Rules and test reports.

This specification applies to the energy efficiency measurement supervision and testing of chillers, and the commissioned testing can refer to this specification. produce and the unit that sells chillers can also conduct inspections with reference to this specification.

The chiller to be tested should be a product qualified by the manufacturer's self-inspection, or imported and sold by the seller commodity.

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 10870-2014 vapor compression cycle chilled water (heat pump) unit performance test method GB/T 18430.1-2007 Vapor compression cycle chilled water (heat pump) unit Part 1: Industrial or commercial Cold water (heat pump) units for use and similar purposes GB/T 18430.2-2016 Vapor compression cycle chilled water (heat pump) unit Part 2: Household and similar Purpose of cold water (heat pump) unit GB 19577-2015 Energy efficiency limit values and energy efficiency grades for chillers 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 Refrigeration capacity ratedtotalrefigeratingcapacity the heat absorbed by the refrigerant from the cold water in the unit evaporator per unit time, that is, the mass flow of cold water multiplied by the evaporation the product of the difference between the inlet and outlet cold water specific enthalpy, the unit of measurement is kW.

3.2 Total electric power consumption ratedtotalgrosselectricpower Under the specified refrigeration (heat) capacity test conditions, the sum of the input power consumed by the unit during operation. Measure the unit is kW.

Note:

1 The total electric power consumption includes the input power of the compressor motor, oil pump motor, electric heater and operation control circuit.

2 For air-cooled units, the total electrical power consumption also includes cooling fan power; for evaporative cooling units, the total input power is also

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