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NATIONAL METROLOGY TECHNICAL SPECIFICATION OF THE PEOPLE'S REPUBLIC OF CHINA

JJF 1770-2019

Rules of Metrology Testing for Energy Efficiency of Multi-connected Air-condition(heat pump) Units

多联式空调（热泵）机组能源效率计量检测规则

(English Translation)

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Introduction

In order to standardize the implementation of energy efficiency labeling management of multi-unit air conditioning (heat pump) units (hereinafter referred to as "multi-unit Machine") energy efficiency measurement and testing work, according to JJF 1261.1-2017 "Energy efficiency measurement and testing of energy-using products According to the requirements of the Rules, this specification is formulated.

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This specification is released for the first time.

Multi-connected air conditioning (heat pump) unit Energy efficiency measurement and testing rules

1 Scope

This specification specifies the energy efficiency measurement requirements, measurement testing procedures, and Measurement and testing methods, measurement and testing results evaluation criteria and testing reports, etc.

This specification applies to multi-line energy efficiency measurement supervision and testing, and commissioned testing can refer to this specification. Production and Sales of multi-line units can also refer to this specification for testing.

The multi-line energy efficiency measurement and detection method specified in this specification is the air enthalpy difference method.

This specification does not apply to units with dual refrigeration cycle systems and multiple refrigeration cycle systems.

The multi-line tested should be products that have passed the self-inspection of the manufacturer, or the products imported and sold by the seller.

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 17758-2010 Unit type air conditioner GB/T 18837-2002 Multi-connected air conditioning (heat pump) unit GB 21454-2008 Multi-connected air conditioning (heat pump) unit energy efficiency limit value and energy efficiency grade GB 27941-2011 Application design and installation requirements for multi-unit air conditioning (heat pump) units for dated reference documents, only the dated version applies to this specification; for undated reference documents, 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 Cooling capacity Under the specified refrigeration capacity test conditions, the unit of measurement is W for the heat exhausted from enclosed spaces, rooms or areas on multiple lines.

3.2 Cooling power consumption Under the specified refrigeration capacity test conditions, the total power consumed during multi-line operation is measured in W.

3.3 Refrigeration energy efficiency ratio Under the specified refrigeration capacity test conditions, the ratio of multi-line refrigeration capacity to refrigeration power consumption is

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measured in W/W.

3.4 Refrigeration comprehensive performance coefficient A test and calculated according to the method described in Appendix B, describing the value of multi-line part-load cooling efficiency, the unit of measurement is W/W.

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