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Centrifugal water chillers

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Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by The Japan Refrigeration and Air Conditioning Industry Association (JRAIA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently JIS B 8621:2011 is replaced with this Standard.

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Centrifugal water chillers

JIS B 8621:2019

1 Scope

This Japanese Industrial Standard specifies requirements for the centrifugal water chillers (hereafter referred to as chillers) which perform cooling or heating of water by the refrigerating cycle consisting of a centrifugal compressor, compressor driving motor, evaporator, water cooled condenser, auxiliary refrigerant pipings and control system. The refrigeration capacity or heat pump heating capacity covered by this Standard is 150 kW and over according to the standard rating specified by this Standard.

Further, this Standard is applicable to chillers for use with a functional refrigerant having a saturation vapour pressure of not more than 3 MPa at the temperature of 35 °C; those chillers which depends on use of brine other than water to perform cooling and heating, or chillers intended for drinking water are not covered by this Standard.

NOTE All pressures indicated in this Standard are gauge pressures.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 8240 Construction of pressure vessels for refrigeration

JIS Z 8731 Acoustics—Description and measurement of environmental noise

3 Terms and definitions

For the purpose of this Standard, the following terms and definitions apply.

3.1

rating

characteristics of the chiller when it is operated under the prescribed manufacture standard conditions

There are standard rating and non-standard rating.

3.2

standard rating

rating where the manufacture standard conditions of the chiller are standard rating conditions

3.3

non-standard rating

rating where the manufacture standard conditions of the chiller are non-standard rating conditions