

JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS B 8614 : 2018

(JRAIA/JSA)

**Mechanical transport refrigeration
units—Test method of cooling
capacity**

ICS 27.200

Reference number : **JIS B 8614 : 2018 (E)**

B 8614 : 2018

Date of Establishment: 1981-11-01

Date of Revision: 2018-03-20

Date of Public Notice in Official Gazette: 2018-03-20

Investigated by: Japanese Industrial Standards Committee
Standards Board for ISO area

JIS B 8614:2018, First English edition published in 2018-12

Translated and published by: Japanese Standards Association
Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

© JSA 2018

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

KK/AT

PROTECTED BY COPYRIGHT

Contents

	Page
Introduction	1
1 Scope	1
2 Normative reference	1
3 Terms and definitions	1
4 Test preparation	2
5 Test condition	2
5.1 Test air temperature	2
5.2 Number of revolutions of compressor	2
5.3 Terminal voltage of electric motor for blower	3
5.4 Low-pressure piping length	3
6 Test apparatus and measuring instrument	3
6.1 Test apparatus	3
6.2 Measuring instrument	4
7 Measurement method	6
7.1 General	6
7.2 Heat insulation capacity of calorimeter	6
7.3 Cooling capacity of refrigeration unit	7
8 Record of test results	8

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 8614:2007** is replaced with this Standard.

This **JIS** document is protected by the Copyright Law.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

Mechanical transport refrigeration units— Test method of cooling capacity

Introduction

This Japanese Industrial Standard was established in 1981 and has gone through three revisions up to the present. The last revision was made in 2007, and the revision at this time is to respond to modifications in technical contents including the change in the number of revolutions of compressors and the introduction of regulation on the low-pressure piping length.

No corresponding International Standard has been established at this point.

1 Scope

This Standard specifies the cooling capacity test method of the mechanical transport refrigeration unit which cools inside the insulated bodies of vehicles using an evaporator equipped with a blower (hereafter referred to as refrigeration units) among refrigeration units to be installed in the insulated or refrigerated vehicles which transport goods at a fixed temperature.

2 Normative reference

No normative reference is available.

3 Terms and definitions

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

3.1

refrigeration unit

equipment which consists of a compressor, drive unit, condenser, evaporator, refrigerant line, control device, electric wiring, etc. and which can be installed on vehicles for the purpose of refrigeration (including insulation) inside the bodies of vehicles

3.2

drive unit

power unit for driving a compressor

3.3

main prime mover drive refrigeration unit

refrigeration unit driving a compressor by the driving force of a mover for running vehicles

3.4

auxiliary prime mover drive refrigeration unit

refrigeration unit driving a compressor by the driving force of a mover exclusively for refrigerators