AS/NZS 4864.1:2008

Australian/New Zealand Standard™

Performance of refrigerated beverage vending machines

Part 1: Test methods—Energy performance

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee ME-008, Refrigerated Display Cabinets. It was approved on behalf of the Council of Standards Australia on 23 May 2008 and on behalf of the Council of Standards New Zealand on 31 May 2008.
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The following are represented on Committee ME-008:

Australian Food and Grocery Council
Australian Greenhouse Office, Department of the Environment and Heritage
Australian Industry Group
Australian Institute of Refrigeration Air Conditioning and Heating
Australian Retailers Association
Electrical Compliance Testing Association
Energy Efficiency & Conservation Authority of New Zealand
Engineers Australia
Food Science Australia
Food Standards Australia New Zealand
NSW Health Department
National Association of Retail Grocers of Australia
Refrigeration Air Conditioning Companies Association

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We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

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Part 1: Test methods—Energy performance

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee ME-008, Refrigerated Display Cabinets.

The objective of this Standard is to provide designers, manufacturers, importers, test laboratories, regulators and users of refrigerated vending machines with a test method to assess the energy efficiency of these devices.

This Standard was prepared in response to the publication of a plan for the regulation of refrigerated beverage vending machines under the National Appliance and Equipment Energy Efficiency Program (NAEEEP) in 2005.

It is intended that this Standard should be proposed as the basis for an IEC Standard once it has been published in Australia.

This series consists of 2 parts. These are:

AS/NZS	
4864	Performance of refrigerated beverage vending machines
4864.1	Part 1: Test methods—Energy performance (this Standard)
4864.2	Part 2: Minimum energy performance standard (MEPS) requirements

Part 1 contains the test method for assessing the efficiency of refrigerated beverage vending machines.

Part 2 specifies Minimum Energy Performance Standards (MEPS) requirements and High Efficiency levels for refrigerated beverage vending machines. Regulatory authorities have advised that it is intended to mandate this Standard in regulations in Australia and New Zealand no earlier than 1 October 2009.

The terms ‘normative’ and ‘informative’ are used to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a standard, whereas an ‘informative’ appendix is only for information and guidance.

Statements expressed in mandatory terms in notes to figures, are deemed to be requirements of this Standard. ‘Shall’ indicates a requirement is mandatory, while ‘should’ indicates a recommendation and good practice.

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Australian/New Zealand Standard
Performance of refrigerated beverage vending machines

Part 1: Test methods—Energy performance

1 SCOPE

This Standard specifies methods of measurement of electrical power consumption of refrigerated beverage vending machines connected to a nominal 230 V mains electricity supply.

This Standard—

(a) defines standard bottled, canned, or other sealed beverage storage capacity;

(b) establishes uniform methods of testing for determining laboratory performance of vending machines for bottled, canned or other sealed beverages;

(c) lists and defines the terms used in the methods of testing; and

(d) establishes test conditions for steady state energy consumption rating.

2 DEFINITIONS

2.1 Bottle

A glass or plastic container in which a beverage is sealed.

2.2 Can

A container made of metal in which a beverage is sealed.

2.3 Closed front model

A refrigerated beverage vending machine with a solid or backlit front, including models where product or sample product can be seen, but is not within the refrigerated space.

2.4 Energy management system

An automated control device or set of automated control devices that allow for adjustment of the operation of refrigerated beverage vending machines depending on environmental and other operational variables in the vending location.

2.5 Facing

A product in the next-to-be-vended position on a glass front vending machine shelf.

2.6 Glass front machine

A refrigerated beverage vending machine where beverages in the refrigerated space can be seen through the glass front.

2.7 Indoor use conditions

Ambient temperature and humidity to replicate typical indoor conditions.

2.8 Low power mode

A mode of operation where the energy management system automatically adjusts the normal operation of the machine by methods such as the reduction of lighting or refrigeration cycles and/or settings.