C370-13

Cooling performance of portable air conditioners

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Preface

This is the second edition of CSA C370, *Cooling performance of portable air conditioners*. It supersedes the previous edition, published in 2009.

This Standard, which covers factory-assembled portable air conditioners (i.e., air-sink, air-source, and water-sink units), provides a means of comparing the energy efficiency of portable air conditioners when they are tested under uniform conditions.

CSA Group acknowledges that the development of this Standard was made possible, in part, by the financial support of Natural Resources Canada (NRCan), the Ontario Ministry of Energy, Hydro-Québec, the Ontario Power Authority, and the Canadian Electricity Association.

This Standard has been harmonized with ANSI/AHAM PAC-1-2009, *Portable Air Conditioners,* to the greatest extent possible and with other comparable North American Standards, e.g., ANSI/ASHRAE 128-2011, *Method of Rating Portable Air Conditioners*.

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

This Standard was prepared by the Subcommittee on Cooling Performance of Portable Air Conditioners, under the jurisdiction of the Technical Committee on Heating, Ventilation, Air Conditioning, and Refrigeration and the Strategic Steering Committee on Performance, Energy Efficiency, and Renewables, and has been formally approved by the Technical Committee.

Notes:

(1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*

(2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*

(3) *This Standard was developed by consensus, which is defined by* CSA Policy governing standardization — Code of good practice for standardization *as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity". It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*

(4) *To submit a request for interpretation of this Standard, please send the following information to* ***inquiries@csagroup.org*** *and include "Request for interpretation" in the subject line:*
(a) define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;
(b) provide an explanation of circumstances surrounding the actual field condition; and
(c) where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.
Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization *and are available on the* Current Standards Activities *page at* ***standardsactivities.csa.ca****.*

(5) *This Standard is subject to periodic review, and suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to* ***inquiries@csagroup.org*** *and include "Proposal for change" in the subject line:*
(a) Standard designation (number);
(b) relevant clause, table, and/or figure number;
(c) wording of the proposed change; and
(d) rationale for the change.

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Cooling performance of portable air conditioners

1 Scope

1.1
This Standard applies to the cooling performance of portable air conditioners that have a rated cooling capacity of 19 000 W (65 000 Btu/h) or less and provide cooled air in one of the operating configurations described in Table 1.

Note: *The air conditioners described in this Clause include air conditioners with heating capability.*

1.2
This Standard does not apply to

(a) testing and rating of individual assemblies, e.g., condensing units or direct expansion fan coil units for separate use;
(b) computer or data processing room air conditioners within the scope of ANSI/ASHRAE 127;
(c) room air conditioners within the scope of ANSI/AHAM RAC-1 or CAN/CSA-C368.1; and
(d) the effects of air infiltration on portable air conditioners with single-duct condenser configurations.

1.3
In this Standard, "shall" is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; "should" is used to express a recommendation or that which is advised but not required; and "may" is used to express an option or that which is permissible within the limits of the standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (nonmandatory) to define their application.

1.4
The values given in SI (metric) units are the standard. The values given in parentheses are for information only.

2 Reference publications
This Standard refers to the following publications, and where such reference is made, it shall be to the edition listed below, including all amendments published thereto.

CSA Group
B52-05 (R2009)
Mechanical refrigeration code

C22.1-12
Canadian Electrical Code, Part I