



**CSA  
Group**

**R7006-18**

# **Sustainability standard for household room air conditioning appliances**



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***R7006-18***

***March 2018***

**Title:** *Sustainability standard for household room air conditioning appliances*

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**Association of Home Appliance Manufacturers**  
**AHAM 7006-2018**  
**Second Edition**



**CSA Group**  
**CSA R7006-18**  
**First Edition**



**Underwriters Laboratories Inc.**  
**UL 7006**  
**Second Edition**

# **Sustainability Standard for Household Room Air Conditioning Appliances**

March 27, 2018



**ANSI/UL 7006-2018**

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## Preface

This is the first edition of CSA R7006, the second edition of UL 7006, and the most recent version of AHAM 7006, Sustainability Standard for Household Room Air Conditioning Appliances.

This harmonized standard was prepared by the Association of Home Appliance Manufacturers, (AHAM), CSA Group and Underwriters Laboratories Inc. (UL). The efforts and support of the Technical Harmonization Committee are gratefully acknowledged.

This standard was prepared by CSA Technical Committee on Sustainability of Household Appliances under the jurisdiction of CSA Strategic Steering Committee on Business Management and Sustainability and has been formally approved by the CSA Technical Committee.

The environmental performance of household room air conditioning appliances is commonly evaluated on the single environmental attribute of electricity consumption during use. This Standard takes a multi-attribute, life cycle approach to measuring a broad spectrum of environmental and social impacts of household room air conditioning appliances as a means of assessing sustainability performance. The multi-attribute approach was developed using representative product life cycle assessment (LCA) information along with other key factors such as hot-spot or hot-button analyses influencing product environmental performance. The attributes and criteria in this Standard are drawn from a much larger list and reflect the understanding of the attributes and criteria that are most prominent in sustainable performance and over which the manufacturers of these products have control. This approach, detailed in Annex A, determined the environmental attributes of household room air conditioning appliances for inclusion in this Standard. The authors acknowledge that revisions to this standard will be considered periodically and that future editions may consider a broader range of sustainability criteria.

It has been contemplated by all parties that this Standard will be updated to reflect new U.S. Department of Energy or Natural Resources Canada minimum energy performance standards for household room air conditioning appliances products. Many of the measurements included in this Standard are unique and have not been conducted on other appliance categories. The Standard's committees expect to learn much from the application of this Second Edition in subsequent years. The use of this Standard and self-assessment by household room air conditioning appliances manufacturers and external third-party assessment bodies will be used to improve the Standard in drafting the second and subsequent editions.

This Standard was written specifically for products placed on the market in the United States and Canada. At the present time, a number of the calculations are based on systems and designs of products in North America.

## Foreword

The Association of Home Appliance Manufacturers (AHAM), CSA Group, and Underwriters Laboratories Inc. (UL), as a Task Force, under the jurisdiction of the AHAM Major Appliance Engineering Council, CSA Group Strategic Steering Committee on Business Management and Sustainability, and UL Environment, collaborated with experts and stakeholders to initiate development of product standards for home appliances as the first step in a broader product sustainability initiative. The overall goal of this family of standards is to provide meaningful product sustainability performance information to consumers and stakeholders. It is intended for this initiative to drive innovation and continual improvement in the sustainability performance of home appliances by empowering consumers. This Standard is based on product life cycle information and consideration for consumer expectations. It provides information for consumers, governments, retailers, and other program developers to help distinguish between products based on environmental criteria.

AHAM, CSA Group, and UL would like to acknowledge the assistance of PE INTERNATIONAL and Five Winds Strategic Consulting whose staff served as experts and project managers.

## AHAM

The Association of Home Appliance Manufacturers (AHAM) represents manufacturers of major, portable and floor care home appliances, and suppliers to the industry in the U.S. and Canada. AHAM's membership includes over 150 companies throughout the world. AHAM is also a standards development organization, accredited by the American National Standards Institute (ANSI) and authors numerous appliance performance testing standards used by manufacturers, consumer organizations and governmental bodies to rate and compare appliances. AHAM administers several appliance rating verification programs, employing third party laboratories. AHAM's consumer safety education program has educated millions of consumers on ways to properly and safely use appliances such as portable heaters, clothes dryers, and cooking products.

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## UL

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## 1 Scope

1.1 This Standard covers room air conditioning appliances for households included within the scope of the U.S. Department of Energy (DoE) and Natural Resources Canada (NRCAN) minimum energy performance requirements. This includes the following product category: room air conditioner (see Clause 4 for a definition of room air conditioner). The room air conditioners covered by this Standard include:

- a) without reverse cycle, with louvered sides, and less than 6,000 Btu/h;
- b) without reverse cycle, with louvered sides, and 6,000 to 7,999 Btu/h;
- c) without reverse cycle, with louvered sides, and 8,000 to 13,999 Btu/h;
- d) without reverse cycle, with louvered sides, and 14,000 to 19,999 Btu/h;
- e) without reverse cycle, with louvered sides, and 20,000 to 27,999 Btu/h;
- f) without reverse cycle, with louvered sides, and 28,000 Btu/h or more;
- g) without reverse cycle, without louvered sides, and less than 6,000 Btu/h;
- h) without reverse cycle, without louvered sides, and 6,000 to 7,999 Btu/h;
- i) without reverse cycle, without louvered sides, and 8,000 to 10,999 Btu/h;
- j) without reverse cycle, without louvered sides, and 11,000 to 13,999 Btu/h;
- k) without reverse cycle, without louvered sides, and 14,000 to 19,999 Btu/h;
- l) without reverse cycle, without louvered sides, and 20,000 Btu/h or more;
- m) with reverse cycle, with louvered sides, and less than 20,000 Btu/h;
- n) with reverse cycle, without louvered sides, and less than 14,000 Btu/h;
- o) with reverse cycle, with louvered sides, and 20,000 Btu/h or more;
- p) with reverse cycle, without louvered sides, and 14,000 Btu/h or more;
- q) casement-only; and
- r) casement-slider.

1.2 This Standard does not include directions for conformity assessment or the use of a mark/seal of conformity assessment.

## 2 General

2.1 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.

## 3 References

### 3.1 Normative references

3.1.1 Where reference is made to any Standards, such reference shall be considered to refer to the latest editions and revisions thereto available at the time of printing, unless otherwise specified.

#### **AHAM (Association of Home Appliance Manufacturers)**

ANSI/AHAM-RAC-1-2015

*Performance Evaluation Procedures for Household Room Air Conditioners*

#### **Canadian Competition Bureau**

*Competition Act, R.S.C. 1985, c. C-34*

*Consumer Packaging and Labelling Act, R.S.C. 1985, c. C-38*

*Textile Labelling Act*

#### **CDP (Carbon Disclosure Project)**

*Investor Initiatives*

*Supply Chain Program*

*Water Program*

#### **CSA Group**

CAN/CSA-ISO 14001:16

*Environmental management systems – Requirements with guidance for use*

#### **European Commission**

*Regulation (EC) No. 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organizations in a community eco-management and audit scheme (EMAS)*