



UL 60745-2-5

STANDARD FOR SAFETY

Hand-Held Motor-Operated Electric
Tools – Safety – Part 2-5: Particular
Requirements for Circular Saws

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UL Standard for Safety for Hand-Held Motor-Operated Electric Tools – Safety – Part 2-5: Particular Requirements for Circular Saws, UL 60745-2-5

Fifth Edition, Dated March 20, 2012

Summary of Topics

This revision of ANSI/UL 60745-2-5 is being issued to reaffirm approval as an American National Standard. No changes in requirements are involved.

As noted in the Commitment for Amendments statement located on the back side of the title page, UL and CSA are committed to updating this harmonized standard jointly. However, the revision pages dated May 24, 2017 will not be jointly issued by UL and CSA as these revision pages only address UL ANSI approval dates.

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Canadian Standards Association
CAN/CSA-C22.2 No. 60745-2-5-12
Fourth Edition
(IEC 60745-2-5:2010 MOD)



Underwriters Laboratories Inc.
UL 60745-2-5
Fifth Edition

Hand-Held Motor-Operated Electric Tools – Safety – Part 2-5: Particular Requirements for Circular Saws

March 20, 2012

(Title Page Reprinted: May 24, 2017)

This national standard is based on publication IEC 60745-2-5, Fifth Edition (2010).



ANSI/UL 60745-2-5-2012 (R2017)

Approved by



Standards Council of Canada
Conseil canadien des normes

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Preface

This is the harmonized CSA and UL standard for Hand-Held Motor-Operated Electric Tools – Safety – Part 2-5: Particular Requirements for Circular Saws. It is the fourth edition of CAN/CSA-C22.2 No. 60745-2-5 and the fifth edition of UL 60745-2-5. This standard is based on IEC 60745-2-5, fifth edition.

This standard (CAN/CSA-C22.2 No. 60745-2-5, fourth edition and UL 60745-2-5, fifth edition) supersedes the third edition of CAN/CSA-C22.2 No. 60745-2-5 and the fourth edition of UL 60745-2-5, published in 2007.

This harmonized standard was prepared by the Canadian Standards Association (CSA) and Underwriters Laboratories Inc. (UL).

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

This standard was reviewed by the CSA Subcommittee on Safety of Hand-Held Motor-Operated Electric Tools, under the jurisdiction of the CSA Technical Committee on Consumer and Commercial Products and the CSA Strategic Steering Committee on Requirements for Electrical Safety, and has been formally approved by the CSA Technical Committee.

This standard has been approved as a National Standard of Canada by the Standards Council of Canada (SCC).

This standard has been approved by the American National Standards Institute (ANSI) as an American National Standard.

Where reference is made to a specific number of samples to be tested, the specified number is considered a minimum quantity.

Note: 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.

Level of Harmonization

This standard adopts the IEC text with national differences.

This standard is published as an equivalent standard for CSA and UL. An equivalent standard is a standard that is substantially the same in technical content, except as follows: Technical national differences are allowed for codes and governmental regulations as well as those recognized as being in accordance with NAFTA Article 905, for example because of fundamental climatic, geographical, technological, or infrastructural factors, scientific justification, or the level of protection that the country considers appropriate. Presentation is word for word except for editorial changes.

All national differences from the IEC text are included in the CSA and UL versions of the standard. While the technical content is the same in each organization's version, the format and presentation may differ.

Reasons for Differences from IEC

Differences from the IEC are being added in order to address regulatory and safety situations present in the US and Canada.

Interpretations

The interpretation by the standards development organization of an identical or equivalent standard is based on the literal text to determine compliance with the standard in accordance with the procedural rules of the standards development organization. If more than one literal interpretation has been identified, a revision is to be proposed as soon as possible to each of the standards development organizations to more accurately reflect the intent.

CSA Effective Date

The effective date for CSA International will be announced through CSA Informs or a CSA certification notice.

UL Effective Date

The effective date for UL 60745-2-5, fifth edition, is March 31, 2014.

Between the present and March 31, 2014 new product submittals to UL must be evaluated under all requirements in this Standard or, if requested in writing, evaluated under presently effective requirements only.

As of March 31, 2014, all products Listed or Recognized by UL shall comply with the requirements in this standard.

A UL effective date is one established by Underwriters Laboratories Inc. and is not part of the ANSI approved standard.

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For CSA, the text, figures, and tables of International Electrotechnical Commission Publication IEC 60745-2-5, Hand-Held Motor-Operated Electrical Tools – Safety – Part 2–5: Particular Requirements for Circular Saws, copyright 2010, are used in this standard with the consent of the International Electrotechnical Commission. The IEC Foreword is not a part of the requirements of this standard but is included for information purposes only.

NATIONAL DIFFERENCES

GENERAL

National Differences from the text of International Electrotechnical Commission (IEC) Publication IEC 60745-2-5, Hand-Held Motor-Operated Electrical Tools – Safety – Part 2-5: Particular Requirements for Circular Saws, copyright 2010, are indicated by notations (differences) and are presented in bold text.

There are five types of National Differences as noted below. The difference type is noted on the first line of the National Difference in the standard. The standard may not include all types of these National Differences.

DR – These are National Differences based on the **national regulatory requirements**.

D1 – These are National Differences which are based on **basic safety principles and requirements**, elimination of which would compromise safety for consumers and users of products.

D2 – These are National Differences from IEC requirements based on existing **safety practices**. These requirements reflect national safety practices, where empirical substantiation (for the IEC or national requirement) is not available or the text has not been included in the IEC standard.

DC – These are National Differences based on the **component standards** and will not be deleted until a particular component standard is harmonized with the IEC component standard.

DE – These are National Differences based on **editorial comments or corrections**.

Each national difference contains a description of what the national difference entails. Typically one of the following words is used to explain how the text of the national difference is to be applied to the base IEC text:

Addition / Add - An addition entails adding a complete new numbered clause, subclause, table, figure, or annex. Addition is not meant to include adding select words to the base IEC text.

Modification / Modify - A modification is an altering of the existing base IEC text such as the addition, replacement or deletion of certain words or the replacement of an entire clause, subclause, table, figure, or annex of the base IEC text.

Deletion / Delete - A deletion entails complete deletion of an entire numbered clause, subclause, table, figure, or annex without any replacement text.

INTERNATIONAL ELECTROTECHNICAL COMMISSION

HAND-HELD MOTOR-OPERATED ELECTRIC TOOLS – SAFETY – Part 2-5: Particular requirements for circular saws

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and nongovernmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.

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International Standard IEC 60745-2-5 has been prepared by IEC technical committee 116: Safety of hand-held motor-operated electric tools.

This fifth edition cancels and replaces the fourth edition published in 2006, of which it constitutes a technical revision.

Main changes include: in Clause 17, Endurance: introduction of endurance tests in practical use for the guards of all types of saws; in Clause 19, Mechanical hazards: clarifications and editorial improvement in respect to the guarding; and in Annex M, Safety of working stands for operation with hand-held motor-operated electric tools: editorial improvements.

The text of this standard is based on the following documents:

FDIS	Report on voting
116/41/FDIS	116/52/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This Part 2-5 is to be used in conjunction with the fourth edition of IEC 60745-1, *Hand-held motor-operated electric tools – Safety – Part 1: General requirements*. It was established on the basis of the fourth edition (2006) of that standard.

NOTE 1 When "Part 1" is mentioned in this standard, it refers to IEC 60745-1.

This part 2 supplements or modifies the corresponding clauses of IEC 60745-1, so as to convert that publication into the IEC standard: Safety requirements for circular saws.

When a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text in Part 1 is to be adapted accordingly.

NOTE 2 The following numbering system is used:

- subclauses, items, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- additional annexes are lettered AA, BB, etc.

NOTE 3 In this standard, the following print types are used:

– requirements: in roman type;

test specifications: in italic type;

notes: in smaller roman type.

A list of all parts of IEC 60745 series, under the general title *Hand-held motor-operated electric tools – Safety*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- withdrawn;

- replaced by a revised edition, or
- amended.

DV.101 DE Addition to the part 2:

The numbering system in the standard uses a space instead of a comma to indicate thousands and uses a comma instead of a period to indicate a decimal point. For example, 1 000 means 1,000 and 1,01 means 1.01.

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