

AS/NZS IEC 61034.2:2017
IEC 61034-2:2005+AMD1:2013 CSV
IEC 61034-2:2005/AMD2:2019
(Incorporating Amendment No. 1)



Australian/New Zealand Standard™

Measurement of smoke density of cables burning under defined conditions

Part 2: Test procedure and requirements



AS/NZS IEC 61034.2:2017

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-003, Electric Wires And Cables. It was approved on behalf of the Council of Standards Australia on 30 April 2017 and by the New Zealand Standards Approval Board on 7 June 2017.

This Standard was published on 30 June 2017.

The following are represented on Committee EL-003:

- Australian Cablemakers Association
- Australian Industry Group
- Electrical Compliance Testing Association
- Electrical Contractors Association of New Zealand
- Electrical Regulatory Authorities Council
- Institute of Electrical Inspectors
- National Electrical and Communications Association
- Queensland University of Technology
- Worksafe New Zealand

This Standard was issued in draft form for comment as DR AS/NZS IEC 61034.2:2017.

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ISBN 978 1 76035 834 1

Australian/New Zealand Standard™

Measurement of smoke density of cables burning under defined conditions

Part 2: Test procedure and requirements

Originated as AS 1660.5.2—1992.

Jointly revised and designated as AS/NZS 1660.5.2:1998.

Third edition 2006.

AS/NZS 1660.5.2:2006 revised and redesignated, in part, as AS/NZS IEC 61304.2:2017.

Reissued incorporating Amendment No 1 (October 2021).



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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee, EL-003 Electric Wires and Cables, to supersede, in part, AS/NZS 1660.5.2:2006, *Test methods for electric cables, cords and conductors, Method 5.2: Fire tests—Measurement of smoke density of cables burning under defined conditions*.

A1 Amendment No. 1 (October 2021) to this Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-003, Electric Cables and Wires. **A1**

The objective of this Standard is to provide details of the test procedure to be employed for the measurement of the density of smoke emitted from cables burning under defined conditions. This Standard describes the means of preparing and assembling cables for test, the method of burning the cables, and gives recommended requirements for evaluating test results.

A1 This Standard is identical with, and has been reproduced from IEC 61034-2:2005+AMD1:2013 CSV (ED. 3.1), *Measurement of smoke density of cables burning under defined conditions, Part 2: Test procedure and requirements* and its Amendment No. 2 (2019) which has been added at the end of the source text. **A1**

As this Standard is reproduced from an International Standard, the following applies:

- (a) In the source text 'this part of IEC 61034' should read 'this Australian/New Zealand Standard'.
- (b) A full point substitutes for a comma when referring to a decimal marker.

None of the normative references in the source document have been adopted as Australian or Australian/New Zealand Standards.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MEASUREMENT OF SMOKE DENSITY OF CABLES
BURNING UNDER DEFINED CONDITIONS –****Part 2: Test procedure and requirements**

FOREWORD

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This consolidated version of IEC 61034-2 consists of the third edition (2005) [documents 20/755/FDIS and 20/767/RVD], its corrigendum 1 (September 2006) and its amendment 1 (2013) [documents 20/1429/FDIS and 20/1444/RVD]. It bears the edition number 3.1.

The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience. A vertical line in the margin shows where the base publication has been modified by amendment 1. Additions and deletions are displayed in red, with deletions being struck through.

International Standard IEC 61034-2 has been prepared by IEC technical committee 20: Electric cables.

The principal changes with respect to the previous edition are as follows:

- a) inclusion of cables down to 1 mm diameter;
- b) inclusion of non-circular cables;
- c) addition of guidance on testing cables above 80 mm diameter;
- d) delineation of elements of the test report;
- e) addition of guidance on the calculation for other parameters for fire safety engineering purposes;
- f) removal of minor differences with equivalent CENELEC work to allow parallel voting with that body.

It has the status of a group safety publication in accordance with IEC Guide 104.

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

IEC 61034 consists of the following parts, under the general title *Measurement of smoke density of cables burning under defined conditions*,

Part 1 : Test apparatus

Part 2 : Test procedure and requirements

The committee has decided that the contents of the base publication and its amendment will remain unchanged until the stability 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.

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