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Edition 1.0 2015-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Audio, video, and related equipment – Determination of power consumption – Part 3: Television sets

Appareils audio, vidéo et matériel connexe – Détermination de la consommation de puissance – Partie 3: Téléviseurs

IEC 62087-3:2015-06(en-fr)

IEC Central Office
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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AUDIO, VIDEO, AND RELATED EQUIPMENT – DETERMINATION OF POWER CONSUMPTION –

Part 3: Television sets

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International Standard IEC 62087-3 has been prepared by technical area 12: AV energy efficiency and smart grid applications, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

This bilingual version (2018-04) corresponds to the monolingual English version, published in 2015-06.

This first edition of IEC 62087-3 cancels and replaces Clauses 6 and 11 and Annex B of IEC 62087:2011. This standard together with IEC 62087-1 to IEC 62087-2 and IEC 62087-4 to IEC 62087-6 cancels and replaces IEC 62087:2011 in its entirety. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to Clauses 6 and 11 and Annex B of IEC 62087:2011.

– For TVs with an automatic brightness control feature, power may now be measured at multiple specific illumination levels.
– A method has been defined for determining the ratio of peak luminance expected in the home versus the peak luminance expected in the retail environment.
– Sections related to general measuring conditions and procedures are now in IEC 62087-1:2015.
– Sections related to signals and media are now in IEC 62087-2:2015.
– The titles have changed in order to comply with the current directives and to accommodate the multipart structure.

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

FDIS	Report on voting
100/2468/FDIS	100/2498/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.

The French version of this standard has not been voted upon.

A list of all parts in the IEC 62087 series, published under the general title *Audio, video, and related equipment – Determination of power consumption*, can be found on the IEC website.

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

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website 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.

INTRODUCTION

This standard specifies the determination of the power consumption of television sets for consumer use. It is used in conjunction with IEC 62087-2:2015, which specifies signals and media.

This standard includes measuring procedures for the determination of power consumption in the On (operation) mode, which was identified as “On (average) mode” in previous editions of IEC 62087. Additionally, it specifies measuring procedures for the determination of power consumption in the Off mode and Partial On mode. This standard also defines the determination of the peak luminance ratio for use associated with television set power consumption evaluation as well as the power factor.

A verification procedure to assess product compliance is described in Annex A of IEC 62087-1:2015.

IEC 62087 has been subdivided and currently consists of the following planned or published parts:

– Part 1: General
– Part 2: Signals and media
– Part 3: Television sets
– Part 4: Video recording equipment
– Part 5: Set top boxes
– Part 6: Audio equipment

AUDIO, VIDEO, AND RELATED EQUIPMENT – DETERMINATION OF POWER CONSUMPTION –

Part 3: Television sets

1 Scope

This part of IEC 62087 specifies the determination of the power consumption and related characteristics of television sets. Television sets include, but are not limited to, those with CRT, LCD, PDP, OLED, or projection technologies.

The operating modes and functions, as they specifically apply to television sets, are defined in detail in this part of IEC 62087.

This standard is limited to television sets that can be connected to an external power source. Television sets that include a non-removable, main battery are not covered by this standard. Television sets may include any number of auxiliary batteries.

The measuring conditions in this standard represent the normal use of the equipment and may differ from specific conditions, for example as specified in safety standards.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62087-1:2015, *Audio, video, and related equipment – Determination of power consumption – Part 1: General*

IEC 62087-2:2015, *Audio, video, and related equipment – Determination of power consumption – Part 2: Signals and media*

IEC 62301:2011, *Household electrical appliances – Measurement of standby power*

3 Terms, definitions, and abbreviations

3.1 Terms and definitions

For the purposes of this document, the terms, definitions and abbreviations, in IEC 62087-1:2015, IEC 62087-2:2015, and the following apply.

3.1.1
additional functions
functions that are not required for the basic operation of the device

Note 1 to entry: Examples of additional functions include, but are not limited to, a VCR unit, a DVD unit, an HDD unit, an FM-radio unit, a memory card-reader unit, or an ambient lighting unit.