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Standards

Irish Standard
I.S. EN 62849:2016

Performance evaluation methods of mobile household robots

I.S. EN 62849:2016

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National Foreword

I.S. EN 62849:2016 is the adopted Irish version of the European Document EN 62849:2016, Performance evaluation methods of mobile household robots

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EUROPEAN STANDARD

EN 62849

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2016

ICS 97.030

English Version

**Performance evaluation methods
of mobile household robots
(IEC 62849:2016)**

Méthodes d'évaluation de l'aptitude à la fonction
des robots mobiles à usage domestique
(IEC 62849:2016)

Verfahren zur Bewertung der Leistungsfähigkeit
von mobilen Haushaltrobotern
(IEC 62849:2016)

This European Standard was approved by CENELEC on 2016-09-29. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 62849:2016

European foreword

The text of document 59/655/FDIS, future edition 1 of IEC 62849, prepared by IEC/TC 59 "Performance of household and similar electrical appliances" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62849:2016.

The following dates are fixed:

- latest date by which the document has to be implemented at (dop) 2017-06-29
national level by publication of an identical national
standard or by endorsement
- latest date by which the national standards conflicting with (dow) 2020-09-29
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In the official version, for Bibliography, the following note has to be added for the standard indicated :

IEC 60335-1:2010 NOTE Harmonized as EN 60335-1:2012 (modified).

Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC/TS 62885-1	-	Surface cleaning appliances - Part 1: General requirements on test material and test equipment	-	-
IEC 62929	2014	Cleaning robots for household use - Dry cleaning: Methods of measuring performance	EN 62929	2014
ISO 554	-	Standard atmospheres for conditioning and/or testing - Specifications	-	-
ISO 2768-1	1989	General tolerances - Part 1: Tolerances for linear and angular dimensions without individual tolerance indications	EN 22768-1	1993

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IEC 62849

Edition 1.0 2016-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Performance evaluation methods of mobile household robots

Méthodes d'évaluation de l'aptitude à la fonction des robots mobiles à usage domestique



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IEC 62849

Edition 1.0 2016-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Performance evaluation methods of mobile household robots

Méthodes d'évaluation de l'aptitude à la fonction des robots mobiles à usage domestique

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PERFORMANCE EVALUATION METHODS
OF MOBILE HOUSEHOLD ROBOTS**

FOREWORD

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International Standard IEC 62849 has been prepared by IEC technical committee 59: Performance of household and similar electrical appliances.

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

FDIS	Report on voting
59/655/FDIS	59/656/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.

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INTRODUCTION

This standard will cover the generic performance test methods for mobile household robots within one document. However this current version is applicable for indoor floor supported wheeled or wheel-track robots with focus on mobility and power consumption related performance. As the needs for manipulation related performance grows, it will be added into this generic performance standard.

PERFORMANCE EVALUATION METHODS OF MOBILE HOUSEHOLD ROBOTS

1 Scope

This International Standard applies to mobile household robots and provides performance testing and evaluation methods for common features of various mobile household robots.

This standard is neither concerned with safety nor with performance requirements.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC TS 62885-1, *Surface cleaning appliances – Part 1: General requirements on test material and test equipment*

IEC 62929:2014, *Cleaning robots for household use – Dry cleaning: Methods of measuring performance*

ISO 554, *Standard atmospheres for conditioning and/or testing – Specifications*

ISO 2768-1:1989, *General tolerances – Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

household robot

actuated mechanism with a degree of autonomy, operating within the household and similar environment, to perform intended tasks

Note 1 to entry: Operating includes travel and/or robot body movement.

3.2

mobile household robot

household robot able to travel under its own control

3.3

capability of homing function

capability of a mobile household robot to return to the charge station(s) for charging or after completion of the work task or called by user

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