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NSAI Standards

Irish Standard
I.S. EN 50416:2005&A1:2015

Household and similar electrical appliances - Safety - Particular requirements for commercial electric conveyor dishwashing machines

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I.S. EN 50416:2005&A1:2015

Incorporating amendments/corrigenda/National Annexes issued since publication:

EN 50416:2005/A1:2015

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I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

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This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

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National Foreword

I.S. EN 50416:2005&A1:2015 is the adopted Irish version of the European Document EN 50416:2005, Household and similar electrical appliances - Safety - Particular requirements for commercial electric conveyor dishwashing machines

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50416:2005/A1

September 2015

ICS 97.040.40

English Version

Household and similar electrical appliances - Safety - Particular requirements for commercial electric conveyor dishwashing machines

Appareils électrodomestiques et analogues - Sécurité - Règles particulières pour les lave-vaisselle à convoyeur à usage collectif

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Besondere Anforderungen für Transportspülmaschinen für den gewerblichen Gebrauch

This amendment A1 modifies the European Standard EN 50416:2005; it was approved by CENELEC on 2015-08-10. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (EN 50416:2005/A1:2015) has been prepared by CLC/TC 61 "Safety of household and similar electrical appliances".

The following dates are fixed:

– latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2016-08-10
– latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2018-08-10

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive 2006/42/EC, see informative Annex ZZ, which is an integral part of this document.

NOTE 1 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.

NOTE 2 The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

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EUROPEAN STANDARD **EN 50416**

NORME EUROPÉENNE

EUROPÄISCHE NORM February 2005

ICS 97.040.40

English version

Household and similar electrical appliances – Safety – Particular requirements for commercial electric conveyor dishwashing machines

Appareils électrodomestiques et analogues – Sécurité – Règles particulières pour les lave-vaisselle à convoyeur à usage collectif

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke – Besondere Anforderungen für Transportspülmaschinen für den gewerblichen Gebrauch

This European Standard was approved by CENELEC on 2004-12-07. 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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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
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Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 61, Safety of household and similar electrical appliances. It covers safety aspects which are related to conveyor dishwashing machines. A first draft was submitted to the Unique Acceptance Procedure in July 2003. Due to a negative advice from the MD Consultant, received during the ongoing UAP, CENELEC TC 61 agreed in its meeting in Athens in November 2003 to review the draft. An ad-hoc meeting between the MD consultant and the WG responsible for EN 50416 in March 2004 resolved all concerns of the MD Consultant.

A second draft was submitted to the formal vote and was approved by CENELEC as EN 50416 on 2004-12-07.

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2005-09-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2007-12-01

This standard has to be used in conjunction with EN 60335-1, Household and similar electrical appliances – Safety – Part 1: General requirements, which is referred to as Part 1. It was established on the basis of the 2002 edition of that standard. Amendments and revisions of Part 1 have also to be taken into account and the dates when such changes become applicable will be stated in the relevant amendment or revision of Part 1.

This standard, supplements or modifies the corresponding clauses of Part 1, so as to convert it into the European Standard: Safety requirements for commercial electric conveyor dishwashing machines.

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

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directive 98/37/EEC. See Annex ZZ.

NOTE 1 The following numbering system is used:

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

NOTE 2 The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type*;
- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

There are no special national conditions causing a deviation from this European Standard, other than those listed in Annex ZA to EN 60335-1.

There are no national deviations from this European Standard, other than those listed in Annex ZB to EN 60335-1.

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Introduction

This European Standard has been prepared to provide a means of conforming to essential safety requirements of the Machinery Directive 98/37/EC. Other requirements and other EU Directives may be applicable to the machines falling within the scope of this standard.

Pressurized components incorporated in machines within the scope of this standard are pressure equipment which is classified no higher than category I of the Pressure Equipment Directive. According to Article 1, item 3.6 of the Pressure Equipment Directive this equipment is excluded from its scope.

The requirements of Annex CC of this standard do not support a relevant ER of the Machinery Directive 98/37/EC.

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1 Scope

This clause of EN 60335-1 is replaced by the following.

This European Standard deals with the safety of electrically operated **conveyor dishwashing machines** for washing plates, dishes, glassware, cutlery and similar articles (e.g. trays, food containers), with or without means for water heating or forced hot air drying, not intended for household use, their **rated voltage** being not more than 250 V for single-phase machines connected between one phase and neutral and 480 V for other machines. The spraying pressure shall not exceed 1 MPa.

NOTE 101 These machines are used for example in restaurants, canteens, hospitals, and commercial enterprises such as bakeries, butcheries, etc.

NOTE 102 Examples of such machines are

– **flight type dishwashers**,

– **rack conveyor dishwashers**.

These machines are designed to be connected to hot and/or cold water supply.

NOTE 103 Requirements to avoid backsiphonage of non-potable water into the public water supply are specified in Annex CC.

Machines making use of steam or hot water for heating purposes are also within the scope of this standard.

This standard does not apply to

– machines which are moveable,

– gas heating appliances which are part of conveyor dishwashing machines,

– machines intended for disinfection,

– machines intended to be used on board of sea-going vessels and aircraft,

– machines designed exclusively for industrial purposes, for example machines used in the food industry for cleaning receptacles that serve as packaging for final products (e.g. bottle-cleaning machines), and machines used in manufacturing processes,

– separately driven transport devices not confined in the machine,

– machines intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas).

2 Normative references

This clause of EN 60335-1 is applicable except as follows.

Addition:

EN 563:1994 + A1:1999, *Safety of machinery – Temperatures of touchable surfaces – Ergonomics data to establish temperature limit values for hot surfaces*

EN 954-1:1996, *Safety of machinery – Safety related parts of control system – General principles for design*

EN 50242:[1)], *Electric dishwashers for household use – Methods for measuring the performance*

[1)] In preparation.

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