



SLOVENSKI STANDARD
SIST EN 60335-2-41:2003/A1:2004
01-oktober-2004

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Household and similar electrical appliances - Safety -- Part 2-41: Particular requirements for pumps

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -- Teil 2-41: Besondere Anforderungen für Pumpen

Appareils électrodomestiques et analogues - Sécurité -- Partie 2-41: Règles particulières pour les pompes

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Ta slovenski standard je istoveten z: EN 60335-2-41:2003/A1:2004

ICS:

13.120	Varnost na domu	Domestic safety
23.080	!j æ ^	Pumps

SIST EN 60335-2-41:2003/A1:2004 **en**

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EUROPEAN STANDARD

EN 60335-2-41/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2004

ICS 97.180; 13.120; 23.080

English version

**Household and similar electrical appliances –
Safety
Part 2-41: Particular requirements for pumps
(IEC 60335-2-41:2002/A1:2004)**

Appareils électrodomestiques
et analogues –
Sécurité
Partie 2-41: Règles particulières
pour les pompes
(CEI 60335-2-41:2002/A1:2004)

Sicherheit elektrischer Geräte für den
Hausgebrauch und ähnliche Zwecke
Teil 2-41: Besondere Anforderungen
für Pumpen
(IEC 60335-2-41:2002/A1:2004)

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This amendment A1 modifies the European Standard EN 60335-2-41:2003; it was approved by CENELEC on 2004-03-01. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This amendment 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
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 61/2537/FDIS, future amendment 1 to IEC 60335-2-41:2002, prepared by the IEC Technical Committee 61, Safety of household and similar electrical appliances, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 60335-2-41:2003 on 2004-03-01.

The following dates are applicable:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2004-12-01
- date on which national standards conflicting with the amendment have to be withdrawn (dow) 2007-03-01

This amendment supplements or modifies the corresponding clauses of EN 60335-2-41:2003.

There are no special national conditions causing a deviation from this amendment.

There are no national deviations from this amendment.

- p NOTE In this document, p is used in the margin to indicate instructions for preparing the printed version.

iTeh STANDARD PREVIEW (standards.iteh.ai) Endorsement notice

[SIST EN 60335-2-41:2003/A1:2004](https://standards.iteh.ai/catalog/standards/sist/en-60335-2-41-2003/a1-2004)

The text of amendment 1:2004 to the International Standard IEC 60335-2-41:2002 was approved by CENELEC as an amendment to the European Standard without any modification.

- p Add:

Annex ZC (normative)

Normative references to international publications with their corresponding European publications

Addition:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60364-7-701	– ¹⁾	Electrical installations of buildings – Part 7: Requirements for special installations or locations – Section 701: Locations containing a bath tub or shower basin	–	–

¹⁾ undated reference

NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC

60335-2-41

2002

AMENDEMENT 1
AMENDMENT 1
2004-01

Amendement 1

Appareils électrodomestiques et analogues –
Sécurité –

Partie 2-41:
Règles particulières pour les pompes
(standards.iteh.ai)

Amendment 1
<https://standards.iteh.ai/catalog/standards/sist/eeee59e9-248c-4cae-9d19-ed1e06c72535/sist-en-60335-2-41-2003-1-2004>

Household and similar electrical appliances –
Safety –

Part 2-41:
Particular requirements for pumps

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Международная Электротехническая Комиссия

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FOREWORD

This amendment has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

This bilingual version (2005-06) replaces the English version.

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

FDIS	Report on voting
61/2537/FDIS	61/2581/RVD

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

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

The committee has decided that the contents of this amendment and the base 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.

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FOREWORD

Add the following to the list of differences existing in some countries:

- 6.1: Class II table fountain pumps are not allowed (USA).

INTRODUCTION

Replace the second sentence of the second paragraph by the following:

It also covers abnormal situations that can be expected in practice and takes into account the way in which electromagnetic phenomena can affect the safe operation of appliances.

1 Scope

Add the following item to Note 1:

- **shower-boost pumps;**

2 Normative references

Add the following:

IEC 60364-7-701, *Electrical installations of buildings – Part 7: Requirements for special installations or locations – Section 701:Locations containing a bath tub or shower basin*

3 Definitions

Add the following:

3.104

shower-boost pump

pump for installation in the water supply system to increase the water flow for showering purposes

6 Classification

6.1 Add the following to the second paragraph:

Table fountain pumps for indoor use may also be **class II** as long as their **rated power input** does not exceed 25 W.

6.2 Add the following new paragraph after the second paragraph:

Shower-boost pumps intended for installation outside of zones 1 and 2, as specified in IEC 60364-7-701, shall be at least IPX2.

11 Heating

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11.7 Replace the existing text by the following:

Replacement:

[SIST EN 60335-2-41:2003/A1:2004](https://standards.iteh.ai/catalog/standards/sist/eeee59e9-248c-4cae-9d19-ed4e06ad3536/sist-en-60335-2-41-2003-a1-2004)
<https://standards.iteh.ai/catalog/standards/sist/eeee59e9-248c-4cae-9d19-ed4e06ad3536/sist-en-60335-2-41-2003-a1-2004>

Pumps are operated with the liquid maintained at the temperature marked on the pump. They are operated until steady conditions are established unless they are marked with a maximum period of operation. In this case, they are operated for the marked period followed by the rest period specified in the instructions, the test being carried out for three cycles of operation. **Shower-boost pumps** that are also supplied with cold water are operated with the cold water at 15 °C ± 2 °C.

Pumps, other than **shower-boost pumps**, marked with a maximum period of operation are also operated with the liquid maintained at 35 °C until steady conditions are established.

15 Moisture resistance

Add the following:

15.1.1 Addition:

Shower-boost pumps are subjected to the appropriate test of IEC 60529 both at rest and in operation while supplied at **rated voltage**.

15.1.2 Replace the second dashed item by the following:

- 1,3 times the pressure occurring at
 - the maximum operating depth, or
 - 15 m, if this is higher.

21 Mechanical strength

Replace the text by the following:

21.1 Modification:

For pumps, other than **shower-boost pumps**, the impact energy is increased to 1,0 J.

22 Construction

22.6 Add the following paragraph:

Shower-boost pumps having a separate enclosure shall have a drain hole in the enclosure positioned so that the water can drain out without impairing electrical insulation, unless water cannot accumulate within the enclosure in normal use. The hole shall be at least 5 mm in diameter or 20 mm² in area with a width of least 3 mm.

Add the following subclause:

22.106 Shower-boost pumps shall be constructed so that they can be permanently connected to the water supply.

Shower-boost pumps for wall mounting shall be constructed so that they can be securely fixed independently of the connection to the water supply.

Compliance is checked by inspection.

NOTE Keyhole slots, hooks and similar means, without any further means to prevent the pump from being inadvertently lifted off the wall, are not considered to be adequate means for fixing the pump securely.

25 Supply connection and external flexible cords

25.7 In the second paragraph, replace "aquarium pumps and **class III pumps**" by "aquarium pumps, **shower-boost pumps** and **class III pumps**".

25.14 Replace the text by the following:

Portable pumps, except table fountain pumps and aquarium pumps, are subjected to the test.