
Safety of household and similar electrical appliances - Part 2: Particular requirements for electric appliances for use with aquariums and garden ponds (IEC 335-2-55:1989, modified)

Safety of household and similar electrical appliances -- Part 2: Particular requirements for electrical appliances for use with aquariums and garden ponds

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -- Teil 2: Besondere Anforderungen für elektrische Geräte zum Gebrauch mit Aquarien und Gartenteichen

SÉCURITÉ DES APPAREILS ÉLECTRODOMESTIQUES ET ANALOGUES -- Partie 2: Règles particulières pour les appareils électriques à utiliser avec les aquariums et les bassins de jardin

Ta slovenski standard je istoveten z: EN 60335-2-55:1993

ICS:

13.120	Varnost na domu	Domestic safety
97.180	Razna oprema za dom in trgovino	Miscellaneous domestic and commercial equipment

SIST EN 60335-2-55:1995 en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60335-2-55:1995](#)

<https://standards.iteh.ai/catalog/standards/sist/f435ecf7-50d9-4365-a9ad-5df90d037b0e/sist-en-60335-2-55-1995>

EUROPEAN STANDARD
NORME EUROPEENNE
EUROPAISCHE NORM

EN 60335-2-55

April 1993

UDC 64.06-83:639.93:712.5:614.8

Descriptors: Household electrical appliances, aquaria, safety requirements, protection against electric shock, fire protection, protection against mechanical hazard

English version

**SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES
PART 2: PARTICULAR REQUIREMENTS FOR ELECTRIC APPLIANCES
FOR USE WITH AQUARIUMS AND GARDEN PONDS
(IEC 335-2-55:1989, modified)**

Sécurité des appareils électrodomestiques et analogues Deuxième partie: Règles particulières pour les appareils électriques à utiliser avec les aquariums et les bassins de jardin (CEI 335-2-55:1989, modifiée)	Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke Teil 2: Besondere Anforderungen für elektrische Geräte zum Gebrauch mit Aquarien und Gartenteichen (IEC 335-2-55:1989, modifiziert)
--	---

ITEH STANDARD PREVIEW
(standards.iteh.ai)

This European Standard was approved by CENELEC on 9 March 1993. 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.

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 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, 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

© 1993 Copyright reserved to CENELEC members

Ref. No. EN 60335-2-55:1993 E

FOREWORD

R The proposal to endorse the first edition of IEC 335-2-55, document CLC/TC 61 (SEC) 689, was circulated under the enquiry procedure in April 1989. This proposal was discussed during the Stockholm meeting in November/December 1989, when it was decided to submit a draft for EN 60335-2-55 to the voting procedure. This procedure started in July 1990 but the draft did not receive sufficient support. The comments were discussed during the Athens meeting in November 1990 and the Brussels meeting in November 1991 when it was decided to submit a second draft for EN 60335-2-55 to the voting procedure.

This draft was circulated in September 1992 and was ratified by CENELEC on 9 March 1993.

This European Standard has been prepared by the secretariat of CENELEC Technical Committee TC 61.

The following dates are applicable:

- latest date of publication of an identical national standard (dop) 1993-12-01
- date of withdrawal of conflicting national standards (dow) 1995-12-01

For aquarium heaters which have complied with HD 262 S1:1976 and its amendments and for other products which have complied with the relevant national standard before 1995-12-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2000-12-01.

This standard has to be used in conjunction with EN 60335-1:1988, Safety of household and similar electrical appliances, Part 1: General requirements, including its amendments A2:1988, A5:1989, A6:1989, A51:1991, A52:1992, A53:1992, A54:1992 and A55:1993.

Where a particular subclause of Part 1 is not mentioned in this Part 2, that subclause applies as far as is reasonable. Where this standard states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

Subclauses which are in addition to those in Part 1 are numbered starting with 101.

There are no special national conditions (snc) causing a deviation from this European Standard, other than those listed in annex ZX to EN 60335-1.

National deviations from this European Standard are listed in annex ZY and are in addition to those in EN 60335-1.

Other publications quoted in this standard:

EN 60335-2-41:1990 Part 2: Particular requirements for electric pumps for liquids having a temperature not exceeding 35 °C

EN 60598-2-18:1989 Luminaires - Part 2: Particular requirements
Section Eighteen: Luminaires for swimming pools and similar applications

r The following print types are used:

- R - requirements: in roman type;
- i - test specifications: in italic type ;
- r - explanations: in small roman type.

p NOTE: In this document the following indications are used in the margin:

- R for roman type,
- i for italic type,
- r for small roman type,
- p for instructions for preparing the printed version.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60335-2-55:1995

<https://standards.iteh.ai/catalog/standards/sist/f435ecf7-50d9-4365-a9ad-5df90d037b0e/sist-en-60335-2-55-1995>

ENDORSEMENT NOTICE

R The text of the International Standard IEC 335-2-55:1989 was approved by CENELEC with agreed common modifications as given below.

COMMON MODIFICATIONS

- p Foreword Delete.
- Preface Delete.
- 1 **Scope**
- p 1.1 Replace "IEC Publication 335-2-41" by "EN 60335-2-41" and "IEC Publication 598-2-18" by "EN 60598-2-18".
- 7 **Marking**
- p 7.1 Delete the first paragraph of the requirement.
- 7.12 Add after the first warning text:
- r **This warning does not apply to Class III appliances.**
<https://standards.iteh.ai/catalog/standards/sist/435ecf7-50d9-4365-a9ad-5df90d037b0e/sist-en-60335-2-55-1995>
- 8 **Protection against electric shock**
- p Replace the text by:
- R This clause of Part 1 is applicable except as follows:
- i 8.4 **Replacement:**
- R Conducting liquids which are or may become accessible in normal use shall not be in direct contact with live parts other than those operating at safety extra-low voltages not exceeding 24 V.
- For Class II appliances and Class II constructions, such liquids shall not be in direct contact with basic insulation.
- 15 **Moisture resistance**
- p 15.2 Replace the text of the modification by:
- i For the immersion test, watertight appliances are immersed to the maximum depth of immersion stated in the instruction sheet or 1 m, whichever is more unfavourable.

COMMON MODIFICATIONS

- 21 **Mechanical strength**
- p 21.1 Replace the text of the addition by:
- i For Class II watertight appliances, compliance is also checked by the test of 21.101.
- For aquarium heaters having a glass enclosure, the impact energy is reduced to $0,2 \text{ Nm} \pm 0,02 \text{ Nm}$ and the blows are applied once to three points of the enclosure that are likely to be weak.
- r Care is to be taken to ensure that the complete length of the glass enclosure is in contact with the polyamide sheet.
- i These heaters are then fully immersed in water in the vertical position. The quantity of water in the vessel is between 0,33 l and 0,5 l for each watt of rated input. The heater is supplied at rated voltage and operated so that the water temperature stabilizes between $20 \text{ }^\circ\text{C}$ and $25 \text{ }^\circ\text{C}$. Water is then removed until half the length of the glass enclosure is exposed. When the heater is at maximum temperature during the cycle of operation of the thermal control, the vessel is refilled with water at $15 \text{ }^\circ\text{C} \pm 2 \text{ }^\circ\text{C}$. If necessary, the ambient temperature is maintained at $15 \text{ }^\circ\text{C} \pm 2 \text{ }^\circ\text{C}$.
- r This immersion test is not applied to heaters intended to be placed on the bottom of the aquarium.
- i Immediately after the application of the impact hammer, watertight aerators are operated while immersed in water to the maximum depth of immersion marked or to 1 m, whichever is the greater, until steady conditions are established. The aerator is then allowed to cool to approximately room temperature.
- After this test, water shall not have entered places where electrical parts are located.
- 25 **Supply connection and external flexible cables and cords**
- p 25.6 Add:
- R This requirement does not apply to Class III appliances.

ANNEX ZY

NATIONAL DEVIATIONS

A-deviation: National deviation due to regulations, the alteration of which is for the time being outside the competence of the CENELEC member.

Addition:

7.12 **SWITZERLAND** (Wiring Rules, SEV 1000-1, 1985, Subclause 41 255)

For Class I and Class II appliances for outdoor use the instruction sheet shall state that an earth-leakage circuit-breaker having a rated tripping current not exceeding 30 mA must be used.

8.4 **FRANCE** (Arrêté du ministère de l'équipement et du logement du 2 octobre 1969 "Règlementations des installations électriques des bâtiments d'habitation")

The value of 24 V is replaced by 12 V.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60335-2-55:1995

<https://standards.iteh.ai/catalog/standards/sist/f435ecf7-50d9-4365-a9ad-5df90d037b0e/sist-en-60335-2-55-1995>

C E N E L E C

=====
Central Secretariat

CORRIGENDUM to EN 60335-2-55:1993

English version

Page 5

Replace the common modification for 25.6 by:

p 25.6 Replace "245-IEC-57" by "H05 RN-F".

Add:

R This requirement does not apply to Class III appliances.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

August 1993

[SIST EN 60335-2-55:1995](https://standards.iteh.ai/catalog/standards/sist/f435ecf7-50d9-4365-a9ad-5df90d037b0e/sist-en-60335-2-55-1995)

<https://standards.iteh.ai/catalog/standards/sist/f435ecf7-50d9-4365-a9ad-5df90d037b0e/sist-en-60335-2-55-1995>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60335-2-55:1995](#)

<https://standards.iteh.ai/catalog/standards/sist/f435ecf7-50d9-4365-a9ad-5df90d037b0e/sist-en-60335-2-55-1995>

NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

**CEI
IEC**
335-2-55

Première édition
First edition
1989-01

**Sécurité des appareils électrodomestiques
et analogues**

Deuxième partie:

Règles particulières pour les appareils électriques
à utiliser avec les aquariums et les bassins
de jardin

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60335-2-55:1995](https://standards.iteh.ai/catalog/standards/sist/f435ecf7-50d9-4365-a9ad-55e1e1d1d1d1/sist-en-60335-2-55-1995)

[https://standards.iteh.ai/catalog/standards/sist/f435ecf7-50d9-4365-a9ad-](https://standards.iteh.ai/catalog/standards/sist/f435ecf7-50d9-4365-a9ad-55e1e1d1d1d1/sist-en-60335-2-55-1995)

**Safety of household and similar electrical
appliances**

Part 2:

Particular requirements for electrical appliances
for use with aquariums and garden ponds



Numéro de référence
Reference number
CEI/IEC: 335-2-55: 1989