
Varnost gospodinjskih in podobnih električnih aparatov - 2-86. del: Posebne zahteve za električne ribiške stroje (IEC 60335-2-86:1998; spremenjen)

Safety of household and similar electrical appliances -- Part 2-86: Particular requirements for electric fishing machines

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -- Teil 2-86: Besondere Anforderungen für elektrische Fischereigeräte

Sécurité des appareils électrodomestiques et analogues -- Partie 2-86: Règles particulières pour les équipements électriques de pêche

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Ta slovenski standard je istoveten z: EN 60335-2-86:2000

ICS:

65.150

Ribolov in ribogojstvo

Fishing and fish breeding

SIST EN 60335-2-86:2001

en

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EUROPEAN STANDARD

EN 60335-2-86

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2000

ICS 65.150

English version

Safety of household and similar electrical appliances
Part 2-86: Particular requirements for electric fishing machines
(IEC 60335-2-86:1998, modified)

Sécurité des appareils
électrodomestiques et analogues
Partie 2-86: Règles particulières pour les
équipements électriques de pêche
(CEI 60335-2-86:1998, modifiée)

Sicherheit elektrischer Geräte für den
Hausgebrauch und ähnliche Zwecke
Teil 2-86: Besondere Anforderungen für
elektrische Fischereigeräte
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This European Standard was approved by CENELEC on 2000-08-01. 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, Czech Republic, 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

Foreword

The text of document 61H/122/FDIS, future first edition of IEC 60335-2-86 prepared by SC 61H of the IEC Technical Committee 61, was submitted to the IEC-CENELEC parallel vote in March 1998. The comments were discussed during the Naples meeting of CENELEC TC 61 in November 1998, when it was decided to submit a new draft for EN 60335-2-86 to the formal vote.

This draft was circulated in November 1999 and was approved by CENELEC as EN 60335-2-86 on 2000-08-01.

The following dates are applicable:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2001-08-01
- date on which national standards conflicting with the EN have to be withdrawn (dow) 2007-08-01

This standard has to be used in conjunction with EN 60335-1, Safety of household and similar electrical appliances - Part 1: General requirements. It was established on the basis of the 1994 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 part 2 supplements or modifies the corresponding clauses of EN 60335-1, so as to convert it into the European Standard: Safety requirements for electric fishing machines.

When a particular subclause of part 1 is not mentioned in this part 2 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.

Subclauses, tables and figures which are additional to those in part 1 are numbered starting with 101.

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

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

NOTE 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 2. When a definition of part 1 concerns an adjective, the adjective and the associated noun are also in bold.

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

Introduction

An investigation by CENELEC TC 61 has concluded that all risks from products within the scope of this standard are fully covered by the Low Voltage Directive, 73/23/EEC. If the product has mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 89/392/EEC, has shown that the risks are mainly of electrical origin and consequently this directive is not applicable. However, the relevant essential safety requirements of the Machinery Directive are covered by this standard together with the principal objectives of the Low Voltage Directive.

Endorsement notice

The text of the International Standard IEC 60335-2-86:1998 was approved by CENELEC as a European Standard with agreed modifications as given below.

COMMON MODIFICATIONS**1 Scope**

p **Add to note 2:**

- In some countries the use of **portable electric fishing machines** for catching fish is only allowed for research purposes.

Annexes**Annex A – Normative references**

p **Replace by:**

Annex A (normative)**Normative references**

International publications with their relevant European publication

Addition:

<u>IEC standard</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
60068-2-52	1996	Environmental testing – Part 2: Tests Test Kb: Salt mist, cyclic (sodium chloride solution)	EN 60068-2-52	1996
60417-2	1998	Graphical symbols for use on equipment Part 2: Symbol originals	EN 60417-2	1999
61558-1 (mod)	1997	Safety of power transformers, power supply units and similar Part 1: General requirements and tests	EN 61558-1	1997

Annex ZB (informative)**A-deviations**

Addition:

<u>Clause</u>	<u>A-deviation</u>
22.101	Germany (Landesfischereiverordnung (LFischVO)) The use of alternating current for catching fish is not allowed.

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**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

60335-2-86

Première édition
First edition
1998-08

**Sécurité des appareils électrodomestiques
et analogues –**

**Partie 2-86:
Règles particulières pour les équipements
électriques de pêche**

**Safety of household and similar
electrical appliances –**

**Part 2-86:
Particular requirements for electric
fishing machines**

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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CONTENTS

	Page
FOREWORD	5
Clause	
1 Scope	9
2 Definitions	9
3 General requirement	13
4 General conditions for the tests	13
5 Void	13
6 Classification	13
7 Marking and instructions	15
8 Protection against access to live parts	17
9 Starting of motor-operated appliances	17
10 Power input and current	17
11 Heating	17
12 Void	19
13 Leakage current and electric strength at operating temperature	19
14 Void	21
15 Moisture resistance	21
16 Leakage current and electric strength	21
17 Overload protection of transformers and associated circuits	21
18 Endurance	23
19 Abnormal operation	23
20 Stability and mechanical hazards	23
21 Mechanical strength	23
22 Construction	23
23 Internal wiring	29
24 Components	29
25 Supply connection and external flexible cords	29
26 Terminals for external conductors	31
27 Provision for earthing	33
28 Screws and connections	33
29 Creepage distances, clearances and distances through insulation	33
30 Resistance to heat, fire and tracking	35
31 Resistance to rusting	35
32 Radiation, toxicity and similar hazards	37
Figure	39
Annexes	41

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –

**Part 2-86: Particular requirements
for electric fishing machines**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60335-2-86 has been prepared by subcommittee 61H: Safety of electrically-operated farm appliances, of IEC technical committee 61: Safety of household and similar appliances.

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

FDIS	Report on voting
61H/122/FDIS	61H/123RVD

[SIST EN 60335-2-86:2001](#)

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 part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the third edition (1991) of that standard and its amendment 1 (1994).

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for electric fishing machines.

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 in part 1 is to be adapted accordingly.

NOTE 1 – The following print types are used:

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

Words in **bold** in the text are defined in clause 2. When a definition of part 1 concerns an adjective, the adjective and the associated noun are also in **bold**.

NOTE 2 – Subclauses, tables and figures which are additional to those in part 1 are numbered starting from 101.

The following differences exist in some countries:

- Clause 1: The use of electric fishing machines is limited to research purposes only (Denmark, Finland, Sweden).

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SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –

Part 2-86: Particular requirements for electric fishing machines

1 Scope

This clause of part 1 is replaced by the following.

This standard deals with the safety of **electric fishing machines** by means of which water may be electrified for the purpose of catching fish or for providing barriers to all animals living in water.

The **rated voltage** of **portable electric fishing machines** is not more than 250 V and the **rated voltage** of **fixed electric fishing machines** for permanent connection to fixed wiring is not more than 1 000 V.

NOTE 1 – Examples of **electric fishing machines** coming within the scope of this standard are:

- **mains-operated electric fishing machines** which include those supplied from portable or stationary generator sets;
- **battery-operated electric fishing machines**.

NOTE 2 – Attention is drawn to the fact that

- for appliances intended to be used on board ships or boats, additional requirements may be necessary;
- for appliances intended to be used in tropical countries, special requirements may be necessary;
- in many countries, additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour, the national water supply authorities and similar authorities.

NOTE 3 – This standard does not apply to

- electric fence energizers (IEC 60335-2-76);
- electric animal stunning equipment (IEC 60335-2-87).

2 Definitions

This clause of part 1 is applicable except as follows.

2.2.9 Replacement:

normal operation

operation of the appliance under the following conditions:

the **electric fishing machine** is operated as in normal use when connected to the supply with an adjustable non-inductive resistor connected between its output terminals. The resistor is adjusted so as to give an **output current** just sufficient not to cause any **protective device** to operate.