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

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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CONTENTS

FOREWORD 3
INTRODUCTION 6
1 Scope 7
2 Normative references 7
3 Terms and definitions 8
4 General requirement 9
5 General conditions for the tests 10
6 Classification 10
7 Marking and instructions 10
8 Protection against access to live parts 12
9 Starting of motor-operated appliances 12
10 Power input and current 12
11 Heating 12
12 Void 13
13 Leakage current and electric strength at operating temperature 13
14 Transient overvoltages 14
15 Moisture resistance 14
16 Leakage current and electric strength 14
17 Overload protection of transformers and associated circuits 14
18 Endurance 14
19 Abnormal operation 14
20 Stability and mechanical hazards 15
21 Mechanical strength 15
22 Construction 15
23 Internal wiring 17
24 Components 17
25 Supply connection and external flexible cords 18
26 Terminals for external conductors 19
27 Provision for earthing 20
28 Screws and connections 20
29 Clearances, creepage distances and solid insulation 20
30 Resistance to heat and fire 20
31 Resistance to rusting 20
32 Radiation, toxicity and similar hazards 21
Annexes 22
Annex A (informative) Routine tests 22
Annex S (normative) Battery-operated appliances powered by batteries that are non-rechargeable or not recharged in the appliance 23
Annex AA (normative) Boat mounted electric fishing machines 26
Bibliography 28

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-86: Particular requirements for electric fishing machines

FOREWORD

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8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

DISCLAIMER
This Redline version is not an official IEC Standard and is intended only to provide the user with an indication of what changes have been made to the previous version. Only the current version of the standard is to be considered the official document.

This Redline version provides you with a quick and easy way to compare all the changes between this standard and its previous edition. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

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

This third edition cancels and replaces the second edition published in 2002, its Amendment 1 (2005) and its Amendment 2 (2012). This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

– aligns the text with IEC 60335-1, Ed 5, and its Amendments 1 and 2;
– some notes have been converted to normative text (22.102, 22.113, 26.106);
– requirements for battery-operated electric fishing machines have been moved to Annex S.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
61H/363/FDIS	61H/365/RVD

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

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 60335 series, under the general title: *Household and similar electrical appliances – Safety,* can be found on the IEC website.

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 fifth edition (2010) of that standard.

NOTE 1 When “Part 1” is mentioned in this standard, it refers to IEC 60335-1.

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.

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 in Part 1 is to be adapted accordingly.

NOTE 2 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 3 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 associated noun are also in bold.

NOTE 4 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
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- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. 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.

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules may differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another part 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

NOTE 1 Throughout this publication, when “Part 1” is mentioned, it refers to IEC 60335-1.

When a part 2 standard does not include additional requirements to cover hazards dealt with in Part 1, Part 1 applies.

NOTE 2 This means that the technical committees responsible for the part 2 standards have determined that it is not necessary to specify particular requirements for the appliance in question over and above the general requirements.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

NOTE 3 Horizontal and generic standards covering a hazard are not applicable since they have been taken into consideration when developing the general and particular requirements for the IEC 60335 series of standards. For example, in the case of temperature requirements for surfaces on many appliances, generic standards, such as ISO 13732-1 for hot surfaces, are not applicable in addition to Part 1 or part 2 standards.

~~An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features which impair the level of safety covered by these requirements.~~

~~An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.~~

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-86: Particular requirements for electric fishing machines

1 Scope

This clause of Part 1 is replaced by the following.

This part of IEC 60335 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 for single phase machines and 480 V for other machines, except that the **rated voltage** of ~~**fixed**~~ **electric fishing machines** for permanent connection to fixed wiring is not more than 1 000 V.

Electric fishing machines are appliances for scientific and commercial use.

Additional requirements for boat mounted **electric fishing machines** are given in Annex AA.

NOTE 101 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 102 Attention is drawn to the fact that

– for appliances intended to be used on board ships or boats, additional requirements ~~may~~ can 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 103 This standard does not apply to

– electric fence energizers (IEC 60335-2-76);

– electric animal stunning equipment (IEC 60335-2-87);

– shark deterrent devices that are carried by the user.

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.

This clause of Part 1 is applicable except as follows.

Addition:

IEC 60068-2-52~~:1996~~, *Environmental testing – Part 2: Tests – Test Kb: Salt mist, cyclic (sodium chloride solution)*

~~*IEC 61558-2-4:1997, Safety of power transformers, power supply units and similar – Part 2: Particular requirements for isolating transformers for general use*~~

IEC 61558-2-4, *Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1 100 V – Part 2-4: Particular requirements and tests for isolating transformers and power supply units incorporating isolating transformers*

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



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CONTENTS

FOREWORD 3
INTRODUCTION 6
1 Scope 7
2 Normative references 7
3 Terms and definitions 8
4 General requirement 9
5 General conditions for the tests 9
6 Classification 10
7 Marking and instructions 10
8 Protection against access to live parts 11
9 Starting of motor-operated appliances 12
10 Power input and current 12
11 Heating 12
12 Void 12
13 Leakage current and electric strength at operating temperature 12
14 Transient overvoltages 12
15 Moisture resistance 13
16 Leakage current and electric strength 13
17 Overload protection of transformers and associated circuits 13
18 Endurance 13
19 Abnormal operation 13
20 Stability and mechanical hazards 13
21 Mechanical strength 13
22 Construction 13
23 Internal wiring 16
24 Components 16
25 Supply connection and external flexible cords 16
26 Terminals for external conductors 16
27 Provision for earthing 17
28 Screws and connections 17
29 Clearances, creepage distances and solid insulation 17
30 Resistance to heat and fire 17
31 Resistance to rusting 17
32 Radiation, toxicity and similar hazards 18
Annexes 19
Annex A (informative) Routine tests 19
Annex S (normative) Battery-operated appliances powered by batteries that are non-rechargeable or not recharged in the appliance 20
Annex AA (normative) Boat mounted electric fishing machines 23
Bibliography 25

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_____

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