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**BS EN ISO 13297:2012**



BSI Standards Publication

# Small craft - Electrical systems - Alternating current installations

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This British Standard is the UK implementation of EN ISO 13297:2012. It supersedes BS EN ISO 13297:2001 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GME/33, Small craft.

A list of organizations represented on this committee can be obtained on request to its secretary.

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**Compliance with a British Standard cannot confer immunity from legal obligations.**

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#### **Amendments issued since publication**

Date	Text affected
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## EUROPÄISCHE NORM

October 2012

ICS 47.080

Supersedes EN ISO 13297:2000

English Version

## Small craft - Electrical systems - Alternating current installations (ISO 13297:2012)

Petits navires - Systèmes électriques - Installations à  
courant alternatif (ISO 13297:2012)

Kleine Wasserfahrzeuge - Elektrische Systeme -  
Wechselstromanlagen (ISO 13297:2012)

This European Standard was approved by CEN on 30 September 2012.

CEN 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 CEN-CENELEC Management Centre or to any CEN 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 CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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Management Centre: Avenue Marnix 17, B-1000 Brussels

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## Foreword

This document (EN ISO 13297:2012) has been prepared by Technical Committee ISO/TC 188 "Small craft".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2013, and conflicting national standards shall be withdrawn at the latest by April 2013.

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

This document supersedes EN ISO 13297:2000.

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

For relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of ISO 13297:2012 has been approved by CEN as a EN ISO 13297:2012 without any modification.

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## **Annex ZA** (informative)

### **Relationship between this European Standard and the Essential Requirements of EU Directive 94/25/EC, as amended by Directive 2003/44/EC**

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide one means of conforming to Essential Requirements of the New Approach Directives 94/25/EC, as amended by Directive 2003/44/EC.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

**Table ZA.1 — Correspondence between this European Standard and EU Directives**

<b>Clause(s)/sub-clause(s) of this European Standard</b>	<b>Corresponding annexes/Paragraphs of Directive 94/25/EC as amended 2003/44/EC</b>	<b>Comments</b>
All clauses	Annex IA2, Clause 5.3, Electrical systems.	
Clause 11	Annex IA2, Clause 5.6.1 Fire protection	In respect of avoiding wiring above hot areas of machines.
Annex B	Annex IA2, Clause 2.5 Owner's manual	

**WARNING:** Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

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## Contents

Page

<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 General requirements</b> .....	<b>4</b>
<b>5 Marking</b> .....	<b>6</b>
<b>6 Ignition sources</b> .....	<b>7</b>
<b>7 Overcurrent protection</b> .....	<b>7</b>
<b>7.1 General</b> .....	<b>7</b>
<b>7.2 Supply circuits</b> .....	<b>7</b>
<b>7.3 Branch circuits</b> .....	<b>8</b>
<b>8 Ground-fault protection/earth-leakage protection</b> .....	<b>8</b>
<b>9 Appliances and equipment</b> .....	<b>8</b>
<b>10 System wiring</b> .....	<b>8</b>
<b>11 Conductor and cable installation</b> .....	<b>9</b>
<b>12 Panel boards (switchboards)</b> .....	<b>11</b>
<b>13 Socket outlets</b> .....	<b>11</b>
<b>14 Power source options</b> .....	<b>12</b>
<b>15 Inverters and inverter/chargers</b> .....	<b>12</b>
<b>Annex A (normative) Conductor requirements</b> .....	<b>15</b>
<b>Annex B (normative) Instructions to be included with owner's manual</b> .....	<b>17</b>
<b>Annex C (informative) Recommended system tests</b> .....	<b>18</b>
<b>Annex D (informative) Typical a.c. system diagrams</b> .....	<b>19</b>
<b>Annex E (informative) Typical battery charger/inverter diagrams</b> .....	<b>23</b>
<b>Bibliography</b> .....	<b>25</b>

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 13297 was prepared by Technical Committee ISO/TC 188, *Small craft*.

This third edition cancels and replaces the second edition (ISO 13297:2000), which has been technically revised.

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# Small craft — Electrical systems — Alternating current installations

**IMPORTANT** — The colours represented in the electronic file of this document can be neither viewed on screen nor printed as true representations. Although the copies of this document printed by ISO have been produced to correspond (with an acceptable tolerance as judged by the naked eye) to the requirements of ISO 3864-4, it is not intended that these printed copies be used for colour matching. Instead, consult ISO 3864-4, which provides colorimetric and photometric properties together with, as a guideline, references from colour order systems.

## 1 Scope

This International Standard specifies the requirements for the design, construction and installation of low-voltage alternating current electrical systems which operate at nominal voltages of less than 250 V single phase on small craft of hull length up to 24 m.

Additional information to be included in the owner's manual is listed in Annex B.

## 2 Normative references

The following referenced documents are indispensable for the application 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.

ISO 7010, *Graphical symbols — Safety colours and safety signs — Registered safety signs*

ISO 8846, *Small craft — Electrical devices — Protection against ignition of surrounding flammable gases*

ISO 10133:2000<sup>1)</sup>, *Small craft — Electrical systems — Extra low voltage d.c. installation*

ISO 10240, *Small craft — Owner's manual*

IEC 60079-0, *Explosive atmospheres — Part 0: General requirements*

IEC 60309-2, *Plugs, socket-outlets and couplers for industrial purposes — Part 2: Dimensional interchangeability requirements for pin and contact-tube accessories*

IEC 60446, *Basic and safety principles for man-machine interface marking and identification — Identification of conductors by colours or numerals*

IEC 60529:1989, *Degrees of protection provided by enclosures (IP code)*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

#### **craft's earth**

#### **protective ground**

connection, provided for safety purposes, that is established by a conducting connection with the common ground/earth (potential of the earth's surface)

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1) Under revision.