

VÄIKELAEVAD. DIISELMOOTORID LAEVAS. MOOTORITE
KÜTUSE-, ÕLI- JA ELEKTRILISED KOMPONENDID

Small craft - Inboard diesel engines - Engine-mounted
fuel, oil and electrical components (ISO 16147:2018)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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|---|--|
| See Eesti standard EVS-EN ISO 16147:2018 sisaldab Euroopa standardi EN ISO 16147:2018 ingliskeelset teksti. | This Estonian standard EVS-EN ISO 16147:2018 consists of the English text of the European standard EN ISO 16147:2018. |
| Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. | This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation. |
| Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 13.06.2018. | Date of Availability of the European standard is 13.06.2018. |
| Standard on kättesaadav Eesti Standardikeskusest. | The standard is available from the Estonian Centre for Standardisation. |

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ICS 47.080

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English Version

Small craft - Inboard diesel engines - Engine-mounted fuel,
oil and electrical components (ISO 16147:2018)

Petits navires - Moteurs intérieurs diesels - Éléments
des circuits d'alimentation, des systèmes de
lubrification et des systèmes électriques fixés sur le
moteur (ISO 16147:2018)

Kleine Wasserfahrzeuge - Eingebaute Dieselmotoren -
Am Motor befestigte Kraftstoff-, Öl- und
Elektrikbauteile (ISO 16147:2018)

This European Standard was approved by CEN on 2 April 2018.

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 18 July 2018.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

This document (EN ISO 16147:2018) has been prepared by Technical Committee ISO/TC 188 "Small craft" in collaboration with CCMC.

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 December 2018, and conflicting national standards shall be withdrawn at the latest by December 2018.

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

This document supersedes EN ISO 16147:2017.

According to the CEN-CENELEC Internal Regulations, the national standards organizations 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 16147:2018 has been approved by CEN as EN ISO 16147:2018 without any modification.

Annex ZA (informative)

Relationship between this European Standard and the Essential Requirements of Directive 2013/53/EU aimed to be covered

This European standard has been prepared under a Commission's standardization request M/542 C(2015) 8736 final to provide one voluntary means of conforming to Essential Requirements of Directive 2013/53/EU.

Once this standard is cited in the Official Journal of the European Union under that Directive, 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 Annex I of Directive 2013/53/EU

| Essential requirements (ERs) of EU Directive 2013/53/EU | Clauses/subclauses of this European Standard | Qualifying remarks/Notes |
|--|--|--|
| Annex I, Part A, 5.1.1 - Installation requirements; inboard engine | 4, 5, 6 | In respect of inspection of fuel, oil and electrical components fitted to diesel inboard-mounted engines. |
| Annex I, Part A, 5.2.1 - Fuel system; general | 4, 5, 7 | In respect of minimising the risk of fuel leakage and risk/spread of fire from fuel components that are engine mounted. |
| Annex I, Part A, 5.3 - Electrical system | 4, 6 | Only in respect of minimising the risk/spread of fire from electrical components that are engine mounted. |
| Annex I, Part A, 5.6.1 Fire protection - General | 4, 5, 6, 7 | In respect of the design and installation arrangements for engine mounted fuel, oil and electrical components on inboard diesel engines. |

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

Contents

Page

| | |
|---|-----------|
| Foreword | iv |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 1 |
| 4 General | 2 |
| 5 Engine fuel and oil system and components | 2 |
| 5.1 General..... | 2 |
| 5.2 High-pressure pipes..... | 3 |
| 5.3 Low-pressure fuel lines..... | 3 |
| 5.4 Fuel and lubrication oil filters..... | 3 |
| 6 Electrical systems and components | 3 |
| 6.1 General..... | 3 |
| 6.2 Cranking motors..... | 3 |
| 6.3 Wiring and connections..... | 4 |
| 6.4 Relays, fuse boxes and electronic control modules (ECMs)..... | 4 |
| 7 Installation manual | 4 |

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of Standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 188, *Small craft, SC 2, Engines and propulsion systems*.

This second edition of ISO 16147 cancels and replaces the first edition (ISO 16147:2002), of which it constitutes a technical revision. It also incorporates the amendment ISO 16147:2002/Amd 1:2013.

The main changes compared to the previous edition are as follows:

- in [4.2](#), requirements for access to fuel and electrical components have been added;
- in [4.3](#), requirements for exposed operating or hot components have been added;
- in [4.4](#), requirements that installation of fuel and electrical components shall take account of the risk and spread of fire have been added;
- in [5.3.1](#), requirements and temperature requirements on material in low pressure fuel lines have been deleted;
- in [5.4](#), requirements on oil filters have been added;
- in [6.1.2](#), requirements that AC installations shall meet the requirements in IEC 60092-507 or ISO 13297 have been added;
- in [6.1.3](#), requirements that electronic shift and throttle components if engine mounted and part of engine delivery from manufacturer shall meet the requirements in ISO 25197 have been added;
- in [Clause 7](#), requirements to state return fuel temperature/energy and flow in installation manual have been deleted and replaced by information about fuel line dimensions.