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Large yachts — Diesel engines for main propulsion and essential auxiliaries — Safety requirements

Grands yachts — Moteurs diesel pour la propulsion principale et les moteurs auxiliaires essentiels — Exigences de sécurité

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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.

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The committee responsible for this document is ISO/TC 8, *Ships and marine technology*, Subcommittee 12, *Large yachts*.

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Introduction

This International Standard defines the safety requirements for diesel engines installed in large yachts and promotes a risk based approach for diesel engines intended for propulsive or essential auxiliaries for power generation.

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Large yachts — Diesel engines for main propulsion and essential auxiliaries — Safety requirements

1 Scope

This International Standard specifies the safety requirements for diesel engines with a rated power of 100kW and over for propulsion and essential auxiliaries for power generation for large yachts 24 m and over in hull length, measured in accordance with ISO 8666:2002, and of less than 500 GT which are in commercial use for sport or pleasure, and do not carry cargo and do not carry more than twelve passengers.

The engine in terms of this International Standard is understood as the prime mover up to its driving extremitie(s) for power take off(s).

This International Standard does not cover engines used for generating the emergency source of electrical power.

2 Normative references

The following referenced documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3046-1, *Reciprocating internal combustion engines — Performance — Part 1: Declarations of power, fuel and lubricating oil consumptions, and test methods — Additional requirements for engines for general use*

ISO 7840, *Small craft — Fire-resistant fuel hoses*

ISO 8666:2002, *Small craft — Principal data*

ISO 12100, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

ISO 13732-1, *Ergonomics of the thermal environment — Methods for the assessment of human responses to contact with surfaces — Part 1: Hot surfaces*

ISO 15540, *Ships and marine technology — Fire resistance of hose assemblies — Test methods*

ISO 25197, *Small craft — Electrical/electronic control systems for steering, shift and throttle*

IEC 60068-2-6, *Environmental testing — Part 2-6: Test Fc Vibration (sinusoidal)*

IEC 60092-101, *Electrical installations in ships — Part 101: Definitions and general requirements*

IEC 60092-504:2001, *Electrical Installations in ships — Part 504: Special Features — Control and Instrumentation*

IEC 60332-2-1, *Tests on electric and optical fibre cables under fire conditions — Part 2-1: Test for vertical flame propagation for a single small insulated wire or cable — Apparatus*

IEC 60332-2-2, *Tests on electric and optical fibre cables under fire conditions — Part 2-2: Test for vertical flame propagation for a single small insulated wire or cable — Procedure for diffusion flame*

IEC 60533, *Electrical and Electronic Installations in Ships — Electromagnetic Compatibility*

IEC 60695-11-5, *Fire hazard testing — Part 11-5: Test flames — Noodle flame test method — Apparatus, confirmatory test arrangement and guidance*

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