SLOVENSKI STANDARD
oSIST prEN ISO 8665-2:2023

01-januar-2023

Mala plovila - Merjenje moči in deklariranje - 2. del: Električni pogon plovil (ISO/DIS 8665-2:2022)

Small craft - Power measurements and declarations - Part 2: Electric marine propulsion (ISO/DIS 8665-2:2022)

Kleine Wasserfahrzeuge - Leistungsmessungen und Leistungsangaben - Teil 2: Elektrischer Schiffsantrieb (ISO/DIS 8665-2:2022)

Petits navires - Mesurage et déclaration de la puissance - Partie 2: Propulsion électrique à usage marin (ISO/DIS 8665-2:2022)

Ta slovenski standard je istoveten z: **prEN ISO 8665-2**

ICS:

47.020.20	Ladijski motorji	Marine engines and propulsion systems
47.080	Čolni	Small craft

oSIST prEN ISO 8665-2:2023 **en,fr,de**

DRAFT INTERNATIONAL STANDARD

ISO/DIS 8665-2

ISO/TC **188**

Secretariat: **SIS**

Voting begins on:
2022-11-09

Voting terminates on:
2023-02-01

Small craft — Power measurements and declarations —

Part 2:
Electric marine propulsion

ICS: 47.080

This document is circulated as received from the committee secretariat.

ISO/CEN PARALLEL PROCESSING

Reference number
ISO/DIS 8665-2:2022(E)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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

For an explanation of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 188, *Small craft*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 464, *Small craft*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all parts in the ISO 8665 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This standard was developed due to the need for a consistent method of measuring and declaring power for electric and hybrid electric propulsion systems for small craft.

Small craft — Power measurements and declarations —

Part 2: Electric marine propulsion

1 Scope

This document specifies the requirements for determining the power of electric marine propulsion systems when presented for documenting and checking of the declared (rated) power published by the manufacturer.

This International Standard applies to electric systems used for propulsion of recreational craft and other small craft of up to 24 m hull length.

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.

Consider references to UN 85

3 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
power
expressed as a measure in kilowatts (kW)

3.2
declared power
value of the power, declared by the manufacturer, which a motor will deliver under a given set of circumstances

3.3
declared propeller shaft power
value of the power, declared by the manufacturer, at the propeller shaft of an electric propulsion system sold with complete propulsion units or at the coupling to the propeller shaft of a motor sold with reduction and/or reversing gears

3.4
declared motor power
value of the power, declared by the manufacturer, at the motor power output shaft of a motor sold without reduction or reversing gears, stern drives or sail drive units

3.5
brake power
power or the sum of the powers delivered at the end of the crankshaft or its equivalent

3.6
continuous power
power which a motor or combined hybrid system is capable of delivering continuously, between the normal maintenance intervals stated by the manufacturer, at the stated speed and under stated ambient conditions, the maintenance prescribed by the manufacturer having been carried out

3.7
net torque
torque transmitted on a test bed at the end of the crankshaft or its equivalent at the corresponding motor speed

4 Declaration of power

4.1 A statement of a single value of declared power shall be accompanied by a statement of the declared motor speed. The declaration of power shall always indicate whether the power is propeller shaft power or motor output power.

4.2 Declaration of propeller shaft power

The propeller shaft power shall be declared for propulsion motors sold as a complete propulsion unit or at the coupling to the propeller shaft of motors sold with reduction and/or reversing gear.

4.3 Declaration of motor power

For units intended to be integrated with but sold without reduction and/or reversing gear, motor-power shall be the shaft power of the motor

5 Test Methods

5.1 Test Conditions

5.1.1 The test motor or propulsion system shall be representative of the manufacturer's production units. All auxiliaries fitted and intended to be sold with the motor shall be listed and described.

5.1.2 Auxiliaries not necessary for propulsion of the craft in which the motor is intended to be installed and which may be mounted on the motor shall be removed for the test.

5.1.3 For liquid-cooled motors, the temperature of the coolant at the raw-water inlet shall be maintained at 25 °C ± 15 °C. The coolant outlet temperature shall be within the range specified by the motor manufacturer if such a range is specified.

5.1.4 Standard reference conditions

For the purpose of determining the power of a motor, the following standard reference conditions shall be used:

— Air temperature: Tr = 25 °C ;

— Relative humidity: ør = 30 %;

— System coolant temperature: Tcr = 25 °C