IEC 62613-2

Edition 2.0 2016-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Plugs, socket-outlets and ship couplers for high-voltage shore connection systems (HVSC-systems) –
Part 2: Dimensional compatibility and interchangeability requirements for accessories to be used by various types of ships

Prises de courant et connecteurs de navires pour les systèmes haute tension de raccordement des navires à quai –
Partie 2: Règles dimensionnelles de compatibilité et d'interchangeabilité pour les appareils destinés à être utilisés par divers types de navires

IEC 62613-2:2016-11(en-fr)

IEC Central Office
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

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PLUGS, SOCKET-OUTLETS AND SHIP COUPLERS FOR HIGH-VOLTAGE SHORE CONNECTION SYSTEMS (HVSC-SYSTEMS) –

Part 2: Dimensional compatibility and interchangeability requirements for accessories to be used by various types of ships

FOREWORD

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International Standard IEC 62613-2 has been prepared by subcommittee 23H: Plugs, Socket-outlets and Couplers for industrial and similar applications, and for Electric Vehicles of IEC technical committee 23: Electrical accessories.

This second edition cancels and replaces the first edition published in 2011. This edition constitutes a technical revision.

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

a) addition of configuration I: 7,2 kV 350 A three-phase accessories with three IP0 pilot contacts;
b) addition of configuration J: 12 kV 500 A three-phase accessories with seven pilot contacts;
c) improvement of drawings in standard sheets and addition of missing dimensions.

The text of this standard is based on the following documents:

CDV	Report on voting
23H/352/CDV	23H/362/RVC

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.

This part of IEC 62613 shall be read in conjunction with IEC 62613-1:2011.

The clauses of these particular requirements supplement or modify the corresponding clauses in Part 1. Where the text of subsequent parts indicates an "addition" to or a "replacement" of the relevant requirement, test specification or explanation of Part 1, these changes are made to the relevant text of Part 1, which then becomes part of the standard. Where no change is necessary, the words "Clause X of IEC 62613-1:2011 applies" are used. Standard sheets are in Annexes A, B, etc.

A list of all the parts in the IEC 62613 series, under the general title *Plugs, socket-outlets and ship couplers for high-voltage shore connection systems (HVSC-systems)*, can be found on the IEC website.

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,
- replaced by a revised edition, or
- amended.

INTRODUCTION

International Standard series IEC 62613 has been developed to address the needs in terms of plugs, socket-outlets and ship couplers (ship connectors and ship inlets), herein referred to as "accessories", of IEC/ISO/IEEE 80005-1:2012, *Utility connections in port – Part 1: High Voltage Shore Connection (HVSC) Systems – General requirements*. The purpose of IEC/ISO/IEEE 80005-1 is to define requirements that allow compliant ships to connect to compliant high-voltage shore power supplies through standardized shore-to-ship connection accessories.

Ships that do not require connecting with standardized high-voltage shore power supplies as above may use accessories that are not covered by the standard sheets of IEC 62613-2 but they may find it impossible to connect to these shore supplies.

Other low voltage plugs, socket-outlets, connectors and inlets used for the connection of certain ship types to low-voltage shore power supplies can be found in the IEC 60309 series.

The IEC 62613 series is divided into the following parts:

– *Part 1: General requirements*, comprising clauses of a general character
– *Part 2: Dimensional compatibility and interchangeability requirements for accessories to be used by various types of ships*

These ships are described in IEC/ISO/IEEE 80005-1.

PLUGS, SOCKET-OUTLETS AND SHIP COUPLERS FOR HIGH-VOLTAGE SHORE CONNECTION SYSTEMS (HVSC-SYSTEMS) –

Part 2: Dimensional compatibility and interchangeability requirements for accessories to be used by various types of ships

1 Scope

This part of IEC 62613 contains standard sheets for different configurations of (shore) socket-outlets, (shore) plugs, ship connectors and ship inlets, hereinafter referred to as accessories, up to 12 kV, 500 A, 50/60 Hz and with up to seven pilot/auxiliary contacts.

General requirements are given in IEC 62613-1.

2 Normative references

Clause 2 of IEC 62613-1:2011 applies, with the following exception:

Addition:

IEC 62613-1:2011, *Plugs, socket-outlets and ship couplers for high-voltage shore connection systems (HVSC-systems) – Part 1: General requirements*

3 Terms and definitions

Clause 3 of IEC 62613-1:2011 applies.

4 General

Clause 4 of IEC 62613-1:2011 applies.

5 Standard ratings

Clause 5 of IEC 62613-1:2011 applies.

6 Classification

Clause 6 of IEC 62613-1:2011 applies.

7 Marking

Clause 7 of IEC 62613-1:2011 applies.

8 Dimensions

Clause 8 of IEC 62613-1:2011 applies except as follows:

8.1 *Replacement:*