

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Mobile and fixed offshore units – Electrical installations –
Part 5: Mobile units**

**Unités mobiles et fixes en mer – Installations électriques –
Partie 5: Unités mobiles**





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**Unités mobiles et fixes en mer – Installations électriques –
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MOBILE AND FIXED OFFSHORE UNITS –
ELECTRICAL INSTALLATIONS –****Part 5: Mobile units**

FOREWORD

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International Standard IEC 61892-5 has been prepared by IEC technical committee 18: Electrical installations of ships and of mobile and fixed offshore units.

The requirements specified in this International Standard are based on the Code for the Construction and Equipment of Mobile Offshore Drilling Units (MODU Code) published by the International Maritime Organization (IMO), and might include additional provisions.

This fourth edition cancels and replaces the third edition published in 2014. This edition constitutes a technical revision.

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

- a) the technical requirements as to electric propulsion have been replaced with a reference to IEC 60092-501:2013;

- b) the requirement for handrails on main and emergency switchboards has been added;
- c) requirements as to control systems and indicators for watertight doors and hatch covers have been made more specific;
- d) requirements concerning the holding capacity for jacking systems have been rewritten;
- e) requirements as to thruster-assisted mooring system have been rewritten;
- f) the annex regarding enhanced system verification (HIL test) for dynamic positioned mobile units has been relocated to IEC 61892-2:2019.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
18/1653/FDIS	18/1665/RVD

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 Directive, Part 2.

A list of all the parts in the IEC 61892 series, published under the general title *Mobile and fixed offshore units – Electrical installations*, can be found on the IEC website.

The committee has decided that the contents of this document shall remain unchanged until the stability date indicated on the IEC website under "<http://www.store.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

IEC 61892 forms a series of International Standards for safety in the design, selection, installation, maintenance and use of electrical equipment for the generation, transmission, storage, distribution and utilization of electrical energy for all purposes in offshore units which are used for the purpose of exploration or exploitation of petroleum resources.

This part of IEC 61892 incorporates and coordinates, as far as possible, existing rules and forms a code of interpretation, where applicable, of the requirements of the International Maritime Organization (IMO), and constitutes a guide for future regulations which may be prepared and a statement of practice for offshore unit owners, designers, installers and appropriate organizations.

This document is based on solutions and methods which are in current use, but it is not intended to impede development of new or improved techniques.

In this revision, voltage limitations have been removed. However, voltage limitations may be given in the referenced equipment standards. The removal of voltage limitations is considered necessary due to the interconnection of, and supply from shore to offshore units. In such cases transmission voltages up to 132 kV AC and 150 kV DC are used and higher voltages are being planned.

The IEC 61892 series aims to constitute a set of International Standards for the offshore petroleum industry, but it is not intended to prevent their use beyond petroleum installations.

MOBILE AND FIXED OFFSHORE UNITS – ELECTRICAL INSTALLATIONS –

Part 5: Mobile units

1 Scope

This part of IEC 61892 specifies additional characteristics for electrical installations in mobile units.

It applies to installations that depend on buoyancy, such as column-stabilized units (semi-submersible units), ship- or barge-type units as well as self-elevating units. It specifies additional characteristics for such units, used during transfer from one location to another and for drilling, production, accommodation, processing, storage and offloading purposes.

It applies to all installations, whether permanent, temporary, transportable or hand-held, to AC installations and DC installations without any limitation on voltage level. Referenced equipment standards may give voltage level limitations.

This document specifies requirements such as those concerning:

- environmental conditions,
- limits of inclination for the unit where the equipment is required to operate,
- bilge pumps,
- navigation and obstruction lights,
- steering gear,
- ballast system,
- jacking systems, and
- anchoring systems.

For electric propulsion, reference is made to IEC 60092-501.

For dynamic positioning systems, reference is made to relevant IMO requirements.

This document does not apply to

- fixed equipment for medical purposes,
- electrical installations of tankers, and
- control of ignition sources other than those created by electrical equipment.

NOTE 1 For medical rooms, IEC 60364-7-710 provides specific requirements. Requirements for tankers are given in IEC 60092-502.

NOTE 2 Guidance on protection of non-electrical equipment can be found in ISO 80079-36, ISO 80079-37 and IMO 2009 MODU Code, 6.7.

NOTE 3 Attention is drawn to further requirements concerning electrical installations on such mobile offshore units contained in the IMO MODU Code.