

# INTERNATIONAL STANDARD

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## **Mobile and fixed offshore units – Electrical installations –**

### **Part 1: General requirements and conditions**

*Unités fixes et mobiles en mer –  
Installations électriques –*

*Partie 1:  
Prescriptions et conditions générales*

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MOBILE AND FIXED OFFSHORE UNITS –  
ELECTRICAL INSTALLATIONS –**

**Part 1: General requirements and conditions**

**FOREWORD**

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters expressed as early as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
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International Standard IEC 61892-1 has been prepared by IEC technical committee 18: Electrical installations of ships and of mobile and fixed offshore units.

The text of this standard based on the following documents:

FDIS	Report on voting
18/916/FDIS	18/920/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

Annex A is for information only.

IEC 61892 consists of the following parts, under the general title: *Mobile and fixed offshore units – Electrical installations*:

Part 1: General requirements and conditions

Part 2: System design<sup>1</sup>

Part 3: Equipment

<sup>1</sup> Under consideration. Before IEC 61892-2 is published, reference is made to IEC 60092-201.

Part 4: Cables<sup>2</sup>

Part 5: Mobile units

Part 6: Installation

Part 7: Hazardous areas

The committee has decided that this publication remains valid until 2006. At this date, in accordance with the committee's decision, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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<sup>2</sup> Under consideration. Before IEC 61892-4 is published, reference is made to IEC 60092-35X-series.

## INTRODUCTION

IEC 61892 forms a series of International Standards intended to enable safety in the design, selection, installation, maintenance and use of electrical equipment for the generation, 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 also incorporates and co-ordinates, as far as possible, existing rules and forms a code of interpretation, where applicable, of the requirements of the International Maritime Organization, a guide for future regulations which may be prepared and a statement of practice for offshore unit owners, constructors and appropriate organizations.

This standard is based on equipment and practices which are in current use, but it is not intended in any way to impede development of new or improved techniques.

The ultimate aim has been to produce a set of International Standards exclusively for the offshore petroleum industry.

In this part of IEC 61892, references are made to other parts of the standard which are still in preparation. Such references are marked with footnotes. A footnote indicates which current standard should be used until the part under preparation is published.

# MOBILE AND FIXED OFFSHORE UNITS – ELECTRICAL INSTALLATIONS –

## Part 1: General requirements and conditions

### 1 Scope

This part of IEC 61892 contains provisions for electrical installations in mobile and fixed units used in the offshore petroleum industry for drilling, production, processing and for storage purposes including pipeline, pumping or 'pigging' stations, compressor stations and exposed location single buoy moorings.

It applies to all installations, whether permanent, temporary, transportable or hand-held, to a.c. installations up to and including 35 000 V and d.c. installations up to and including 1 500 V.

This standard does not apply either to fixed equipment for medical purposes or to the electrical installations of tankers.

NOTE For medical rooms see IEC 60364-7-710

### 2 Normative references

The following referenced documents are indispensable for the application 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.

IEC 60034 (all parts), *Rotating electrical machines*

IEC 60079-0:1998, *Electrical apparatus for explosive gas atmospheres – Part 0: General requirements*  
Amendment 1 (2000)<sup>1</sup>

IEC 61892-3:1999, *Mobile and fixed offshore units – Electrical installations – Part 3: Equipment*

IEC 61892-7:1997, *Mobile and fixed offshore units – Electrical installations – Part 7: Hazardous areas*

IMO-110E, *The International Convention of Safety of Life at Sea (SOLAS)*

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<sup>1</sup> There exists a consolidated version including IEC 60079-0 (1998) and its amendment 1 (2000).