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INTERNATIONAL STANDARD

**Mobile and fixed offshore units – Electrical installations –
Part 1: General requirements and conditions**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions.....	7
4 General requirements and conditions.....	11
4.1 General.....	11
4.2 Workmanship and material.....	11
4.3 Acceptance of substitutes or alternatives.....	11
4.4 Additions and alterations.....	11
4.5 Environmental conditions.....	11
4.5.1 General.....	11
4.5.2 Design parameters.....	12
4.6 Materials.....	13
4.7 Power supply system characteristics.....	13
4.7.1 General.....	13
4.7.2 AC distribution systems.....	13
4.7.3 DC distribution systems.....	14
4.8 Electrical apparatus for explosive gas atmospheres.....	15
4.9 Precautions against galvanic corrosion.....	15
4.10 Clearance and creepage distances.....	15
4.11 Insulation.....	15
4.12 Maintenance and inspection.....	15
4.13 Cable entries.....	15
4.14 Precautions against vibration and mechanical shock.....	15
4.15 Location of electrical equipment in units.....	16
4.16 Mechanical protection.....	16
4.17 Protection from heat, water, steam and oil.....	16
4.18 Protection against electrical shock.....	16
4.19 Enclosures.....	16
4.20 Environmental impact.....	17
Annex A (informative) Degree of protection.....	18
Annex B (Informative) Cold climate precautions.....	20
Bibliography.....	21
Table 1 – Operational design parameters – Ambient temperature.....	12
Table 2 – Design parameters – Humidity, relative.....	12
Table A.1 – Degrees of protection against foreign objects indicated by the first characteristic numeral.....	18
Table A.2 – Degrees of protection against water indicated by the second characteristic numeral.....	19

INTERNATIONAL ELECTROTECHNICAL COMMISSION

MOBILE AND FIXED OFFSHORE UNITS – ELECTRICAL INSTALLATIONS –

Part 1: General requirements and conditions

FOREWORD

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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.

This second edition cancels and replaces the first edition published in 2001. This edition constitutes a technical revision.

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

- a) the d.c.voltages given in Clause 1, have been updated in order to ensure uniform requirements for all parts of the standard;
- b) the requirement to EMC has been rewritten to comply with the requirements of IEC 61000-2-4;
- c) a clause regarding environmental impact has been added;
- d) Annex A (Guidance on environmental conditions) has been deleted;

e) Annex B (Informative) regarding cold climate precautions has been added.

The text of this standard based on the following documents:

FDIS	Report on voting
18/1166/FDIS	18/1176/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 2.

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

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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

A bilingual version of this publication may be issued at a later date.

INTRODUCTION

The IEC 61892 series of International Standards is 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 the IEC 61892 series 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.

Withdrawn

MOBILE AND FIXED OFFSHORE UNITS – ELECTRICAL INSTALLATIONS –

Part 1: General requirements and conditions

1 Scope

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

This International Standard 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 (a.c. and d.c. voltages are nominal values).

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 60034-1:2010, *Rotating electrical machines – Part 1: Rating and performance*

IEC 60079 (all parts), *Explosive atmospheres*

IEC 61000-2-4:2002, *Electromagnetic compatibility (EMC) – Part 2-4: Environment – Compatibility levels in industrial plants for low-frequency conducted disturbances*

IEC 61140, *Protection against electric shock – Common aspects for installation and equipment*

IEC 61892-2:2005, *Mobile and fixed offshore units – Electrical installations – Part 2: System design*

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

IMO-110E, IMO-111F and IMO 113S, *International Convention for the Safety of Life at Sea (SOLAS)*

IMO MODU Code, *Code for the construction and equipment of mobile offshore drilling units*