BS IEC 61892-6:2019



BSI Standards Publication

Mobile and fixed offshore units — Electrical installations

Part 6: Installation

bsi.

National foreword

This British Standard is the UK implementation of IEC 61892-6:2019. It supersedes BS IEC 61892-6:2013, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee JPEL/18, Electrical installations of ships and of mobile and fixed offshore units.

A list of organizations represented on this committee can be obtained on request to its secretary.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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MOBILE AND FIXED OFFSHORE UNITS – ELECTRICAL INSTALLATIONS –

Part 6: Installation

FOREWORD

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International Standard IEC 61892-6 has been prepared by IEC technical committee 18: Electrical installations of ships and of mobile and fixed offshore units.

This fourth edition cancels and replaces the third edition published in 2013. This edition constitutes a technical revision.

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

a) requirements for protection during equipment storage have been added;
b) the special requirements for distribution board enclosures in accommodation spaces have been deleted;
c) requirements for installation of UPS have been updated;
d) requirements regarding the installation of batteries have been modified;

e) requirements for large single-core cables for three-phase AC have been updated;

f) requirements in relation to cable transit systems have been added;

g) the table on the sizes of earth continuity conductors and equipment earthing connections, set out in IEC 61892-4:2007, has been included;

h) requirements as to the installation of controls and instrumentation have been modified; clauses relevant to design and equipment have been deleted.

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

FDIS	Report on voting
18/1654/FDIS	18/1663/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 Directives, Part 2.

A list of all 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 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

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 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 6: Installation

1 Scope

This part of IEC 61892 provides specific requirements for the installation of electrical equipment in mobile and fixed offshore units, including pipeline, pumping or "pigging" stations, compressor stations and single buoy moorings, used in the offshore petroleum industry 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 voltage level limitation. Referenced equipment standards may give voltage level limitations.

This document specifies requirements such as those concerning

– protection during equipment storage and in the installation period,
– installation of generators and motors,
– installation of transformers,
– installation of switchgear and controlgear assemblies,
– installation of semiconductor converters and UPS,
– installation of secondary cells and batteries,
– installation of luminaires,
– installation of heating and cooking appliances,
– installation of trace and surface heating,
– installation of cables and wiring, both low-voltage and high-voltage cables,
– requirements in relation to earthing and bonding,
– lightning protection;,
– testing of completed installation, and
– documentation.

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.

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.