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INTERNATIONAL STANDARD

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

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CONTENTS

FOREWORD.....	5
INTRODUCTION.....	7
1 Scope.....	8
2 Normative references	8
3 Terms and definitions	9
4 General requirements	10
4.1 Protection against flooding	10
4.2 Rotating machines.....	10
4.3 Conductors, equipment and apparatus	10
4.4 Main switchboards.....	10
4.5 Precautions against vibration and mechanical shock	11
4.6 Axes of rotation	11
5 Limits of inclination of the unit	11
5.1 Authority requirement	11
5.2 Machines, equipment and apparatus – General	11
5.3 Propulsion machinery.....	11
5.4 Emergency machinery	11
5.5 Dynamic condition	11
6 Bilge pumps	12
6.1 Power supply.....	12
6.2 Cables and cable connections	12
6.3 Location of starting arrangement	12
7 Navigation lights.....	12
7.1 General.....	12
7.2 Navigation lights when in operation	12
7.3 Steaming lights	12
7.4 Collision regulations	12
7.5 Power supply and monitoring systems.....	13
7.6 Special requirements for lights using LEDs.....	13
8 Steering gear.....	13
8.1 Power operated steering gear.....	13
8.2 Motors.....	14
8.3 Motor starters.....	14
8.4 Power circuits supply.....	14
8.5 Supply of control circuits and control systems	14
8.6 Circuit protection	15
8.7 Starting and stopping of motors for steering gear power units	15
8.8 Steering gear control systems	15
8.9 Alarms and indications	15
8.10 Rudder angle indication.....	16
8.11 Separation of circuits.....	16
8.12 Communication between navigating bridge and steering gear compartment	16
9 Electric propulsion	16
9.1 General.....	16
9.2 General requirements.....	17
9.2.1 Torque and critical speeds.....	17

9.2.2	Lubrication	18
9.2.3	Prime movers	18
9.3	Electromagnetic compatibility (EMC) and harmonic distortion	19
9.3.1	General	19
9.3.2	Total harmonic distortion, THD	19
9.3.3	Radio frequency interference	19
9.4	Harmonic filtering	19
9.5	Generators, motors, semiconductor convertors and electric slip-couplings	20
9.5.1	Machine and equipment temperature and ventilation	20
9.5.2	Accessibility and facilities for repair <i>in situ</i>	20
9.5.3	Protection against moisture and condensate	21
9.5.4	Sudden short circuits	21
9.5.5	Overspeed of propulsion motors	21
9.5.6	Exciter sets	21
9.5.7	Semiconductor convertor design data	21
9.6	Protection against moisture and condensation	22
9.7	Controlgear	22
9.7.1	Location of manoeuvring controls	22
9.7.2	Engine order systems	22
9.7.3	Operation of manoeuvring controls	22
9.7.4	Interlocking of the means of control	23
9.8	Cables and wiring	23
9.8.1	Conductors	23
9.8.2	Internal wiring	23
9.8.3	Bus-bars	23
9.9	Main and control circuits	23
9.9.1	Control	23
9.9.2	Power management system	24
9.9.3	Circuitry and components	26
9.10	Protection of the system	26
9.10.1	Protection	26
9.10.2	Instrumentation	27
9.11	Propulsion transformers	28
9.12	Testing	28
10	Dynamic positioning	28
11	Ballast systems	28
11.1	General	28
11.2	Ballast pumps	29
11.3	Control and indicating systems	29
11.4	Internal communication	30
11.5	Protection against flooding	30
12	Jacking systems	30
12.1	General	30
12.2	Design	30
12.3	Holding capacity	31
12.4	Electric motor capacity	31
12.5	Control and monitoring	31
12.6	Jacking gear motors and motor controller	31
12.6.1	General	31

12.6.2	Group installation	31
12.6.3	Overcurrent protection	32
12.6.4	Running protection	32
12.6.5	Metering	32
12.7	Testing onboard	32
13	Anchoring systems	32
13.1	General	32
13.2	Anchoring arrangements	32
13.3	Control systems	32
13.4	Thruster-assisted anchoring systems (TA)	33
Annex A (informative)	Enhanced system verification test (HIL test)	34
Bibliography	36
Figure 1	– Typical equipment (configuration) for unit with one or two propellers	17
Figure 2	– Typical control configuration	25

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.

This second edition cancels and replaces the first edition published in 2000. This edition constitutes a technical revision.

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

- a) the requirement to d.c. generators has been deleted;
- b) the requirement to EMC has been rewritten;
- c) the requirement to power management system has been added;
- d) an informative annex regarding testing of DP systems has been added.

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

FDIS	Report on voting
18/1167/FDIS	18/1177/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.

The requirements specified in this International Standard are based on the Code for the Construction and Equipment of Mobile Offshore Drilling Units (1989 MODU CODE) published by the International Maritime Organization (IMO), and might include additional provisions.

A list of all the parts in the IEC 61892 series, 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 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 standard may be issued at a later date.

INTRODUCTION

IEC 61892 forms a series of International Standards intended to ensure 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 used for exploration or exploitation of petroleum resources.

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.

MOBILE AND FIXED OFFSHORE UNITS – ELECTRICAL INSTALLATIONS –

Part 5: Mobile units

1 Scope

This part of IEC 61892 specifies the characteristics for electrical installations in mobile units, for use during transfer from one location to another and for use during the exploration and exploitation of petroleum resources.

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 1500 V.(a.c. and d.c. voltages are nominal values).

NOTE Attention is drawn to further requirements concerning electrical installations on such mobile offshore units contained in the MODU CODE of the International Maritime Organization (IMO).

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

IEC 60034-6, *Rotating electrical machines – Part 6: Methods of cooling (IC Code)*

IEC 60076 (all parts), *Power transformers*

IEC 60092-501:2007, *Electrical installations in ships – Part 501 Special features – Electric propulsion plant*

IEC 60092-504, *Electrical installations in ships – Part 504 Special features – Control and instrumentation*

IEC 60332-1-2, *Tests on electric and optical fibre cables under fire conditions – Part 1-2: Test for vertical flame propagation for a single insulated wire or cable – Procedure for 1 kW pre-mixed flame*

IEC 60332-3-22, *Tests on electric cables under fire conditions – Part 3-22: Test for vertical flame spread of vertically-mounted bunched wires or cables – Category A*

IEC 61000-6-2:2005, *Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity for industrial environments*

IEC 61378-1, *Convertor transformers – Part 1: Transformers for industrial applications*

IEC 61892-1, *Mobile and fixed offshore units – Electrical installations – Part 1: General requirements and conditions*

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

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

IEC 61892-6, *Mobile and fixed offshore units – Electrical installations – Part 6: Installation*

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

IMO *Guidelines for vessels with dynamic positioning systems – see IMO/MSC/Circ. 645, Annex, International Maritime Organization*

IMO 904E, *Convention on the International Regulations for Preventing Collisions at Sea, International Maritime Organization (COLREG)*