

ICS 47.020.60
CCS U 60



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 25444.2-2010

**Mobile and fixed offshore units -- Electrical installations -- Part
2: System design**

移动式 and 固定式近海设施 电气装置 第2部分：系统设计

(English Translation)

Issued on: November 10, 2010

Implemented on: May 1, 2011

Issued by: Standardization Administration of China

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Foreword

GB/T 25444 "mobile and fixed offshore installations electrical devices" is divided into seven sections.

--- Part 1. General requirements and conditions;

--- Part 2. system design;

--- Part 3. equipment;

--- Part 4. Cable;

--- Part 5. mobile facilities;

--- Part 6. Installation;

--- Part 7. Hazardous area.

This section GB/T 25444 Part 2.

This section identical with IEC 61892-2:2005 "the second part of the mobile and fixed offshore installations Electrical installations. System Design" (In English).

For ease of use, this section made the following editorial changes.

a) "This part of IEC 61892" be replaced by "GB/T 25444 this part" or "this part";

b) For IEC 61892-2:2005 international standard references, there is equated adopted as our standard, and in this section by reference Our standard instead of an international standard, not identical with the rest of our standards in this section are referenced directly;

- c) use a decimal point instead of a comma as the decimal point, " ";
- d) Remove international standards preface, introduction;
- e) presentation of in accordance with the provisions of GB/T 1.1-2000 also been modified;
- f) the provisions of the footnotes in this section are numbered sequentially.

This part is proposed by the China State Shipbuilding Corporation.

This part of the National Standardization Technical Committee Marine Boats (SAC/TC12/SC6) centralized.

This section drafted by. China Shipbuilding Technology and Economy Research Institute.

1 Scope

GB/T 25444 in this section (hereinafter referred to in this section) provides design system for mobile and fixed offshore installations to the electrical device Demand for offshore oil industry, drilling, production, processing and storage, including the pipeline, pumping stations or inner tube cleaning station, compressor station and the exposed single Buoy mooring facilities.

This section applies to not more than 35000V AC voltage and DC voltage not exceeding 750V permanent, temporary, mobile or handheld all electrical installations (AC and DC voltage of nominal voltage).

This section does not apply to fixed electrical installations or medical equipment on tankers.

2 Normative references

The following documents contain provisions which, through reference GB/T 25444 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 4205 man-machine interface (MMI) operating rules (GB/T 4205-2003, IEC 60447:1993, IDT) GB/T 6994-2006 marine electrical equipment definitions and general provisions (IEC 60092-101:2002, IDT) GB/T 10250 Marine Electrical and electronic equipment electromagnetic compatibility (GB/T 10250-2007, IEC 60533:1999, IDT) GB/T 18039.4 Electromagnetic compatibility environment facility frequency conducted disturbances compatibility level (GB/T 18039.4-2003, IEC 61000-2-4:1994, IDT) GB/T 20438 functional safety (all parts), electrical/electronic/programmable electronic safety-related systems [GB/T 20438 (all section Points) -2006, IEC 61508 (all parts), IDT] Functional safety GB/T 21109 (all parts) process industry Safety Instrumented System

[GB/T 21109 (all parts) -2007, IEC 61511 (all parts).2003, IDT] GB/T 25444.3 - Part 3 mobile and fixed offshore installations Electrical installations. equipment (GB/T 25444.3-2010, IEC 61892-3:2007, IDT) GB/T 25444.5-2010 mobile and fixed offshore installations electrical installations - Part 5. Mobile Facilities (IEC 61892-5:2000, IDT) IEC 60038:2002 International Electrotechnical Commission standard voltage (IEC standard voltages) IEC 60092-504:2001 marine electrical equipment Part 504. alarm Control and instrumentation (Electrical installations in ships-Part 504. Special features-Control and instrumentation) IEC 60617-DB.20011) Graphic chart symbols and architecture topographical installation plans and charts (Graphical symbols for diagrams-Architectural and topographical installation plans and diagrams)

1) "DB" IEC reference online database.

IEC 60947-2:2003 Low-voltage switchgear and control equipment Part 2. Circuit Breaker (Low voltage switchgear and control gear-Part 2. Circuit-breakers) IEC 61892-1:2001 Part 1 mobile and fixed offshore installations Electrical installations. General requirements and conditions (Mobile and fixed offshore units-Electrical installations-Part 1. General requirements and conditions)