



RUSSIAN MARITIME REGISTER OF SHIPPING

CIRCULAR LETTER

No. 315-23-1876c

dated 14.12.2022

Re:

amendments to the Rules for the Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms (MODU/FOP), 2022, ND No. 2-020201-019-E

Item(s) of supervision:

cables; electrical equipment in dangerous areas

Entry-into-force date:

01.01.2023

~~Cancels/amends/adds Circular Letter No.~~

~~dated~~

Number of pages: 1 + 3

Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to part X "Electrical Equipment"

Director General

Konstantin G. Palnikov

Text of CL:

We hereby inform that the Rules for the Classification, Construction and Equipment of MODU/FOP shall be amended as specified in Appendices to the Circular Letter.

It is necessary to do the following:

1. Bring the content of the Circular Letter to the notice of the RS surveyors, interested organizations and persons in the area of the RS Branch Offices' activity.
 2. Apply the provisions of this Circular Letter during review and approval of technical documentation on ships contracted for construction or conversion on or after 01.01.2023, in the absence of a contract, in compliance with 5.10, Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships, starting from 01.01.2023.
-

List of amended and/or added paras/chapters/ sections:

Part X: paras 2.11.6, 16.8.1.1, 16.8.1.2 and 18.1.1

Person in charge: Maxim D. Vasilioglo 315

+78126050517

"Thesis" System No. 22-207144

**Information on amendments introduced by the Circular Letter
(for inclusion in the Revision History to the RS Publication)**

No.	Amended paras/chapters/ sections	Information on amendments	No. and date of the Circular Letter introducing the amendments	Entry-into-force date
1	Para 2.11.6	Requirements for electrical equipment and cables in explosion hazardous area have been specified	315-23-1876c of 14.12.2022	01.01.2023
2	Paras 16.8.1.1 and 16.8.1.2	Requirements for minimum cross-sectional areas and general requirements for cables have been specified	315-23-1876c of 14.12.2022	01.01.2023
3	Para 18.1.1	Requirements for high voltage electrical equipment have been specified	315-23-1876c of 14.12.2022	01.01.2023

**RULES FOR THE CLASSIFICATION, CONSTRUCTION AND EQUIPMENT OF
MOBILE OFFSHORE DRILLING UNITS AND FIXED OFFSHORE PLATFORMS
(MODU/FOP), 2022,**

ND No. 2-020201-019-E

PART X. ELECTRICAL EQUIPMENT

2 GENERAL

1 **Para 2.11.6** is replaced by the following text:

"2.11.6 In locations and spaces of Zone 2, certified electrical equipment of the following types may be installed:

- .1** listed in 2.11.5;
- .2** special design of protection type (*Exn*);
- .3** non-explosion-proof equipment with the IP55 and higher type enclosure, which ensures absence of sparks and arcs in standard operating conditions, and the maximum surface temperature of which shall not reach the ignition point of any gas/vapor which may be present in the explosion hazardous areas."

16 CABLES AND WIRES

2 **Paras 16.8.1.1 and 16.8.1.2** are replaced by the following text:

"16.8.1.1 Use shall be made of flame-retarding or non-combustible cables and conductors with copper cores manufactured in accordance with the requirements of this Part of the MODU/FOP Rules, national standards, as well as the following IEC standards: 60092-350:2020, 60092-350:2005, 60092-353:2016, 60092-354:2020, 60092-360:2014, 60092-370:2019, 60092-376:2017 and IEC 61892-4:2019. Cables shall be tested for flame propagation in compliance with the requirements of IEC 60332-1-2:2004+AMD:2015 and IEC 60332-3-22:2018.

Cables manufactured and tested in compliance with standards other than those specified above, may be used on ships provided that they comply with the requirements of international and national standards and on safety level are equivalent to or exceeding the standards specified above.

The use of flexible cables, fiber optic cables, etc. used for special purposes may be permitted provided they are manufactured and tested in accordance with approved standards.

In respect of fire resistance cable test, the following IEC standards shall be used: IEC 60331-1:2018 — for cables with the outer diameter above 20 mm, IEC 60331-2:2018 — for cables with the outer diameter of 20 mm and less; IEC 60331-23:1999 – for data cables and IEC 60331-25:1999 — for fiber optic cables.

16.8.1.2 Cables and wires with stranded conductors shall be used, and the cross-sectional area of the conductor shall be not less than:

- .1** 1,0 mm² — for supply, control and signalling circuits of essential services and for supply circuits arrangements;
- .2** 0,5 mm² — for control and signaling circuits;
- .3** 0,5 mm² — with the number of cores in the cable not less than four for instrumentation and internal communication circuits.

Cables with a single-wire conductor having a cross-sectional area of 1,5 mm² and less may be used for supply of non-essential services. The core number in supply cables shall correspond to the phase or polarity of the distribution network.

High-frequency cables with core diameters of 0,4 — 0,8 mm complying with the requirements of IEC 61156-5:2020 may be used in data transmission circuits, taking into account the mechanical strength of such cables in accordance with IEC 60092-370:2019."

18 REQUIREMENTS FOR ELECTRICAL EQUIPMENT FOR A VOLTAGE IN EXCESS OF 1000 V TO 15 000 V

3 **Para 18.1.1** is replaced by the text reading as follows:

"18.1.1 Application.

These requirements apply to three-phase alternating current systems with rated voltages in excess of 1 kV, where rated voltage means the voltage between phases.

The requirements for design and installation of low voltage electrical equipment (up to 1000 V) set out in this part also apply to high voltage electrical equipment, if not otherwise stated in the present section.

Additional requirements for electrical equipment designed for a voltage in excess of 15 kV are specified in Section 19, Part XI "Electrical Equipment" of the Rules for the Classification and Construction of Sea-Going Ships."