



RUSSIAN MARITIME REGISTER OF SHIPPING

CIRCULAR LETTER

No. 315-24-1782c

dated 03.06.2022

Re:

amendments to the Rules for the Classification and Construction of Sea-Going Ships, 2022, ND No. 2-020101-152-E, in connection with coming into force of IACS unified requirement (UR) M60 (Rev.1 Nov 2021)

Item(s) of supervision:

automated main gas turbines

Entry-into-force date:

01.01.2023

Cancels / amends / adds Circular Letter No.

-

dated -

Number of pages:

1 + 2

Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Part XV "Automation"

Director General

Konstantin G. Palnikov

Text of CL:

We hereby inform that the Rules for the Classification and Construction of Sea-Going Ships shall be amended as specified in the 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 the Circular Letter during review and approval of the technical documentation on products installed on board the ships contracted for construction or conversion on or after 01.01.2023, in the absence of a contract — according to 5.10 of 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 the amended and/or introduced paras/chapters/sections:

Part XV: Table 4.2.10-4

Person in charge: Andrey V. Vinogradov 315

+7 812 6050517

"Thesis" System No. 22-99642

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

Nos.	Amended paras/chapters/ sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
1	Table 4.2.10-4	Monitored parameters and types of automatic protection for main gas turbines have been specified considering provisions of IACS UR M60 (Rev.1 Nov 2021)	315-24-1782c of 03.06.2022	01.01.2023

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS, 2022,

ND No. 2-020101-152-E

PART XV. AUTOMATION

4 SHIPS WITH AUT1 IN CLASS NOTATION

Table 4.2.10-4 is replaced by the following one:

"Table 4.2.10-4

Main gas turbines

Nos.	Monitored parameter	Group 1: indication, alarm	Group 2: automatic start of stand-by pumps with alarm	Group 3: automatic shutdown of gas turbine
1	Lubricating oil pressure at inlet	●↓ ⁴	■	×
2	Lubricating oil temperature at inlet	●↑	—	—
3	Bearing temperature	●↑	—	—
4	Gas temperature at gas turbine outlet	●↑	—	×
5	Flame failure or ignition system failure or stratification of temperatures over flame tubes	●↑	—	×
6	Automatic start system failure	○	—	—
7	Fuel oil pressure at gas turbine inlet	●↓	—	× ¹
8	Fuel oil pressure before burners	●↓	—	× ¹
9	Fuel oil temperature before burners ²	●↑↓	—	—
10	Pressure differential across air cleaner	●↑	—	—
11	Gas turbine vibration at each support	●↑ ⁴	—	×
12	Axial displacement of rotor	↑	—	×
13	Gas turbine speed (at each rotor)	●↑	—	× ³
14	Oil level in lubricating oil tank	●↓	—	—
15	Automatic gas turbine shutdown	○	—	—
16	Gas pollution of machinery room	●↑	—	× ¹
17	Temperature under sheath	●↑	—	—
18	Gas temperature after gas turbine	●↑ ⁴	—	×
19	Failure of power supply to control, alarm and safety systems	○	—	—
20	Coolant temperature	●↑	—	—
21	Pressure differential across lubricating oil filter	↑	—	—
22	Vacuum pressure at the compressor inlet	↑ ⁴	—	×

Symbols:

- — remote indication (continuous);
- — remote indication (on call);
- ↑ — alarm for high value;
- ↓ — alarm for low value;
- — automatic start of stand-by pumps;
- ×
- — alarm signal.

¹When gas is used.

²When high-viscosity fuels are used.

³Shutdown resulted from power turbine speed.

⁴Alarm at the measuring point shall be activated prior to arriving the critical condition for the activation of safety devices.

Notes: 1. For Group 1 parameters a common sensor is provided for indication and alarm systems;
for Group 2 parameters — a sensor for automatic start of stand-by pumps;
for Group 3 parameters — a sensor of safety system (turbine shutdown).

2. The list of monitored parameters and types of automatic protection and indication specified in the table may be amended by the manufacturer based on the results of the relevant failure mode and effect analysis (FMEA), which shall be submitted to the RS for agreement.