

**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	Para 2.4.1.2	Requirements for usage of signals in alarm and monitoring systems have been specified	315-07-1634c of 29.09.2021	01.10.2021
2	Para 2.4.1.18	List of equipment for which visual and audible alarm shall be provided has been supplemented with active means of the ship's steering	315-07-1634c of 29.09.2021	01.10.2021
3	Para 2.4.2.3	Requirements for usage of signals in safety systems have been specified	315-07-1634c of 29.09.2021	01.10.2021

**RULES FOR THE CLASSIFICATION AND CONSTRUCTION
OF SEA-GOING SHIPS, 2021,**

ND No. 2-020101-138-E

PART XV. AUTOMATION

**2 DESIGN OF AUTOMATION SYSTEMS, AUTOMATION COMPONENTS
AND CONTROL DEVICES**

1 **Para 2.4.1.2** is replaced by the following text:

"**2.4.1.2** Provision shall be made for the self-monitoring of the alarm and monitoring system; the alarm signal shall be applied in the case of at least such typical faults as short-circuits, line wire break and earth fault, and the failure of the power supply.

If discrete signals are utilised in alarm and monitoring systems, normally closed loops shall be used."

2 **Para 2.4.1.18** is replaced by the following text:

"**2.4.1.18** In addition to the monitored parameters listed in Sections 4 — 6, visual and audible alarm shall be provided for the following equipment:

- .1 steering gear in accordance with 5.5.11 and 5.5.13, Part XI "Electrical Equipment";
- .2 emergency diesel-generators in accordance with 9.6, Part XI "Electrical Equipment";
- .3 uninterruptible power systems (UPS) in accordance with 9.7, Part XI "Electrical Equipment";
- .4 electric propulsion motors in accordance with 17.12, Part XI "Electrical Equipment";
- .5 podded azimuth thruster drives and steerable propeller drives in accordance with 17.13, Part XI "Electrical Equipment";
- .6 electric propulsion plants control systems in accordance with 17.14, Part XI "Electrical Equipment";
- .7 control systems for gas internal combustion engines in accordance with 9.9 and 9.12, Part IX "Machinery".
- .8 active means of the ship's steering in accordance with 7.3, Part VII "Machinery Installations".

3 **Para 2.4.2.3** is replaced by the following text:

"**2.4.2.3** Provision shall be made for the self-monitoring of the safety systems: at least at such faults as short-circuit, line wire break and earth fault an alarm signal shall be activated.

If discrete signals are utilised in safety systems of essential equipment and machinery, normally open circuits with loop monitoring shall be used."