Polski Rejestr Statków

RULES
FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS

AMENDMENTS No. 2/2010

to

PART VIII

ELECTRICAL INSTALLATIONS AND CONTROL SYSTEMS

2007

GDAŃSK

Amendments No. 2/2010 to Part VIII – Electrical Installations and Control Systems – 2007, of the Rules for the Classification and Construction of Sea-going Ships were approved by the PRS Board on 30 December 2010 and enter into force on 1 January 2011.

PRS/HW, 12/2010

The following amendments to Part VIII – Electrical Installations and Control Systems have been introduced:

1. *In* **Table 2.3.4.2,** *the record in column 2, item 25 has been amended to read:*

   Machinery space area protected by local water-spraying fire-extinguishing system covering the areas A and B according to Fig. 2.3.4.2.

2. *In Notes to paragraph* **2.3.4.2,** *paragraph 3) has been added***:**

   3) The area protected by local water-spraying fire-extinguishing system is shown in Fig. 2.3.4.2.

   A – a protected area – an area which is required to be protected by local water-spraying fire-extinguishing system

   B – an area adjacent to a protected area, exposed to direct spray

   C – an adjacent area, other than A and B areas, where water may extend.

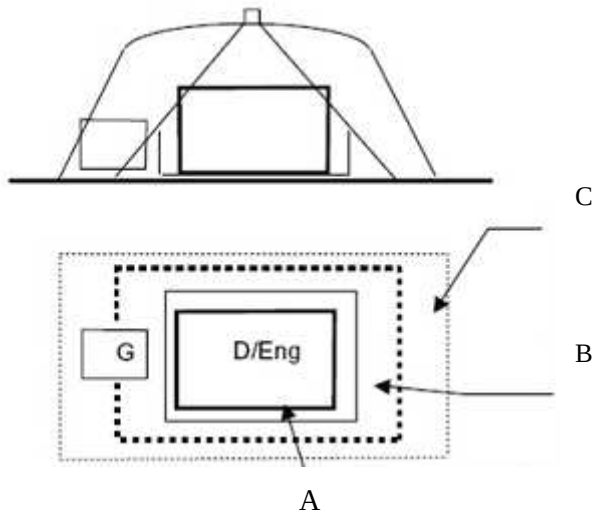

Fig. 2.3.4.2

3. *In Notes to paragraph* **2.3.4.2,** *paragraph 4) has been added:*

   4) In area C, according to Fig. 2.3.4.2, the electrical and electronic equipment may have a lower degree of protection, provided evidence of suitability for use in these areas is submitted, taking into account the design and equipment layout, e.g. the position of inlet ventilation openings. The cooling airflow for the equipment is to be ensured.

4. *Paragraph* **7.1.1** *has been amended to read:*

7.1.1 In addition to compliance with the applicable requirements of the present Chapter, signalling and internal communication systems are to comply, within the scope agreed with PRS, with the provisions of the *Code on Alerts and Indicators, 2009*, adopted by IMO Resolution A.1021(26).

5. *Paragraph* **7.1.2** *has been added*:

7.1.2 With the exception of bells, audible signals are to have a signal frequency between 200 Hz and 2,500 Hz.

6. *Paragraph* **7.3.2.12** *has been added:*

7.3.2.12 Administration may accept the use of public address system for the general alarm and the fire alarm, provided that:

.1 all requirements for those alerts specified in the *LSA Code*, *FSS Code* and the *SOLAS Convention*, as amended, are complied with;

.2 all the relevant requirements for alerts, specified in the *Code on Alerts and Indicators, 2009* are complied with*;*

.3 the public address system automatically overrides: any other input system when an emergency alarm is required and any volume controls provided to give the required output for the emergency mode when an emergency alarm is required;

.4 the public address system is arranged to prevent feedback or other interference; and

.5 the public address system is arranged to minimize the effect of a single failure.

7. *Paragraph* **7.4.1** *has been amended to read:*

7.4.1 Every cargo ship of 300 gross tonnage and upwards and every passenger ship are to be provided with a general alarm system. The system shall be capable of sounding the general alarm signal consisting of seven short blasts followed by one long blast on the ship's whistle or siren and additionally on other signalling devices.

The minimum sound pressure level for the alarm tone in open spaces is to be at least 80 dB(A) and at least 15 dB(9A) above the ambient noise level. In closed spaces the sound pressure level for the alarm tone is to be at least 75 dB(A) and at least 20 dB(A) above the ambient noise level. In no case shall the sound pressure level exceed 120 dB(A). In cabins without a loudspeaker installation, a buzzer or a similar sound device is to be installed.

In cargo ships of less than 300 gross tonnage, an alarm given by human voice or by any other means is permitted, provided it is heard simultaneously in all locations where people may be present.

8. Paragraph **7.5.2.2** *has been amended to read:*

7.5.2.2 Fire detection and fire alarm system is to be supplied from not less than two sources of power supply, one of which is to be an emergency source.

The supply is to be provided by separate feeders reserved solely for that purpose. Such feeders are to run to an automatic change-over switch situated in or adjacent to control panel for fire detection system.

Operation of the automatic changeover switch or a failure of one of the power supplies is not to result in permanent or temporary degradation of the fire detection and fire alarm system. Where the fire detection and fire alarm system would be degraded by the momentary loss of power, a source of stored energy having adequate capacity is to be provided to ensure the continuous operation during changeover between power supplies.

Connection of electrical power supplies to an automatic changeover switch is to be arranged such that a fault will not result in the loss of all supplies to the automatic changeover switch.

The fire detection and fire alarm system emergency power may be supplied by an accumulator battery (in such case the requirements regarding the capacity of the battery, specified in 9.3 or 22.1.2, and the battery location (polski tekst) are to be complied with) or from the emergency switchboard. The rating of the charging unit, on restoration of the input power, is to be sufficient to recharge the batteries while maintaining the output supply to the fire detection system.

9. *Paragraph* **20.4.1.1** *has been amended to read:*

In addition to compliance with the applicable requirements of the present Chapter, alarm signalling is to comply, within the scope agreed with PRS, with the requirements of the *Code on Alerts and Indicators, 2009.*

10. *Sub-chapter* **21.5** *has been added*:

21.5 Personnel Alarm

21.5.1 The personnel alarm is to automatically set off an alarm on the navigation bridge or in the officers' quarters, as appropriate, if it is not reset from the machinery space in a period not exceeding 30 minutes**.**

21.5.2 A pre-warning signal is to be provided in the machinery space which operates 3 min before the alarm, referred to in 21.5.1, is given.

21.5.3 The alarm system is to be put into operation:

.1 automatically when the engineer on duty has to attend the machinery space in case of a machinery alarm;

.2 manually by the engineer on duty when attending the machinery space on routine checks.

21.5.4 The alarm system is to be disconnected by the engineer on duty after leaving the machinery space. When the system is brought into operation automatically in accordance with 21.5.3.1, its disconnection should not be possible before the engineer acknowledged the alarm in the machinery space.

21.5.5 Personnel alarm is to automatically operate the engineers' alarm, required in 21.6.

11. *Paragraph* **21.6** *has been added*:

21.6 Engineers' Alarm

In addition to manual operation from the machinery space, the engineers' alarm on ships with periodically unattended machinery spaces is to operate when the machinery alarm is not acknowledged in the machinery space or ECR in a specified limited period of time, depending on the size of the ship but not exceeding 5 min.

12. *Paragraph* **22.5.8.2** *has been amended to read:*

The gas sampling pipes are not to run through hazardous spaces, except where permitted by 22.5.8.6.