



RUSSIAN MARITIME REGISTER OF SHIPPING

CIRCULAR LETTER

No. 315-23-1660c

dated 12.11.2021

Re:

amendments to the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships, 2021, ND No. 2-020101-139-E

Item(s) of supervision:

electrical equipment

Entry-into-force date:

01.01.2022

Cancel / amends / adds Circular Letter No.

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Number of pages: 1+3

Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Section 10 of Part IV "Technical Supervision during Manufacture of Products"

Director General

Konstantin G. Palnikov

Text of CL:

We hereby inform that in connection with entry into force of IACS unified requirement (UR) U13 (Rev.3 Dec 2020) the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships shall be amended as specified in the Appendices to the Circular

It is necessary to do the following:

1. Bring the content of the Circular Letter to the notice of the RS surveyors, as well as 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 as well as when performing technical supervision during manufacture of products, when the requests for service rendering listed above are received on or after 01.01.2022.
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List of the amended and/or introduced paras/chapters/sections:

Part IV: Para 10.4.6.1.1, Para 10.5.5.1.1, Table 10.7.1.1 and Para 10.7.1.10

Person in charge: Alexey Yu. Bessonov 315

+7 (812) 605-05-17

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**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 10.4.6.1.1	Title of the IEC standard 60034-1 has been corrected	315-23-1660c of 12.11.2021	01.01.2022
2	Пункт 10.5.5.1.1	Titles of the IEC standards 60034-5 and I 60529 have been corrected	315-23-1660c of 12.11.2021	01.01.2022
3	Таблица 10.7.1.1	In footnote "3" of the Table Title of the IEC standard 60034-1 has been corrected	315-23-1660c of 12.11.2021	01.01.2022
4	Para 10.7.1.10	Title of the IEC standard 60034-1 has been corrected	315-23-1660c of 12.11.2021	01.01.2022

**RULES FOR TECHNICAL SUPERVISION DURING CONSTRUCTION OF SHIPS
AND MANUFACTURE OF MATERIALS AND PRODUCTS FOR SHIPS, 2021,**

ND No. 2-020101-139-E

PART IV. TECHNICAL SUPERVISION DURING MANUFACTURE OF PRODUCTS

10 ELECTRICAL EQUIPMENT

1 **Para 10.4.6.1.1** The first paragraph is replaced by the following text:

"**10.4.6.1.1** The insulation of electrical machine windings in compliance with IEC standard 60034-1:2017 shall withstand without breakdown or damage the test voltage of which the root-mean square values are specified in Table 10.4.6.1.1."

2 **Para 10.5.5.1.1** is replaced by the following text:

"**10.5.5.1.1** These tests apply to products with voltage up to 1000 V.

Testing the degree of protection for voltage over 1000 V shall be in compliance with IEC standard 60529:2013.

Testing the protection degree of rotation electrical machines shall be in compliance with IEC standard 60034-5:2000+AMD:2006."

3 **Table 10.7.1.1** is replaced by the following:

"Table 10.7.1.1

Electrical machines	Technical inspection and checks	Measurements of insulation resistance	Tests of insulation strength	Tests for conformity with operational conditions	Heat test	Short-time overcurrent test	Short-time torque overload test	Check of commutator machines switching	Stalling test	Overspeed test	Test for electric and thermal strength at short-circuit current	Test for permissible levels of industrial radio interference voltages ³	Check of operability at load loss and increase	Check of operability with load variation from idling to rated load	Other tests and checks
A.c.synchronous generators	+	+	+	+	+	+	-	-	-	+	+	+	+	+	Refer to 10.7.1.11
D.c. generators ¹	+	+	+	+	+	+	-	+	-	+	-	+	-	-	
A.c. induction motors	+	+	+	+	+	+	+	-	+ ²	+	-	+	-	-	
D.c. motors	+	+	+	+	+	+	+	+	+ ²	+	-	+	-	-	
Converters	+	+	+	+	+	+	-	(+)	-	+	(+)	+	-	-	
Rotary amplifiers	+	+	+	+	+	+	-	+	-	+	-	+	-	-	
Other machines	+	+	+	+	+	(+)	(+)	(+)	-	(+)	(+)	+	-	-	
Symbols: "+" = test (check) is needed; "(+)" = test (check) performance depends on the particular machine; "-" = test (check) is not needed.															
¹ Exciters of synchronous machines may be tested in combination with these machines. ² The stalling test is applied only to propulsion motors, motors for a direct drive of the rudder and steering gear, and also to motors driving anchor and mooring machinery. ³ Tests are carried out in compliance with standard IEC 60034-1:2017 (para13).															

3 **Para 10.7.1.10.** The first paragraph is replaced by the following text:

"**10.7.1.10** The test for immunity to shock short-circuit current shall be carried out in compliance with standard IEC 60034-1:2017 (para 9.9) under the following conditions:".