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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 20703-2006

**Electrical installations in ships equipment -- Heating and
cooking appliances**

船舶电气装置 取暖和烹调电器

(English Translation)

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Table of Contents

Foreword
1 Scope
2 General requirements
2.1 Heating elements
2.2 Internal connection
2.3 Support of live parts
2.4 Protection of live parts
2.5 Temperature limits of exposed parts
2.6 Control of heating and cooking appliances

Foreword

This standard is equivalent to the use of IEC 60092-307. 1980 "ship electrical installation heating and cooking appliances." for ease of use, this standard makes the following editorial changes.

- a) the words "this International Standard" are replaced by the words "this standard";
- b) Remove the introduction and preface to international standards and add a preface to national standards.

This standard was proposed by China State Shipbuilding Corporation.

This standard is under the jurisdiction of the Marine Electrical Equipment Subcommittee of the National Marine Ship Standardization Committee.

1 Scope

This standard applies to marine heating and cooking appliances.

2.1 Heating elements

The material of the heating element should be able to withstand the maximum temperatures allowed during normal use and its installation should be easy to replace.

2.2 Internal connection

2.2.1

Electrical connection between heating elements, through the connection of the heating element itself, or through the highest temperature possible the structure in which the terminal block and the connecting wire are not damaged can be realized.

2.2.2

The connection between the heating element and the switch and the supply cable should be achieved by means of the terminal. Should be connected so that the terminals and the temperature rise of the switch does not exceed the design value. Power supply at ambient temperature as defined in the definitions and general requirements of IEC 60092-101 the temperature of the cable terminals (including the internal ground) can exceed 75 °C. These terminals should be clearly marked.

2.2.3

Connections between heating elements and connections between heating elements and terminals that may be connected to insulated cables, unless self-supporting or securely position, otherwise insulated with a suitable non-combustible material.

2.2.4

The bare joints shall be made of corrosion-resistant materials and shall be capable of adapting to complex ambient temperatures and self-supporting capabilities. Bare joint support should be in accordance with the provisions of 2.3.

2.2.5

Only when the connector is fixed or supported to keep its position will not change, and will not be damaged when the porcelain beads are in normal use.

Porcelain beads are allowed in the case.

2.3 Support of live parts

All heated live parts, whether heating elements, bare wires or terminal blocks, should be supported in moisture or can be effectively prevented Intrusion of moisture into the non-combustible material.

2.4 Protection of live parts

The heating element should be equipped with a protective device. The protective device shall be of a rugged construction and shall be installed where it will not contact any current-carrying components.

The opening of the protective device shall be sufficiently narrow to prevent the heating element from being touched or shorted when a standard inspection timing is applied. Cooking department of cooking appliances Parts should be protected so that cooking

utensils do not touch live parts. Spilled or spilled liquids or food should not cause short circuits or insulation damage.

2.5 Temperature limits of exposed parts

Heating and cooking appliances shall be constructed so that the surface temperature of the components that must be used does not exceed the values specified in the table below.

Materials for handles, clamps and similar parts Maximum temperature at hand grip during normal use/°C Long time Metal 55 60 Porcelain and glass materials, Molded material, rubber or wood See IEC 60092-101 for ambient temperature.

For parts that are not handled by hands that do not have protective measures (such as the splash drain handle of the electric cooker), higher temperatures are allowed.

2.6 Control of heating and cooking appliances

When the control switch is in the off position, all non-grounded poles of the heating element should be insulated.

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