

ICS 47.020.60
CCS U 65



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

GB/T 29485-2025

Replacing GB/T 29485-2013

Ships and marine technology - Electric rudder angle indicators

船舶与海洋技术 电气舵角指示器

(English Translation)

Issued on: October 31, 2025

Implemented on: May 1, 2026

Issued by: State Administration for Market Regulation

Table of Contents

Foreword
1 Scope
2 Normative references

Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

This document supersedes GB/T 29485-2013 "Electrical Rudder Angle Indicators for Ships and Marine Technology" and is consistent with GB/T 29485-2013.

Compared to previous versions, aside from structural adjustments and editorial changes, the main technical changes are as follows.

- a) Added specifications for displays (see 4.1);
- b) Added provisions for alarms (see 4.4);
- c) Added requirements for displays used for information display (see 6.1);
- d) Added alarm testing requirements (see 6.6);
- e) The requirements for the interface have been changed (see Chapter 7, Chapter 7 of the 2013 edition).

This document is equivalent to ISO 20673:2022 "Electrical rudder angle indicators for marine and marine technologies".

1 Scope

This document specifies the structure, performance requirements, test methods, and required test results for electric rudder angle indicators, based on SO 1974.

The requirements of Section 19.2.5.4 of Chapter V of the LAS (2000 Amendments).

Where the requirements of this document differ from those of IEC 60945, the requirements of this document shall prevail.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies to this document.

IEC 60945 Marine navigation and radio communication equipment and systems - General requirements, test methods and required test results (Ma- Note: GB/T 15868-1995 General requirements and test methods for marine radio equipment and marine navigation equipment for Global Maritime Distress and Safety Systems (CMDSS). and the required test results (IEC 60945:1994, IDT)

IEC 61162-1 Digital interfaces for marine navigation and radio communication equipment and systems - Part 1: Single transmitters and multiple receivers

IEC 61162-2 Digital interfaces for marine navigation and radio communication equipment and systems - Part 2: Single transmitters and multiple receivers

Note: GB/T 31843.2-2019 Digital Interfaces for Marine Navigation and Radio Communication Equipment and Systems Part 2: Single Transmitter and Multiple Receiver High-Reception Interfaces High-speed transmission (IEC 61162-2:1998, IDT)

IEC 61162-450 Digital interfaces for marine navigation and radio communication equipment and systems - Part 450: Multiplexers and multiplex receivers

Note: GB/T 31843.450-2019 Digital Interfaces for Marine Navigation and Radio Communication Equipment and Systems - Part 450: Multiple Transmitters and Multiple Receivers Ethernet connectivity (IEC 61162-450:2018, IDT)

IEC 62288 Marine navigation and radio communication equipment and systems - General purpose of displaying navigation information on marine navigation displays.

IEC 62923-1 Marine navigation and radio communication equipment and systems - Bridge alarm management - Part 1: Operational and performance requirements (required test results)