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

GB/T 7251.7-2025

Replacing GB/T 7251.7-2015

**Low-voltage switchgear and controlgear assemblies - Part 7:
Assemblies for specific applications such as marinas, camping
sites, market squares, electric vehicle charging stations**
(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is Part 7 of GB/T 7251 "Low-voltage switchgear and controlgear assemblies". GB/T 7251 has been published as follows part.

--- Part 1: General provisions;

- Part 2: Complete power switchgear and control equipment;
- Part 3: Distribution board operated by general personnel (DBO);
- Part 4: Particular requirements for construction site complete equipment (ACS);
- Part 5: Complete equipment for power distribution in public grids;
- Part 6: Busbar trunk system (bus duct);
- Part 7: Complete sets of equipment for specific applications such as docks, campsites, market squares, and electric vehicle charging stations;
- Part 8: General technical requirements for intelligent complete equipment;
- Part 10: Guidance for specifying complete equipment.

This document replaces GB/T 7251.7-2015 "Low-voltage switchgear and controlgear - Part 7: Docks, campsites, markets" Compared with GB/T 7251.7-2015, except for structural adjustments and editorial changes, in addition, the main technical changes are as follows.

- Changed the scope of the document (see Chapter 1, Chapter 1 of GB/T 7251.7-2015);
 - Added terms and definitions for ground and floor mounted complete sets of equipment and wall mounted complete sets of equipment (see 3.5.3.701 and 3.5.3.702);
 - Added new classification of complete equipment according to installation method and mechanical resistance (see 5.701 and 5.702);
 - Added Table 702 according to the classification described in 5.701 and 5.702, which lists the tests and related harshness to which the complete equipment is subjected.
- degrees (see Table 702);
- Increased the surge current withstand strength requirements of AEVCS (see 9.701);
 - Added impact test verification requirements for movable and transportable complete sets of equipment (see 10.2.701.7);
 - Added a new Appendix CC to conduct a new endurance test on individual switching devices intended for use in AEVSC.

The equipment has not been tested to this requirement (see Appendix CC).

This document is equivalent to IEC 61439-7:2022 "Low-voltage switchgear and controlgear assemblies - Part 7: Docks, campsites, markets" Complete sets of equipment for specific applications such as squares, electric vehicle charging stations, etc.

The following minimal editorial changes have been made to this document.

- Corrected typographical errors, changed AECVS to AEVCS in 5.4, and added subscript b to Table AA.1.

Introduction

GB/T 7251 adopts IEC international standards to meet the needs of international trade, technical and economic exchanges.

This document is a product standard and is used in conjunction with GB/T 7251.1.

GB/T 7251 is intended to consist of nine parts.

--- Part 1: General. Aims to specify the general requirements of various types of complete equipment standards.

--- Part 2: Complete power switchgear and control equipment. Aims to specify specific requirements and verification of complete power switchgear and control equipment method.

--- Part 3: Distribution boards operated by general personnel (DBO). Aims to specify specific requirements for distribution boards operated by general personnel and verification methods.

--- Part 4: Particular requirements for complete sets of equipment for construction sites (ACS). Aims to specify the specific requirements for complete sets of equipment for construction sites.

Requirements and verification methods.

--- Part 5: Complete sets of power distribution equipment for public grids. Aims to specify specific requirements and Verification method.

--- Part 6: Busbar trunking system (bus duct). Aims to specify specific requirements and verification methods for bus ducts.

--- Part 7: Complete equipment for specific applications such as docks, campsites, market squares, electric vehicle charging stations, etc.

Specific requirements and verification methods for complete equipment used.

--- Part 8: General technical requirements for intelligent complete sets of equipment. Aims to specify specific requirements for intelligent complete sets of equipment, such as network connectivity connection, four remote control functions, etc. and their verification methods.

--- Part 10: Guidelines for specifying complete equipment. Aims to provide application guidance for users of complete equipment.

Low-voltage switchgear and control equipment Part 7: Piers, campsites, market squares, Complete equipment for specific applications such as electric vehicle charging stations

1 Scope

Except for the following contents, Chapter 1 of GB/T 7251.1-2023 applies.

replace.

This document defines the specific requirements for complete sets of equipment for the following applications. marinas, campsites, market squares and electric vehicle charging stations, as follows.

- Complete equipment with a rated voltage not exceeding 1000VAC or 1500VDC;
- Complete sets of equipment used with equipment for generating, transmitting, distributing and converting electricity, as well as equipment for controlling the consumption of electricity;
- Complete sets of equipment operated by general personnel (such as plugging and unplugging electrical equipment);
- Intended for installation and use in market squares, piers, campgrounds and other similar places accessible to the public, including temporary installations;
- Complete equipment for Mode 3 and Mode 4 Electric Vehicle Charging Stations (AEVCS). They are designed in accordance with IEC 61851-1:2017, Functionality and additional requirements for integrated conductive charging systems for electric vehicles.

Note 1: Throughout this document, the terms AMHS (see 3.1.701), ACCS (see 3.1.702), AMPS (see 3.1.703), and AEVCS (see 3.1.704) are respectively Intended for use in marinas and similar places (AMHS), camping grounds and similar places (ACCS), market squares and other similar outdoor public places (AMPS), Abbreviation for low-voltage switchgear and controlgear assemblies for charging stations (AEVCS). The term assembly refers to all these distribution panels.

This document does not apply to complete equipment intended for installation on ships, houseboats, yachts and similar vessels.

For the correct selection of switching devices and components, the following criteria apply.

- IEC 60364-7-709 (AMHS) or - IEC 60364-7-708 (ACCS) or - IEC 60364-7-740 (AMPS) or
- IEC 60364-7-722(AEVCS).

This document applies to all complete equipment that is designed, manufactured and verified once or manufactured in batches with complete standardization.

Manufacturing and/or assembly may be carried out by persons other than the initial manufacturer (see 3.10.1 of GB/T 7251.1-2023).

This document does not apply to stand-alone devices and assembled components that comply with relevant product standards, such as circuit breakers, fuse switches, electronic equipment, etc.