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

GB/T 32347.2-2015

**Railway applications -- Environmental conditions for equipment
-- Part 2: Fixed electrical installations**

轨道交通 设备环境条件 第2部分：地面电气设备

(English Translation)

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Foreword

GB/T 32347 "rail transportation equipment, environmental conditions," is divided into three parts.

- Part 1. rolling stock equipment;
- Part 2. ground electrical equipment;
- Part 3. Signal and communications equipment.

This section GB/T Part of 232,347.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses redrafted law revision using IEC 62498-2:2010 "rail transportation equipment, environmental conditions - Part 2. Electric Ground Gas equipment. " this part of IEC 62498-2:2010 compared to the existence of technical differences, these differences involve the provision of a single vertical line in the margin (-) Were marked. This part of IEC 62498-2:2010 compared to the existence of technical differences and their reasons are as follows.

--- Situation on normative references, this part of the technical differences have been adjusted in order to adapt to China's technical conditions, adjustment Focus reflected in Chapter 2, "Normative references" on. Specific adjustments are as follows.

- Modify with international standards of GB/T 4797.1 instead of IEC 60721-2-1. 1982 (see 4.3.1);
- Modify with international standards of GB/T 4797.2 instead of IEC 60721-2-3 (see 4.2);
- Modify with international standards of GB/T 4798.3 instead of IEC 60721-3-3 (see 4.3.1 and 4.9);
- Modify with international standards of GB/T 4798.4 instead of IEC 60721-3-4 (see 4.6, 4.8, 4.9 and 4.10);
- equivalents adoption of international standards GB/T 24338.6 replaced by IEC 62236-5 (see 4.12);
- Modify with international standards of GB/T 32347.3-2015 instead of IEC 62498-3:2010 (see 4.9);
- Modify with international standards of GB/T 32350.1 replaced by IEC 62497-1 (see 4.10 and 4.11);
- Modify with international standards of GB/T 32350.2 replaced by IEC 62497-2 (see 4.11);
- increase the GB/T 11804-2005 (see Chapter 3);
- increase of GB 50009-2012 (see 4.4.1 and 4.7.2);
- increase the GB 50178 (see 4.8);
- Remove the IEC 60529, informative annex to cite references and instead GB 4208 (see B.8).

--- Remove some of the terms, the related terms in 11804-2005 GB/T has been defined (see IEC 62498-2. 3.3 2010's ~ 3.5);

--- Modify the elevation requirements to meet our requirements for traction equipment elevation (see 4.2, IEC 62498-2:2010 4.2);

--- Increase the bioactive material needs to take into account the necessary termite protection (see 4.10).

This section also made the following editorial changes.

--- Modify the formula (1) indicates the gain IEC 62498-2. B.3 2010 on the domestic terrain roughness coefficient provisions;

--- Remove the IEC 62498-2:2010 Chinese Appendix B (1), and 4.4.1 of the formula (1) is repeated;

- Remove the IEC 62498-2. B.2 2010, without reference to Japan's argument;
- Remove the IEC 62498-2. B.3 2010, relevant content was adjusted to 4.4.1;
- Modify the IEC 62498-1. Appendix A and Appendix B of the order of 2010 to comply with the revised text of the order;
- Revised reference.

This part by the State Railway Administration.

This part of the National electric traction equipment and systems Standardization Technical Committee (SAC/TC278) centralized.

This part mainly drafted by. China Railway Electrification Survey Design and Research Institute Limited.

Participated in the drafting of this section. The Siyuan Group Co., Ltd., Beijing whole way communication signals Research and Design Institute Limited the company.

1 Scope

This section GB/T 32347 specifies the environmental conditions parameter rail transportation ground electrical equipment, including altitude, temperature and humidity, air Air movement, rain, hail, snow and ice, solar radiation, shock and vibration, pollution, lightning, electromagnetic compatibility (EMC), fire inside the tunnel environment Conditions and earthquakes.

This section provides the environmental impact of rail traction power supply system key fixed electrical equipment for the following locations.

- outdoor;
- Shelter spaces;
- Tunnel;
- Enclosed spaces above the region.

This section does not apply to escalators, elevators, fire facilities, lighting tunnels and stations, ticket machines, ventilation systems, and some non-basic skills Energy facilities, does not apply to cranes, mining equipment, suspension lifts and cable car.

This section does not specify test equipment requirements.

This section does not consider nuclear radiation.

Necessary environmental data in this section does not cover (if any) should be clearly defined in the technical specifications.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 4797.1 electric and electronic products natural environmental conditions of temperature and humidity (GB/T 4797.1-2005, IEC 60721-2-1.

2002, MOD)

GB/T 4797.2 electric and electronic products natural environmental conditions - Part 2. Altitude and air pressure, water depth and water pressure (GB/T 4797.2-2005, IEC 60721-2-3. 1987, MOD) GB/T 4798.3 application of electric and electronic products environmental conditions - Part 3. Stationary use at weather protected locations (GB/T 4798.3-2007, IEC 60721-3-3:2002, MOD) GB/T 4798.4 application of electric and electronic products environmental conditions - Part 4. No fixed workplace climate protection use (GB/T 4798.4-2007, IEC 60721-3-4:1995, MOD) GB/T 11804-2005 electric and electronic products environmental conditions term GB/T 24338.6 rail Electromagnetic compatibility Part 5. Emission and immunity of the ground power supply installations and equipment (GB/T 24338.6-2009, IEC 62236-5:2003, IDT) GB/T 32347.3-2015 rail transportation equipment, environmental conditions - Part 3. Signal and communications equipment (IEC 62498-3:2010, MOD) GB/T 32350.1 rail Insulation coordination - Part 1. General requirements for electric and electronic equipment clearances and creepage distances (GB/T 32350.1-2015, IEC 62497-1:2010, MOD) GB/T 32350.2 rail Insulation coordination - Part 2. overvoltage protection and related (GB/T 32350.2-2015, IEC 62497-2:2010, MOD)