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

GB/T 32580.3-2026

Replacing GB/T 32580.302-2016, GB/T 32580.301-2016

**Railway applications - Fixed installations - High voltage AC
switchgear and transformers - Part 3: Current transformers**

轨道交通 地面装置 高压交流开关设备及互感器 第3部分：电流互感器

(English Translation)

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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".

Drafting.

This document is Part 3 of GB/T 32580 "High-voltage AC switchgear and instrument transformers for ground installations in rail transit".

GB/T 32580 has published the following parts.

---Part 1: Circuit Breakers;

---Part 2: Disconnecting switches, grounding switches, and load switches;

---Part 3: Current Transformers;

---Part 4: Voltage Transformers;

---Part 5: 27.5kV and 2x27.5kV metal-enclosed switchgear and controlgear.

This document replaces GB/T 32580.302-2016 "Special Requirements for AC Switchgear on Ground Installations of Rail Transit - Part 3-2" Part. Single-phase current transformers for dedicated measurement, control and protection devices of AC traction systems and GB/T 32580.301-2016 "Railway AC Traction Systems" Part 3-1 Special Requirements for AC Switchgear for Ground-based Installations. Dedicated Measurement, Control, and Protection Devices for AC Traction Systems this document is based on GB/T 32580.302-2016 and incorporates content from GB/T 32580.301-2016.

Compared with GB/T 32580.302-2016, apart from structural adjustments and editorial changes, the main technical changes are as follows.

- a) The scope has been changed (see Chapter 1, Chapter 1 of GB/T 32580.302-2016);
- b) The terms and definitions have been changed (see Chapter 3, Chapter 3 of GB/T 32580.302-2016);
- c) The normal and special usage conditions have been changed (see Chapter 4, Chapter 4 of GB/T 32580.302-2016);
- d) Features and applications have been removed (see Chapter 5 of GB/T 32580.302-2016);
- e) The ratings have been changed (see Chapter 5, Chapters 6 and 7 of GB/T 32580.302-2016);
- f) Increased requirements for liquids used in the equipment, solid materials used in the equipment, unified creepage distance reference for external insulation, and protection of the enclosure.

Protection rating, corrosion, fire hazard, structural requirements, insulating oil performance requirements, sealing performance, and mechanical strength requirements (see 6.1, 6.2).

(6.5~6.7, 6.9, 6.11~6.14)

- g) Changes were made to contamination, temperature rise requirements for parts and components, grounding requirements for equipment, markings, requirements for outgoing

terminals, and transmission of electrical current.

Pressure (see 4.1.4, 6.3, 6.4, 6.8, 6.10, 6.15, and 8.1~8.5 of GB/T 32580.302-2016);

h) The information that the buyer should specify, the information that the supplier should specify, and other requirements (see GB/T 32580.302-2016) have been removed.

8.6~8.8);

i) Additional experimental methods have been added (see Chapter 7);

j) Added inspection rules (see Chapter 8);

k) Added information provided during inquiries, bidding, and ordering (see Chapter 9);

l) Added rules for transportation, storage, installation, operation, and maintenance (see Chapter 10);

m) Added relevant security provisions (see Chapter 11);

n) Increased the product's environmental impact (see Chapter 12);

o) Additional documentation has been added to accompany the product (see Appendix D).

This document is modified to adopt IEC 62505-3-2:2020 "Particular requirements for AC switchgear on ground installations of rail transit - Part 3-2".

Part. Current transformers for measurement, control and protection devices for AC traction systems and IEC 62505-3-1:2020 "Railway ground Part 3-1.Special Requirements for AC Switchgear. Application Guidelines for Measurement, Control and Protection Devices for AC Traction Systems.

This document has undergone significant structural adjustments compared to IEC 62505-3-2:2020 and IEC 62505-3-1:2020.The three documents...

See Appendix A for a list of structural number correspondences.

The technical differences between this document and IEC 62505-3-2:2020 and IEC 62505-3-1:2020, and the reasons therefor, are as follows.

---The scope has been revised (see Chapter 1) to suit my country's technical conditions and facilitate the use of the standard;

---Added provisions for GB/T 2900.1, GB/T 2900.19, GB/T 2900.20, GB/T 2900.49 (see Chapter 3) and GB/T 7595-2017 (see 6.12), GB/T 26218.1-2010 (see 4.1.4), GB/T 32580.5 (see 6.4, 6.5), the normative references in TB/T 2805-2021 (see 6.5) have been deleted, replacing the normative references in IEC 62505-3-2:2020.

IEC 60850:2014, IEC 62236-5:2018, and IEC 62497-1:2010 are used to adapt to my country's technical conditions and increase operability.