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

GB/T 32580.302-2016

**Railway applications -- Fixed installations -- Particular requirements for a.c.
switchgear -- Part 3-2: Measurement, control and protection devices for specific
use in a.c. traction systems -- Single-phase current transformers**

轨道交通 地面装置 交流开关设备的特殊要求 第3-2部分：交流牵引系统专用测量
、控制和保护装置 单相电流互感器

(English Translation)

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Table of Contents

Preface
1 Scope
2 Normative reference document
3 Terms and definitions
4 Working conditions
5 Features and Applications
6 Rating and design requirements
7 Primary short circuit condition

Foreword

GB/T 32580 "Special requirements for AC switchgear for rail transit equipment" is divided into the following sections.

- Part 1. Single-phase circuit breakers with U_n greater than 1 kV;
- Part 2. Single - phase disconnectors with U_n greater than 1 kV, earthing switches and load switches;
- Part 3-1. Guidance on the application of measurement, control and protection devices for AC traction systems;
- Part 3-2. Special measurement, control and protection devices for AC traction systems - Single - phase current transformers;

Part 3-3. Special measurement, control and protection devices for AC traction systems Single phase inductive voltage transformers.

This part is part 3-2 of GB/T 32580.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This section uses the re-drafting method to modify the use of IEC 62505-3-2.:2009 "Rail Transit Ground Equipment AC Switchgear Special requirements - Part 3-2. Single - phase current transformers for the measurement, control and protection of AC traction systems.

The technical differences between this part and IEC 62505-3-2.:2009 are given in Appendix A.

This section makes the following editorial changes.

--- increase 8.1 "general" to eliminate the suspension section;

- Increased Information Appendix A, describing the technical differences between this and the original;

--- delete the original reference.

This section is made by the National Railway Administration.

This part is headed by the National Technical Committee for Standardization of Electrical Equipment and Systems (SAC/TC278).

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Rail transit ground equipment AC switchgear special requirements Part 3-2. AC traction system for special measurement, Control and protection devices Single-phase current transformers

1 Scope

This part of GB/T 32580 specifies the operating conditions, characteristics and applications of single-phase current transformers ("current transformers") Valuation and design requirements, primary short-circuit conditions, special design and structural characteristics.

This part applies to the electrified railway power supply system with nominal voltage of 25kV, 50kV and frequency of 50Hz. Electrical measurement and protection of the current transformer.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document.

GB/T 1402-2010 Rail Transit Traction Power Supply System Voltage (IEC 60850.:2007, MOD) GB 4208-2008 enclosure protection class (IP code) (IEC 60529.:2001, IDT) GB 20840.2-2014 Transformers - Part 2. Supplementary technical requirements for current transformers (IEC 61869-2.:2012, MOD) GB/T 24338 (all parts) Rail traffic Electromagnetic compatibility (IEC 62236) GB/T 32580.1-2016 Particular requirements for AC switchgear for terrestrial equipment for rail transit - Part 1. Un greater than 1kV single-phase circuit

breaker (IEC 62505-1.:2009, MOD)

3 Terms and definitions

The terms and definitions defined in GB 20840.2-2014 and GB/T 32580.1-2016 apply to this document.

4 Working conditions

The equipment described in this part is installed on the circuit breaker specified in GB/T 32580.1-2016, so the work of GB/T 32580.1-2016 the conditions apply to this section. If the current transformer is installed separately with the switch, the operating conditions of the switch are applicable to this section.

5 Features and applications

Current transformers should meet.

a) Installed inside the circuit breaker specified in GB/T 32580.1-2016 or installed in the special casing of the circuit breaker.

Technical requirements and the structural and test requirements of GB/T 32580.1-2016 (if applicable);

b) When installed on a separate stand, the technical requirements of this part apply.