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

GB/T 32580.303-2016

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

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

(English Translation)

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Foreword

GB/T 32580 "earth rail exchange equipment for the exchange of special requirements" is divided into the following sections.

- Part 1. Single-phase circuit breakers with U_n greater than 1kV;
- Part 2. Single-phase isolation switch with U_n greater than 1kV, earthing switch and load switch;
- Part 3-1. Guidance on the application of special measuring, controlling and protecting devices for AC traction system;
- Part 3-2. AC traction system dedicated measurement, control and protection devices single-phase current transformer;
- Part 3-3. Single-phase inductive voltage transformers for measurement, control and protection of AC traction systems.

This section GB/T 32580 Part 3-3.

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

This section uses the redrafted law to amend the use of IEC 62505-3-3:2009 "Earth Moving Equipment Rail Exchange Equipment Special Particular requirements Part 3-3. AC traction system for measurement, control and protection devices single-phase inductive voltage transformer. " this part of IEC 62505-3-3:2009 technical differences see Appendix A.

This section made the following editorial changes.

- Increase 9.1 "General" to eliminate the suspension section;
- Increase information Appendix A, indicating the technical differences between this part and the original;
- Delete the original reference.

This part is proposed by the National Railroad Administration.

This part of the traction electrical equipment and systems standardization Technical Committee (SAC/TC278) centralized.

This part of the main drafting unit. China Railway Fourth Survey and Design Institute Group Co., Ltd..

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1 Scope

This section GB/T 32580 specifies the working conditions, characteristics and should be single-phase inductive voltage transformers (referred to as "voltage transformers") Use, rating and design requirements, withstand conditions, ferroresonance, special designs and structural characteristics.

This section applies to the nominal voltage 25kV, 50kV and 50Hz frequency electrical railway power supply system for electrical measurement and protection Voltage transformer.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 1402-2010 rail transit traction power supply system voltage (IEC 60850:2007, MOD)
GB 4208-2008 enclosure protection (IP code) (IEC 60529:2001, IDT) Transformers - Part 3. Technical supplementary requirements for electromagnetic voltage transformers (IEC 61869-3-2011, MOD) GB/T 24338.6 electromagnetic compatibility of rail transit - Part 5 - Ground-powered devices and equipment emission and immunity (IEC 62236-5:2003, IDT) GB/T 32580.1-2016 rail transit ground devices - Particular requirements for ac switching equipment - Part 1. Un greater than 1kV single-phase circuit breakers (IEC 62505-1:2009, MOD)

3 Terms and definitions

GB 20840.3-2013 and GB/T 32580.1-2016 Terms and definitions apply to this document.

4 Working conditions

This section describes the device installed in the circuit breaker GB/T 32580.1-2016, GB/T 32580.1-2016 working conditions suitable Used in this section. If the voltage transformer is separately installed and used with the switch, the working conditions of the switch used together also apply to this section.

5 Features and Applications

Voltage transformers should be met.

a) installed in the circuit breaker specified in GB/T 32580.1-2016 or installed in the special casing of the circuit breaker, the technical part of this