

ICS 29.280
CCS S 81



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

GB/T 32579-2016

**Railway application -- Fixed installations -- Harmonisation of
the rated values of the converter groups and tests on converter
groups**

轨道交通 地面装置 变流机组额定参数的协调及其试验

(English Translation)

Issued on: April 25, 2016

Implemented on: November 1, 2016

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China**

Table of Contents

Preface
1 Scope
2 Normative reference document
3 Terms and definitions, symbol
3.1 The basic connection of the converter unit
3.2 Terms and definitions
3.3 Symbol
4 Working conditions

Foreword

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

This standard uses the re-drafting method to amend the IEC 62589.:2010 "rail transit ground unit variable flow unit rated parameters of the Association Tune and test".

There is a technical difference between this standard and IEC 62589.:2010. These differences involve the terms of the margins of the vertical single line (-) Line markings. The technical differences between this standard and IEC 62589.:2010 are normative references, and this standard has a technical difference Adjusted to meet the technical conditions of our country, the adjustment of the situation is reflected in Chapter 2 "normative reference documents", the specific adjustments are as follows.

--- replace IEC 60076 with GB 1094.1;

Replace GB 60850..2007 with GB/T 1402;

Replace GB/T 3859.2 with IEC/T R60146-1-2..1991;

--- Replace IEC 60050-811.:1991 with GB/T 2900.36-2003;

Replace GB 62590..2010 with GB/T 32593-2016.

The editorial changes made by this standard are.

--- deleted the original introduction;

- Added information on Appendix D, the original table 1 as Table D.1 to comply with the provisions of GB/T 1.1-2009;

--- modify the original table 2 to Table 4 number, followed by changes to Table 1 to Table 3;

--- modified the reference, with the national standard instead of international documents, delete the reference without reference.

This standard is proposed by the National Railway Administration.

This standard is nationalized by the National Technical Committee for Traction Electrical Equipment and Systems (SAC/TC278).

The main drafting unit of this standard. Zhuzhou converter technology National Engineering Research Center Co., Ltd.

This standard participates in the drafting unit. Yongji new speed motor electrical limited liability company, CSR Nanjing Puzhen Vehicle Co., Ltd., China Railway fourth Survey and Design Institute Group Limited.

1 Scope

This standard specifies the important requirements related to the type test of the converter unit, which specifies the relevant parameters of the traction transformer and the converter Number of basic relationships in order to determine the minimum requirement for rating selection.

This standard applies to the minimum value of the rated value to be considered so that the selected switching device characteristics can be adapted to the variable flow unit. Appendix A, Appendix B, Appendix C and Appendix D provide some guidance for the design of the converter unit.

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 1094.1 Power transformers - Part 1. General (GB 1094.1-2013, IEC 60076-1.:2011, MOD) GB/T 1402-2010 Rail Transit Traction Power Supply System Voltage (IEC 60850.:2007, MOD) GB/T 2900.36-2003 Electrical terminology Electric traction [IEC 60050 (811)..1991, MOD] GB/T 3859.2 General requirements for semiconductor converters and grid commutators - Part 1-2. Application guidelines (IEC/T R60146-1-2..2011, MOD) GB/T 32593-2016 Power electronic converters for substation of substations (IEC 62590.:2010, MOD) IEC 61000-2-12.:2003 Electromagnetic compatibility (EMC) - Part 2-12. Environment in low voltage transmission in public medium voltage supply systems Interference and signal transmission compatibility based on EMC publications [Electromagneticcompatibility (EMC) -Part 2-12.

Environment-Compatibilitylevelsforlow-frequencyconducteddisturbancesandsignalingin publicmedium-voltagepowersupplysystems-BasicEMCpublication] IEC 62498-2

Environmental conditions for rail transit equipment - Part 2. Grounded electrical installations (Railway applications - Environmental conditions for equipment - Part 2. Fixed electrical installations) EN 50329.:2010 railroad transport ground equipment traction transformer (Railway applications - Fixed installations - Traction transformers)

3 Terms and definitions, symbols

The following terms and definitions apply to this document.

3.1

The basic connection of the converter unit According to the main components of the converter unit to distinguish between the type of flow unit. Figure 1 and Figure 2 show the original of different types of converter units Scheming.