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

GB/T 26217-2019

Replacing GB/T 26217-2010

DC voltage measuring device for HVDC transmission system

高压直流输电系统直流电压测量装置

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 26217-2010 "DC voltage measurement device for high-voltage DC transmission systems", and is in line with GB/T 26217-2010 The main technical changes are as follows:

- Change "800kV" to "1100kV", and modify the second paragraph to "This standard applies to DC installed at $\pm 1100\text{kV}$ and below Voltage measuring device, typical arrangement is DC pole bus, double twelve pulsating converter valve group midpoint (if applicable) bus, neutral Busbar, ground electrode lead and bridge arm circuit of flexible DC transmission system. "(See Chapter 1, Chapter 1 of the.2010 edition);
- Deleted the terms "step response", "amplitude", "phase", "cutoff frequency", "IP code", "protection level" (see section Chapter 3);
- Change the "rated DC voltage" to "rated primary voltage" and modify the corresponding definition (see 3.8,
- Added the term "maximum continuous operating voltage" (see 3.9);
- Modify the chapter title "Ratings and performance requirements" to "Rated values" (see Chapter 5, Chapter 5 of the.2010 edition);
- Modify the "rated DC voltage" to "rated primary voltage" and increase the voltage value "1100" (see 5.1,
- 5.1 of the.2010 version);
- Revised "Nominal DC voltage value" to "Maximum continuous operating voltage" and modified the voltage value (see 5.2,.2010 version 5.2);
- Change the secondary output corresponding to the rated primary DC voltage to "2D41H" to "3A98H" (see 5.4,.2010 version 5.4);
- In Table 1, the "rated DC voltage" was changed to "the highest continuous operating voltage", and the corresponding voltage value was modified, adding "1100" and The corresponding withstand voltage value (see 5.5.1,
- 5.5.1 of the.2010 version);
- take the content of the standard accuracy level as "
- 5.6 accuracy level of the entire voltage measurement device" (see 5.6,

1 Scope

GB/T 26217-2019 is the Chinese national standard on dc voltage measuring device for hvdc transmission system, in the field of electrical engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most

foreign buyers meet it. It was issued on 10 December 2019 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 July 2020. Classification: ICS 29.180, CCS K41. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the normal and special use conditions of DC voltage measurement devices for DC power transmission of voltage levels of $\pm 1100\text{kV}$ and below, Ratings, design and construction, tests and nameplates, etc. This standard applies to DC voltage measurement devices installed at $\pm 1100\text{kV}$ and below. Typical layout locations are DC pole busbars, double ten Mid-point (if applicable) bus, neutral bus, ground lead, and flexible DC transmission system bridge arm circuit of two-pulsation converter valve group.

2 Normative references

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

GB/T 311.1-2012 Insulation coordination Part 1. Definitions, principles and rules

GB/T 2424.25 Environmental testing for electric and electronic products-Part 3. Test guidelines-Earthquake test methods

GB/T 2900.1 Basic terms of electrical terms

GB/T 4208 enclosure protection grade (IP code)

GB/T 7354 High Voltage Test Technology Partial Discharge Measurement

GB/T 11022-2011 Common technical requirements for high-voltage switchgear and control equipment standards

GB/T 16927.1 High voltage test technology-Part 1. General definition and test requirements

GB/T 16927.2 High voltage test technology Part 2. Measurement system

GB/T 20840.3-2013 Transformers Part 3. Supplementary technical requirements for electromagnetic voltage transformers

GB/T 20840.5-2013 transformers Part 5. Supplementary technical requirements for capacitive voltage transformers

GB/T 20840.7-2007 transformers Part 7. Electronic voltage transformers

GB/T 20840.8-2007 Current transformers Part 8. Electronic current transformers

GB/T 21429 Definition, test methods, acceptance criteria and design recommendations for hollow composite insulators for outdoor and indoor electrical equipment

3 Terms and definitions

Defined in GB/T 20840.7-2007, GB/T 20840.8-2007, GB/T 16927.2 and GB/T 2900.1 and the following terms And definitions apply to this document. For ease of use, the following lists some of the terms and definitions in GB/T 20840.7-2007.

3.1 DC voltage divider Conversion device composed of high-pressure arm and low-pressure arm. The input voltage is applied to the entire device, and the output voltage is taken from the low-voltage arm.