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

GB/T 7330-2008

Replacing GB/T 7330-1998

Line traps for a.c. power systems

交流电力系统阻波器

(English Translation)

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Table of Contents

Introduction

1 Scope

2 Normative references

3 Terms and definitions

4 Requirements

5 Test methods

6 Recommended

Appendix A (informative) AC-DC converter station using traps

Annex B (informative) Supplement

Annex C (normative) tuning capacitor dielectric claim

Foreword

1989 "AC power system traps" and its 2002 Supplement to Appendix C "tuning capacitor. This standard corresponds to IEC 60353 Dielectric requirements ", with its non-equivalent.

This standard and IEC 60353. 1989 comparison, the main differences are as follows.

--- In the format, the international standard retains 30 years ago published the first edition of IEC 60353. 1971 format, and the provisions of GB/T 1.1-2000 vary greatly. Writing rules according to our standards, the number of articles in which the cancellation, the original 1,2 Chapter merged into Chapter 1, "scope" adds Chapter 2, "Normative references", the original Chapter 3, "Symbols" and Section 2 "Definitions" Merged into Chapter 3, "terminology, symbols and definitions", the original working conditions in Chapter 4, Section 3, "requirements" and Chapter 12 Section 4 of the original "Nameplate" merged into Chapter 4, "requirements", the original Section 5, "test" Chapter 2 merged into Chapter 5, "test", the original Article 6 "Recommended" in Chapter 4 merged Chapter 6, "recommended." Thus, reduced from IEC 60353 23 of chapter 6, and in the provisions Still try to keep the order of the sequence of IEC 60353 in order to check.

--- Will be listed in the original table 2, "Power System Voltage, radio interference voltage and test voltage relationship" in the power system voltage level and Other relevant parameters to be adjusted (edition 4.8) according to the provisions of China's electric power system.

--- Referring to supplement IEC 60353, an increase of subsidiary protection element related content, as well as tuning devices and their components (Excerpts 3.3,4.2.2,4.3 etc.).

- Improving the level of pressure wave trap (Excerpts 5.4.1.2, 5.4.2).
- Increased the primary coil terminal requirements (this version 4.2.1).
- Added protection for the traps to block the carrier channel resistance shunt loss calculated on the basis of recommendations (Excerpts 4.4).
- Information about the legend of the anti-halo (Excerpts 4.11.2).
- Deleting the contents of the original standard (5.2.1 edition) about Aldrey (one kind of Al-Mg-Si alloy) temperature coefficient.
- In IEC 60076-5 the appropriate formula in place of the original standard equation thermometer final test performance of thermal and Table 4 (Excerpts 5.5).
- The supplement to IEC 60353 Appendix C of this standard is attached as Appendix C. Due to limitations of the specific test conditions, the proposed appendix the bipolar pulse capacitor test in China is still not easy to achieve this standard in order to improve temporarily traps impulse test voltage (Excerpts 5.4.1.2) and frequency tuning means test pressure (this version 5.4.2) the way to improve the level of insulation as a tuning capacitor Transitional measures, the conditions have to be fully implemented after the IEC 60353. 1989 and its Supplementary Appendix C requirements.

This standard replaces GB/T 7330-1998 "AC power system traps." this standard and GB/T 7330-1998 compared in terms of technical content and format, the original GB/T 7330-1998 basically retained IEC 60353:1998 technical format and content, and in this edition made major changes, also added Appendix C, as described above. In addition, the text in detail and also made some modifications.

The Standard Appendix A, Appendix B is an informative annex, Annex C is normative appendix.

The standard proposed by China Electricity Council.

This standard by the national electricity system, management and exchange of information Standardization Technical Committee (SAC/TC82) under the jurisdiction and interpretation.

This standard by the Beijing Electric Power Plant and Tianjin Electric Power Institute of Electrical and hydraulic equipment is responsible for drafting, Northwest Electric Power Design Institute, State Grid Nanjing Auto Research Institute of Guangdong Power Grid Corporation participated in the drafting.

1 Scope

This standard specifies the definition of the relevant traps, working conditions, requirements, testing and recommendations.

This standard applies to the series with the HV and EHV AC power lines in the traps. The

device to prevent frequency is generally 40kHz ~ 500kHz carrier signal within the range of occurrence of excessive losses in power system conditions, and interference from adjacent carrier Minimized.

This standard does not apply to high-voltage power line inductor and a AC-DC converter stations traps for other purposes. For AC-DC Information flow converter stations traps in Appendix A.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB 311.1-1997 insulation with high voltage power transmission equipment (neq IEC 60071-1:1993) GB 1094.2-1996 Power transformers - Part 2 temperature (eqv IEC 60076-2:1993) GB/T 5273-1985 transformers, high-voltage electrical terminals and casing (neq IEC 60518. 1975) GB 7327-1987 AC systems with silicon carbide surge arresters (neq IEC 60099-1:1991) GB 11032-2000 exchange gapless metal oxide surge arresters (eqv IEC 60099-4:1991) GB/T 11604-1989 high-voltage electrical equipment radio interference test method (eqv IEC 60018. 1983) GB/T 16927.1-1997 high voltage test techniques Part 1. General test requirements (eqv IEC 60060-1. 1989) GB/T 16927.2-1997 high voltage test techniques Part 2. Measuring systems (eqv IEC 60060-2:1994) JB/T 6479-1992 Line traps for ac power systems Used series gap metal oxide surge arresters

3 Terms and Definitions

The following terms and definitions apply to this standard.

Even one kind of the carrier signal from the primary coil inductance type, tuning devices, high-voltage equipment protection element consisting of series of high-voltage power lines Contacts between adjacent power system components (e.g., bus, transformer, etc.), or a power line at the branch point. Tuning means connected across the two main coil End, properly tuned, it can exhibit a high impedance in one or more carrier frequencies or continuous carrier band and frequency impedance can be is negligible, in order to limit the power losses in the power system of the carrier signal.

Fig. 1a) and Figure 1b) shows two typical wave trap circuit. single frequency tuned wave trap and band tuner traps. Traps are also recoverable

Other forms of circuits.