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

GB 18489-2008

Replacing GB 18489-2001

**Capacitors for use in tubular fluorescent and other discharge
lamp circuits -- General and safety requirements**

管形荧光灯和其他放电灯线路用电容器 一般要求和安全要求

(English Translation)

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References

Foreword

All the technical contents of this standard is mandatory.

This standard is identical with IEC 61048:2006 "tubular fluorescent and other discharge lamp circuits capacitors general requirements and safety to Seeking "(in English).

For ease of use, this standard made the following editorial changes.

a) "IEC 61048" to the "standard", "IEC Standard No. 61048" be replaced by "GB 18489";

b) Remove IEC 61048 foreword;

"." C) used in place of a decimal point as the decimal point, "";

d) For IEC 61048:2006 and other international standards have been cited as identical with our standard, our present standard reference these national standards or industry standards corresponding to international standards in place, the rest not tantamount to the adoption of international standards of our standards, in this standard are a direct reference (see Chapter 2 of this standard).

This standard replaces GB 18489-2001 "tubular fluorescent and other discharge lamp circuits capacitors general requirements and safety requirements." the main differences between this standard and GB 18489-2001 are as follows.

--- Increasing the "Introduction";

--- Adds references in the standard directories, maps and tables of contents hinting index;

--- Chapter 5 adds, "(except Annex C)";

--- 13.2 adds "The whole test period should be no visible bubbles.";

--- 14.1 adds "In Japan and North America, self-healing capacitors should be able to withstand at room temperature is applied between the terminals, and its value as $1.75U_n$, which lasted AC test voltage of 10s. ";

--- The 15.2 "Note. A typical line being considered" replaced with "corresponding voltage and current waveforms are shown in Fig. 4, a typical test.

Circuit is given in Figure 5. If required ripple, it may be used in parallel circuits. The method of calculation of the test equipment in Appendix D it has been given. ";

15.2 --- Added "at room temperature";

--- 18.1.2 adds "In any case, the initial voltage should not exceed $1.3 \times U_n$, then boosted to the selected continuous voltage values." And "(eg the provisions of 18.1.2.1) ";

--- 18.1.2.1 increased "only for this project did not meet the provisions of 18.1.2 in all 20 capacitors total current does not drop More than 50% or as low as the initial value less expected scenario. ";

--- 18.1.3 The "Note. The test line is under consideration" is replaced with "corresponding voltage and current waveforms are shown in Fig. 4 Typical measurement.

Test circuit is shown in Figure 5. If required ripple, it may be used in parallel circuits. The method of calculation of the test equipment in the appendix D has been given. ";

--- 18.2.3.2 adds, "Note. You can alternately applied to the capacitor DC and AC voltage

until the capacitor failure so far.";

--- Added "Figure 4 15.2 and 18.1.3 test current and voltage waveforms";

--- Added "Figure 5 typical test circuit 15.2 and 18.1.3 Test";

--- Appendix C. 1 Added "(without the test 15.1)";

--- Added "Appendix D (informative) 15.2 18.1.3 test equipment and calculation guide."

--- Chapter 18 of the reg numbers have been adjusted.

The Standard Appendix A, Appendix B and Appendix C are normative appendices, Appendix D is an informative annex.

This standard was proposed by the National Federation of Light Industry.

This standard by the National Standardization Technical Committee of electrical lighting (SAC/TC224) centralized.

GB 18489-2008/IEC 61048:2006 this standard was drafted. Anhui Light Source Electric Co., Ltd., Foshan City, China Electrical Lighting Co., Ltd., Beijing Institute of electric light.

Introduction

This standard contains general and safety requirements tubular fluorescent and other discharge lamp circuits capacitors.

The performance of these capacitors requirements refer to the GB/T 18504-2001.

Note: The requirement is to ensure the safety of electrical equipment to meet these requirements at a reasonable installation, maintenance and use of the situation, no people, animals or property safe question.

GB 18489-2008/IEC 61048:2006 Tubular fluorescent and other discharge lamp circuits Capacitors General and safety requirements

1 Scope

This standard specifies the rated voltage not exceeding 1000V, electric capacity of not less than 0.1 μ F, reactive power does not exceed 2.5kvar, can continue AC withstand voltage requirement of non-self-healing and self-healing capacitor, the capacitor for the operating frequency of 50Hz or 60Hz, altitude does not exceed 3000m discharge lamp circuits.

NOTE: matching lamps and ballasts respectively, by IEC 60081, IEC 60901, IEC 60188, IEC 60192, IEC 60662, IEC 61167, GB 19510.9 and GB 19510.10 provisions.

This standard includes a lamp with a line parallel, series or series-parallel combination of capacitors.

This standard covers only paper or plastic film insulation or in combination with both insulating and impregnating or non-impregnated capacitors are metalized Treatment or metal foil electrode with.

This standard does not include a radio frequency interference suppression capacitors, for such requirements, see GB/T 14472.

The standard tests are type tests, it does not include individual capacitor testing in the production process.

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/T 5169.11 Fire hazard testing for electric and electronic products - Part 11. Glowing/hot wire based test methods for finished burning Hot wire flammability test method (GB/T 5169.11-2006, IEC 60695-2-11:2000, IDT) GB 7000.1-2007 Lamps - Part 1. General requirements and tests (IEC 60598-1:2003, IDT) GB/T 13539 (all parts), Low-voltage fuses (IEC 60269, IDT) GB/T 18504-2001 tubular fluorescent and other discharge lamp circuits capacitors - Performance requirements (IEC 61049:1991, IDT) IEC 60529. 1989 Housing protection (IP code) IEC 60695-11-5 Fire hazard testing - Part 11-5. Needle-flame test method equipment, confirmed test protocols and guidelines ISO 4046-4:2002 Paper, paperboard, pulp and paper and paperboard terminology vocabulary level and processing products

3 Terms and Definitions

This standard uses the following terms and definitions.

U-shaped

RMS sine wave voltage on the capacitor flag.

Capacitor surface during the hottest part of the work should not exceed temperatures.

GB 18489-2008/IEC 61048:2006 Note. The loss of the capacitor is not much, but make the surface temperature over the ambient temperature, and should therefore be set aside for this appropriate margin.

It should not be any part of the surface of the capacitor to the capacitor energized when the temperature is below this value.

A capacitor connected across the resistance between the terminals, to reduce the charge