

ICS 31.060.70
CCS K 42



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

GB/T 19749.1-2016

Replacing GB/T 19749-2005

**Coupling capacitors and capacitor dividers -- Part 1: General
rules**

(English Translation)

Issued on: February 24, 2016

Implemented on: September 1, 2016

Issued by: Standardization Administration of China

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References

Foreword

GB/T 19749 "coupling capacitors and capacitive voltage divider" intends divided into the following four parts.

--- Part 1. General;

--- Part 2. connected between the line and ground for power line carrier (PLC) of the single-phase AC or DC coupling capacitor;

--- Part 3. harmonic filters for AC or DC coupling capacitors;

--- Part 4. (except GB/T 20840.5 included CVT) connected between the line and ground single-phase AC or DC capacitive voltage divider and RC- divider.

This section GB/T 19749 Part 1.

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

This Part replaces GB/T 19749-2005 "coupling capacitors and capacitive voltage divider." Compared with GB/T 19749-2005, in addition to editorial changes outside the main technical changes are as follows.

--- Revised Normative contents of the file (see Chapter 2, 2005 edition 1.2);

--- The terms and definitions are divided into "general terms and definitions" and "coupling capacitors Terms and definitions" (see 3.1 and 3.2);

--- Added "equipment," "frequency standard reference range" and other terms and definitions 20 (see Chapter 3);

- Deleted "Capacitive Voltage Transformer" and other terms and definitions 14 (see the 2005 edition 1.3);
- Added "other conditions within the user equipment" (see 4.2.4);
- Increased requirements DC device (see 3.1.6, etc.);
- Added "System Grounding" (see 4.4);
- Remove the "acceptance test" (see 2005 2.2.3);
- Increasing the "special test" (see 8.4);
- Added "DC resistance measurement device" "radio interference voltage test" "test DC polarity inversion device" [see 8.2e) and 8.3h) and 8.3i)];
- Modify the routine tests and type tests, the test flow provisions (see Chapter 9, 2, Chapter 2, 2005 edition of Chapter 10 and FIG.);
- Added "partial discharge test circuit and detection equipment" (see Appendix B);
- Added "Radio interference voltage - measurement loop" (see Appendix C).

This section uses redrafted law revision using IEC 60358-1:2012 "coupling capacitors and capacitor dividers - Part 1. General" (in English). This part of IEC 60358-1:2012 and its main technical differences for the following reasons.

--- On normative references, this part has been adjusted technical differences, in order to adapt our technical conditions, adjust the focus reflected in Chapter 2, "Normative references", the specific adjustments are as follows.

- Added references GB/T 26218.1-2010;
- Added references GB/T 26218.2-2010;
- Added references GB/T 26218.3-2011.

--- Taking into account international standards and voltage levels of different voltage levels according to GB 311.1-2012 given the appropriate content has also been modified.

--- Altitude correction reference GB 311.1-2012, according to the actual situation has been modified.

This part of IEC 60358-1:2012 clause above main difference has been involved through a single vertical line (-) blank space at the outside edges of the pages marked.

This section incorporates IEC 60358-1:2013 errata content, terms concerning these corrections have been through a vertical wire (|) its outer margin positions were marked 2012/cor.1.

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

--- According to the rules GB/T 1.1-2009 given some written format and layout has been modified;

--- "This part" instead of IEC 60358-1:2012 in the "standard" word;

--- With a decimal point instead of the original IEC standard as a decimal comma ",";

--- Remove the IEC 60358-1:2012 Foreword.

Please note that some of the content of this section may involve patents. This part of the release mechanism does not assume the responsibility to identify these patents.

This part is proposed by the China Electrical Equipment Industrial Association.

This part of the National Standardization Technical Committee Power capacitor (SAC/TC45) centralized.

This section is drafted. Xi'an High Voltage Apparatus Research Institute Co., Ltd., Xi'an Electric Power Capacitor Co., Ltd., Guilin Power Capacitor Co., Ltd., Nissin Electric (Wuxi) Co., Ltd., Hefei Warwick Automation Co., Ltd., Zibo Leybold Power Capacitor Co., Ltd., Anhui Electric Power Research Institute, New Northeast Electric Group Power Capacitor Co., Ltd., Shanghai MWB Transformer Co., Ltd., Dandong Xintai Electric Co., Ltd., Xiamen Farah Electronics Co., Ltd., and Shenzhen City power Technology Co., Ltd.

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This part of the standard replaces the previous editions are.

--- GB/T 19749-2005.

Coupling capacitors and capacitive voltage divider Part 1. General

1 Scope

This section GB/T 19749 specifies the terms and definitions signs coupling capacitors and capacitive voltage divider, conditions, ratings, design requirements, test conditions, test classification, routine tests, type testing, special tests and equipment.

This section applies to the rated voltage 1000V or more, connected between the line and the ground voltage terminal permanently grounded or connected to the device for the following applications and other similar uses capacitors.

This section is based on the standard of the coupling capacitor, supplementary provisions and test GB/T 19749.2, GB/T 19749.3 and GB/T 19749.4 is given as in other parts of this standard.