AS 60044.5—2004
IEC/PAS 60044-5:2002

Australian Standard™

Instrument transformers

Part 5: Capacitor voltage transformers

STANDARDS AUSTRALIA

This Australian Standard was prepared by Committee EL-013, Measurement and Protection Transformers. It was approved on behalf of the Council of Standards Australia on 25 November 2003 and published on 30 January 2004.

The following are represented on Committee EL-013:

Australian Electrical and Electronic Manufacturers Association
Cigre AP12
CSIRO Telecommunications and Industrial Physics
Electricity Supply Association of Australia
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PREFACE

This Standard was prepared by the Standards Australia Committee EL-013, Measurement and Protection Transformers to partially supersede AS 1243—2982 for capacitor voltage transformers one year after publication. During this period, it is anticipated that regulatory authorities will approve current transformers to either Standard. AS 1243—1982 will continue to apply to three-phase voltage transformers only.

The objective of this Standard is to provide users and manufacturers of capacitor voltage transformers with definitions of terms, safety requirements, methods of specifying performance and methods of test.

This Standard is Part Five of a series covering instrument transformers. The series consists of the following Standards:

AS	
60044	Instrument transformers
60044.1	Part 1: Current transformers
60044.2	Part 2: Single-phase inductive voltage transformers
60044.3	Part 3: Combined transformers
60044.5	Part 5: Capacitor voltage transformers (this Standard)

This Standard is identical with, and has been reproduced, from IEC/PAS 60044-5:2002, *Instrument transformers – Part 5: Capacitor voltage transformers*.

As this Standard is reproduced from an International Standard, the following applies:

(a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

(b) In the source text ‘this international standard’ should read ‘this Australian Standard’.

(c) A full point should be substituted for a comma when referring to a decimal marker.

(d) Any French text on figures should be ignored.

The terms ‘normative’ and ‘informative’ are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

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1 Scope

This PAS which is a part of International Standard IEC 60044 applies to new single-phase capacitor voltage transformers connected between line and ground for system voltages $U_m \geq$ 72,5 kV at power frequencies from 15 Hz to 100 Hz. They are intended to supply a low voltage for measurement, control and protective functions.

The capacitor voltage transformer can be equipped with or without carrier-frequency accessories for power line carrier-frequency (PLC) application at carrier frequencies from 30 kHz to 500 kHz.

The future standard that should supersede the present PAS will replace the IEC 60186 regarding capacitor voltage transformers.

Three standards formed the basis for this IEC-PAS 60044-5:

– IEC 60044-2; concerning inductive voltage transformers;

– IEC 60358, concerning coupling capacitors and capacitor dividers;

– IEC 60481, concerning coupling devices for power line carrier (PLC) systems.

The application measurement function includes both indication measuring and revenue measuring.

NOTE Diagrams of capacitor voltage transformer to which this document applies are given in figures A.1 and A.2.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this document. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However parties to agreements based on this document are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

References to international standards that are struck through in this clause are replaced by references to Australian or Australian/New Zealand Standards that are listed immediately thereafter and identified by shading. Any Australian or Australian/New Zealand Standard that is identical to the International Standard it replaces is identified as such.

IEC 60028:1925, *International standard of resistance for copper*

~~IEC 60038:1983, *IEC Standard voltages*~~

AS 60038—2000, *Standard voltages*