

ANSI/IEEE C37.20.2

Annex D



ANSI/IEEE C37.20.2 - 2015 ANNEX D

- Current revision states:

“This annex covers voltage dividers intended to be used in equipment to provide voltage measurement or signaling, such that there is no galvanic isolation between circuits operating above 254 V ac or 280 V dc and those operating at lower voltages.

This annex provides construction and testing requirements for voltage dividers as an alternative to requirements found in applicable IEC standards for these products. Capacitive voltage dividers complying with Annex A of IEC 61243-5 [B1] need not comply with this annex. Other voltage dividers complying with IEC 62271-206 [B3] need not comply with this annex.”

INCORRECT REFERENCES

IEC 61243-5 and IEC 62271-206 are incorrect references and do not address voltage dividers intended for measurement and signaling (metering and control) but rather for detection and indication of voltage only.

- IEC 61243-5 - 1997 : Live working-Voltage detectors-Part 5: Voltage detecting systems (VDS)

Scope: This part of IEC 61243 is applicable to voltage detecting systems that are single-pole and are capacitively-coupled to live parts. They are used to detect the presence or absence of operating voltage on a.c. electrical systems for voltages from 1 kV to 52kV, and for frequencies from 16-2/3 Hz to 60 Hz.

- IEC 62271-206 - 2011 : Voltage presence indicating systems for rated voltages above 1kV and up to and including 52 kV

Scope: This part of IEC 62271 is applicable to voltage presence indicating systems (VPIS) incorporated in a.c. switchgear and controlgear covered by IEC 62271-200 or IEC 62271-201.

Voltage presence indicating systems are devices used to provide information to operators about the voltage condition of the main circuit of the switchgear in which they are installed.

PROPOSED CORRECTION

Voltage dividers intended for measurement and signaling (metering and control) are covered by the following standard:

- IEC 60044-7 – 1999: Electronic voltage transformers

Scope: This part of International Standard IEC 60044 applies to newly manufactured electronic voltage transformers with analogue output for use with electrical measuring instruments and electrical protective devices at frequencies from 15 Hz to 100 Hz.

Annex B (informative): Technical information for electronic voltage transformers

B.1 Introduction: Electronic voltage transformers make use of (resistive-) capacitive voltage dividers (for example) and/or optical arrangements are equipped with electronic components for the transmission and amplification of measured signals.

IEC 60044 will be superseded by IEC 61869 (next slide) in the near future.

NEW STANDARDS IN PROCESS

IEC 61689 parts 7 and 11 are currently in process of creation and will fall under 61689-1 and IEC 61689-6 which have been published (2007 and 2016 respectively)

- IEC 61689-1 : Instrument Transformers – General Requirements
- IEC 61689-6 : Additional general requirements for low-power instrument transformers
- IEC 61689-7 : Specific requirements for electronic Voltage Transformers
- IEC 61689-11 : Specific requirements for low power passive voltage transformers