

STN	Priamo pôsobiace analógové elektrické prístroje a ich príslušenstvo Časť 2: Špeciálne požiadavky pre ampérmetre a voltmetre	STN EN IEC 60051-2
		35 6203

Direct acting indicating analogue electrical measuring instruments and their accessories - Part 2: Special requirements for ammeters and voltmeters

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/21

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EN IEC 60051-2

April 2021

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Supersedes EN 60051-2:1989 and all of its amendments
and corrigenda (if any)

English Version

**Direct acting indicating analogue electrical measuring
instruments and their accessories - Part 2: Special requirements
for ammeters and voltmeters**
(IEC 60051-2:2018)

Appareils mesurateurs électriques indicateurs analogiques à
action directe et leurs accessoires - Partie 2: Exigences
particulières pour les ampèremètres et les voltmètres
 (IEC 60051-2:2018)

Direkt wirkend anzeigennde analoge elektrische
Messgeräte und ihr Zubehör - Teil 2: Spezielle
Anforderungen für Strom- und Spannungs- Messgeräte
 (IEC 60051-2:2018)

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EN IEC 60051-2:2021 (E)**European foreword**

The text of document 85/555/CDV, future edition 5 of IEC 60051-2, prepared by IEC/TC 85 "Measuring equipment for electrical and electromagnetic quantities" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60051-2:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-10-30
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-04-30

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IEC 60051-7 NOTE Harmonized as EN IEC 60051-7

Annex ZA
(normative)**Normative references to international publications
with their corresponding European publications**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60051-1	2016	Direct acting indicating analogue electrical measuring instruments and their accessories – Part 1: Definitions and general requirements common to all parts	EN 60051-1	2017
IEC 60051-9	-	Direct acting indicating analogue electrical measuring instruments and their accessories - Part 9: Recommended test methods	EN 60051-9	-
IEC 61869-2	-	Instrument transformers - Part 2: Additional requirements for current transformers	EN 61869-2	-



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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Direct acting indicating analogue electrical measuring instruments and their accessories –

Part 2: Special requirements for ammeters and voltmeters

Appareils mesureurs électriques indicateurs analogiques à action directe et leurs accessoires –

Partie 2: Exigences particulières pour les ampèremètres et les voltmètres





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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Direct acting indicating analogue electrical measuring instruments and their accessories –

Part 2: Special requirements for ammeters and voltmeters

Appareils mesurateurs électriques indicateurs analogiques à action directe et leurs accessoires –

Partie 2: Exigences particulières pour les ampèremètres et les voltmètres

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INTERNATIONAL ELECTROTECHNICAL COMMISSION**DIRECT ACTING INDICATING ANALOGUE ELECTRICAL
MEASURING INSTRUMENTS AND THEIR ACCESSORIES –****Part 2: Special requirements for ammeters and voltmeters****FOREWORD**

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International Standard IEC 60051-2 has been prepared by IEC technical committee 85: Measuring equipment for electrical and electromagnetic quantities.

This fifth edition cancels and replaces the fourth edition published in 1984. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) updating of content in line with new editions of IEC 60051-1 and IEC 60051-9;
- b) addition of Annex A to specify the nonconformity classification of test items.

The text of this International Standard is based on the following documents:

CDV	Report on voting
85/555/CDV	85/578A/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

This International Standard is to be used in conjunction with IEC 60051-1:2016.

A list of all parts in the IEC 60051 series, published under the general title *Direct acting indicating analogue electrical measuring instruments and their accessories*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

IEC 60051 is published in separate parts according to the following structure and under the general title *Direct acting indicating analogue electrical measuring instruments and their accessories*.

- Part 1: Definitions and general requirements common to all parts
- Part 2: Special requirements for ammeters and voltmeters
- Part 3: Special requirements for wattmeters and varmeters
- Part 4: Special requirements for frequency meters
- Part 5: Special requirements for phase meters, power factor meters and synchrosopes
- Part 6: Special requirements for ohmmeters (impedance meters) and conductance meters
- Part 7: Special requirements for multi-function instruments
- Part 8: Special requirements for accessories
- Part 9: Recommended test methods

IEC 60051-2 is not complete in itself and is read in conjunction with IEC 60051-1.

All of these parts are arranged in the same format and a standard relationship between subject and clause number is maintained throughout these parts. This arrangement will assist the reader of IEC 60051 to distinguish information relating to the different types of instruments.

DIRECT ACTING INDICATING ANALOGUE ELECTRICAL MEASURING INSTRUMENTS AND THEIR ACCESSORIES –

Part 2: Special requirements for ammeters and voltmeters

1 Scope

This part of IEC 60051 applies to direct acting indicating ammeters and voltmeters having an analogue display.

NOTE For multi-function instruments, see IEC 60051-7.

It also applies to:

- direct acting indicating ammeters and voltmeters whose scale marks do not correspond directly to their electrical input quantity, provided that the relationship between them is known;
- direct acting indicating ammeters and voltmeters and accessories having electronic devices in their measuring and/or auxiliary circuits.

This document does not apply to:

- special purpose instruments which are covered by their own IEC standards;
- special purpose devices which are covered by their own IEC standards when they are used as accessories.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60051-1:2016, *Direct acting indicating analogue electrical measuring instruments and their accessories – Part 1: Definitions and general requirements common to all parts*

IEC 60051-9, *Direct acting indicating analogue electrical measuring instruments and their accessories – Part 9: Recommended test methods*

IEC 61869-2, *Instrument transformers – Part 2: Additional requirements for current transformers*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN