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Standards

Irish Standard
I.S. EN IEC 60027-2:2019

Letter symbols to be used in electrical technology - Part 2: Telecommunications and electronics

I.S. EN IEC 60027-2:2019

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This document is based on:

EN IEC 60027-2:2019

Published:

2019-04-05

This document was published under the authority of the NSAI and comes into effect on:

2019-04-23

ICS number:

01.060

33.020

NOTE: If blank see CEN/CENELEC cover page

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National Foreword

I.S. EN IEC 60027-2:2019 is the adopted Irish version of the European Document EN IEC 60027-2:2019, Letter symbols to be used in electrical technology - Part 2: Telecommunications and electronics

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EUROPEAN STANDARD

EN IEC 60027-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2019

ICS 01.060, 33.020

Supersedes EN 60027-2:2007

English Version

**Letter symbols to be used in electrical technology - Part 2:
Telecommunications and electronics
(IEC 60027-2:2019)**

Symboles littéraux à utiliser en électrotechnique - Partie 2:
Télécommunications et électronique
(IEC 60027-2:2019)

Formelzeichen für die Elektrotechnik - Teil 2:
Telekommunikation und Elektronik
(IEC 60027-2:2019)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 60027-2:2019 (E)**European foreword**

The text of document 25/635/FDIS, future edition 4 of IEC 60027-2, prepared by IEC/TC 25 "Quantities and units" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60027-2:2019.

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) 2019-11-12
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-02-12

This document supersedes EN 60027-2:2007.

This edition constitutes a technical revision and includes the following significant changes with respect to the previous edition:

- a) former Subclauses 3.8 and 3.9 are cancelled and replaced by EN 80000-13:2008;
- b) former Subclause 3.10, now 4.8, is revised in accordance with IEC 60050-192:2015;
- c) former Subclause 3.11, now 4.9, is revised in accordance with IEC 60050-561:2014;
- d) former Subclause 3.13, now 4.11, is revised in accordance with EN ISO 80000-8:2007, IEC 60050-801:1994 and IEC 60050-802:2011;
- e) technical and editorial corrections have been carried out, mainly in Subclause 4.1.
- f) tables are simplified, mainly by deleting useless columns.

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60027-3	NOTE	Harmonized as EN 60027-3
IEC 60747 (series)	NOTE	Harmonized in EN 60747 (series)
IEC 61703:2001	NOTE	Harmonized as EN 61703:2002 (not modified)
ISO 80000-1:2009	NOTE	Harmonized as EN ISO 80000-1:2013 (not modified)
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IEC 80000-13:2008	NOTE	Harmonized as EN 80000-13:2008 (not modified)

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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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 60027-1	1992	Letters symbols to be used in electrical technology - Part 1: General		
+ A1	1997		EN 60027-1	2006
+ A2	2005		+ A2	2007

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IEC 60027-2

Edition 4.0 2019-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Letter symbols to be used in electrical technology –
Part 2: Telecommunications and electronics**

**Symboles littéraux à utiliser en électrotechnique –
Partie 2: Télécommunications et électronique**





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IEC 60027-2

Edition 4.0 2019-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Letter symbols to be used in electrical technology –
Part 2: Telecommunications and electronics**

**Symboles littéraux à utiliser en électrotechnique –
Partie 2: Télécommunications et électronique**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 01.060; 33.020

ISBN 978-2-8322-6346-4

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CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references	5
3 Terms and definitions	5
4 Introduction to tables	5
5 Quantities and units.....	6
5.1 General concepts.....	6
5.2 Linear time-independent networks under sinusoidal conditions	20
5.2.1 General	20
5.2.2 Two-port networks	20
5.2.3 n -port networks.....	28
5.3 Line transmission of signals and telephony	34
5.3.1 Quantities and units in line transmission.....	34
5.3.2 Subscripts for line transmission	35
5.3.3 Quantities and units in telephony.....	36
5.3.4 Subscripts for telephony	36
5.4 Waveguide propagation	37
5.4.1 Frequency and wavelength in a waveguide.....	37
5.4.2 Characteristic and normalized impedance and admittance in general.....	38
5.4.3 Impedance and admittance at a point in a substance	39
5.4.4 Impedance and admittance at a point in vacuum.....	40
5.4.5 Impedance and admittance of a waveguide	41
5.5 Radiocommunications	42
5.5.1 General and tropospheric propagation	42
5.5.2 Ionospheric propagation	45
5.5.3 Antennas	46
5.5.4 Radio links.....	51
5.6 Optical fibre communication	53
5.7 Television	59
5.8 Dependability.....	61
5.9 Piezoelectric resonators.....	62
5.10 Semiconductor devices	68
5.11 Electroacoustics	68
Bibliography.....	73
Figure 1 – Conventions concerning signs in electric circuits.....	20
Figure 2 – Conventions for n -port linear networks	28
Figure 3 – Equivalent circuits of a one-port piezoelectric resonator.....	62

INTERNATIONAL ELECTROTECHNICAL COMMISSION

LETTER SYMBOLS TO BE USED IN ELECTRICAL TECHNOLOGY –

Part 2: Telecommunications and electronics

FOREWORD

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International Standard IEC 60027-2 has been prepared by IEC technical committee 25: Quantities and units.

This fourth edition cancels and replaces the third edition published in 2005. This fourth edition constitutes a technical revision.

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

- a) former Subclauses 3.8 and 3.9 are cancelled and replaced by IEC 80000-13:2008;
- b) former Subclause 3.10, now 4.8, is revised in accordance with IEC 60050-192:2015;
- c) former Subclause 3.11, now 4.9, is revised in accordance with IEC 60050-561:2014;
- d) former Subclause 3.13, now 4.11, is revised in accordance with ISO 80000-8:2007, IEC 60050-801:1994 and IEC 60050-802:2011;
- e) technical and editorial corrections have been carried out, mainly in Subclause 4.1.
- f) tables are simplified, mainly by deleting useless columns.

The text of this standard is based on the following documents:

FDIS	Report on voting
25/635/FDIS	25/640/RVD

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.

A list of all parts in the IEC 60027 series, published under the general title *Letter symbols to be used in electrical technology*, can be found on the IEC website.

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

LETTER SYMBOLS TO BE USED IN ELECTRICAL TECHNOLOGY –

Part 2: Telecommunications and electronics

1 Scope

This part of IEC 60027 is applicable to telecommunications and electronics. It gives names and symbols for quantities and their units.

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 60027-1:1992, *Letter symbols to be used in electrical technology – Part 1: General*
IEC 60027-1:1992/AMD1:1997
IEC 60027-1:1992/AMD2:2005

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

4 Introduction to tables

In this part of IEC 60027, complex quantities are in general denoted by underlining their symbols. However, this does not constitute a compulsory rule in applications (see IEC 60027-1).

To avoid any ambiguity, some quantity names are followed by a specific use, enclosed in angle brackets "<...>" after a comma.

When several symbols are indicated for a given quantity, the first is the preferred symbol and the others are reserve symbols, unless otherwise stated.

When several units are indicated for a given quantity, the first is the coherent SI unit, unless otherwise stated. For logarithmic ratios, the first mentioned unit is the decibel.

For quantities defined as a logarithm of the ratio of two power quantities or two root-power quantities (also known as field quantities), the submultiple decibel (dB) of the bel (B) is generally used, rather than the neper (Np). The bel is not explicitly mentioned in the tables. See IEC 60027-3 and ISO 80000-1:2009, Annex C.

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