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Storheter och enheter i elektrotekniken – Del 2: Telekommunikation och elektronik

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

Som svensk standard gäller europastandarden EN 60027-2:2007. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60027-2:2007.

Nationellt förord

Europastandarden EN 60027-2:2007

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60027-2, Third edition, 2005 - Letter symbols to be used in electrical technology - Part 2: Telecommunications and electronics**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-IEC 60027-2, utg 1, 2004, gäller ej fr o m 2011-01-26.

Avsnitt 3.8 och 3.9 ersätts 2011-06-01 av SS-EN 80000-13, utgåva 1, 2011.

I standarden förekommer hänvisning till IEC 60050, dvs till den internationella elektrotekniska ordlistan, IEV (International Electrotechnical Vocabulary), som ges ut av IEC. Under namnet Electropedia finns den tillgänglig i databasform på <http://www.electropedia.org/>.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

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English version

**Letter symbols to be used in electrical technology -
Part 2: Telecommunications and electronics
(IEC 60027-2:2005)**

Symboles littéraux à utiliser
en électrotechnique -
Partie 2: Télécommunications
et électronique
(CEI 60027-2:2005)

Formelzeichen
für die Elektrotechnik -
Teil 2: Telekommunikation
und Elektronik
(IEC 60027-2:2005)

This European Standard was approved by CENELEC on 2007-04-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of the International Standard IEC 60027-2:2005, prepared by IEC TC 25, Quantities and units, and their letter symbols, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 60027-2 on 2007-04-01 without any modification.

This European Standard supersedes HD 60027-2:2003.

EN 60027-2:2007 includes the following significant technical changes with respect to HD 60027-2:2003:

- it contains a revision of some clauses of HD 245.2 S1:1983 that were not technically revised in HD 60027-2:2003;
- it contains a revision of Clause 8 which is now Clause 10;
- it contains some new clauses dealing with subjects that were not previously considered;
- former Clause 10 will be given in another part of EN 60027;
- former Clause 11 will be revised as EN 60027-6.

The following dates were fixed:

- | | | |
|--|-------|------------|
| – latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement | (dop) | 2008-04-01 |
| – latest date by which the national standards conflicting
with the EN have to be withdrawn | (dow) | 2010-04-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60027-2:2005 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60027-1	1992	Letter symbols to be used in electrical technology - Part 1: General	EN 60027-1 ¹⁾	2006
IEC 60027-3	2002	Letter symbols to be used in electrical technology - Part 3: Logarithmic and related quantities, and their units	EN 60027-3	2007
IEC 60050-101	1998	International Electrotechnical Vocabulary (IEV) - Part 101: Mathematics	-	-
IEC 60050-131	2002	International Electrotechnical Vocabulary - Part 131: Circuit theory	-	-
IEC 60050-191	1990	International Electrotechnical Vocabulary (IEV) - Chapter 191: Dependability and quality of service	-	-
IEC 60050-351	1998	International Electrotechnical Vocabulary (IEV) - Part 351: Automatic control	-	-
IEC 60050-702	1992	International electrotechnical vocabulary (IEV) - Chapter 702: Oscillations, signals and related devices	-	-
IEC 60050-704	1993	International electrotechnical vocabulary (IEV) - Chapter 704: Transmission	-	-
IEC 60050-705	1995	International Electrotechnical Vocabulary (IEV) - Chapter 705: Radio wave propagation	-	-
IEC 60050-712	1992	International Electrotechnical Vocabulary (IEV) - Chapter 712: Antennas	-	-

¹⁾ EN 60027-1 is based on IEC 60027-1:1995 (Reprint) + A1:1997.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-713	1998	International Electrotechnical Vocabulary (IEV) - Part 713: Radiocommunications: transmitters, receivers, networks and operation	-	-
IEC 60050-715	1996	International Electrotechnical Vocabulary (IEV) - Chapter 715: Telecommunication networks, teletraffic and operation	-	-
IEC 60050-721	1991	International Electrotechnical Vocabulary (IEV) - Chapter 721: Telegraphy facsimile and data communication	-	-
IEC 60050-722	1992	International electrotechnical vocabulary (IEV) - Chapter 722: Telephony	-	-
IEC 60050-723	1997	International Electrotechnical Vocabulary (IEV) - Chapter 723: Broadcasting: Sound, television and data	-	-
IEC 60050-725	1994	International Electrotechnical Vocabulary (IEV) - Chapter 725: Space radiocommunications	-	-
IEC 60050-726	1982	International electrotechnical vocabulary (IEV) - Part 726: Transmission lines and waveguides	-	-
IEC 60050-731	1991	International Electrotechnical Vocabulary (IEV) - Chapter 731: Optical fibre communication	-	-
IEC 60122-1	2002	Quartz crystal units of assessed quality - Part 1: Generic specification	EN 60122-1	2002
IEC 60375	2003	Conventions concerning electric and magnetic circuits	EN 60375	2003
IEC 60747	Series	Semiconductor devices	-	-
IEC 60747-1	1983	Semiconductor devices - Part 1: General	-	-
IEC 60748	Series	Semiconductor devices - Integrated circuits	-	-
IEC 60748-1	2002	Semiconductor devices - Integrated circuits - Part 1: General	-	-
IEC 61703	2001	Mathematical expressions for reliability, availability, maintainability and maintenance support terms	EN 61703	2002
IEC/TR 61931	1998	Fibre optic - Terminology	-	-
ISO/IEC 2382-16	1996	Information technology - Vocabulary - Part 16: Information theory	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 31-0	1992	Quantities and units - Part 0: General principles	-	-
ISO 31-11	1992	Quantities and units - Part 11: Mathematical signs and symbols for use in the physical sciences and technology	-	-

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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 units.

2 Normative references

The following referenced documents are indispensable for the application 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 60027-3:2002, *Letter symbols to be used in electrical technology – Part 3: Logarithmic and related quantities*

IEC 60050-101:1998, *International Electrotechnical Vocabulary – Part 101: Mathematics*

IEC 60050-131:2002, *International Electrotechnical Vocabulary – Part 131 – Circuit theory*

IEC 60050-191:1990, *International Electrotechnical Vocabulary – Part 191: Dependability and quality of service*

IEC 60050-351:1998, *International Electrotechnical Vocabulary – Part 351: Automatic control*

IEC 60050-702:1992, *International Electrotechnical Vocabulary – Part 702: Oscillations, signals and related devices*

IEC 60050-704:1993, *International Electrotechnical Vocabulary – Part 704: Transmission*

IEC 60050-705:1995, *International Electrotechnical Vocabulary – Part 705: Radio wave propagation*

IEC 60050-712:1992, *International Electrotechnical Vocabulary – Part 712: Antennas*

IEC 60050-713:1998, *International Electrotechnical Vocabulary – Part 713: Radiocommunications: transmitters, receivers, networks and operation*

IEC 60050-715:1996, *Telecommunication networks, teletraffic and operation*

IEC 60050-721:1991, *International Electrotechnical Vocabulary – Part 721: Telegraphy, facsimile and data communication*

IEC 60050-722:1992, *International Electrotechnical Vocabulary – Part 722: Telephony*

IEC 60050-723:1997, *International Electrotechnical Vocabulary – Part 723: Broadcasting: sound, television, data*

IEC 60050-725:1994, *International Electrotechnical Vocabulary – Part 725: Space radio-communications*

IEC 60050-726:1982, *International Electrotechnical Vocabulary – Part 726: Transmission lines and waveguides*

IEC 60050-731:1991, *International Electrotechnical Vocabulary – Part 731: Optical fibre communication*

IEC 60122-1:2002, *Quartz crystal units of assessed quality – Part 1: Generic specification*

IEC 60375:2003, *Conventions concerning electric and magnetic circuits*

IEC 60747(all parts), *Semiconductor devices – Discrete devices*

IEC 60747-1:1983, *Semiconductor devices – Discrete devices – Part 1: General*

IEC 60748 (all parts), *Semiconductor devices – Integrated circuits*

IEC 60748-1:2002, *Semiconductor devices – Integrated circuits – Part 1: General*

IEC 61703:2001, *Mathematical expressions for reliability, availability, maintainability and maintenance support terms*

IEC 61931:1998, *Fibre optic – Terminology*

ISO/IEC 2382-16:1996, *Information technology – Vocabulary – Part 16: Information theory*

ISO 31-0:1992, *Reference materials – Contents of certificates and labels*

ISO 31-11:1992, *Quantities and units – Part 11: Mathematical signs and symbols for use in the physical sciences and technology*

NOTE 1 In this part of IEC 60027, complex quantities are denoted by underlining their symbols. However, this does not constitute a compulsory rule in applications (see 1.6 in IEC 60027-1).

NOTE 2 The heading in the tables "Unit, coherent with the SI" covers SI units and other units coherent with the SI, such as bar and neper.