

Preparation of parts lists

The European Standard EN 62027:2000 has the status of a
British Standard

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National foreword

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The UK participation in its preparation was entrusted to Technical Committee GEL/3, Documentation and graphical symbols, which has the responsibility to:

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 27, an inside back cover and a back cover.

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Preparation of parts lists

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Etablissement des nomenclatures de composants
(CEI 62027:2000)

Erstellung von Teilelisten
(IEC 62027:2000)

This European Standard was approved by CENELEC on 2000-06-01. 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.

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CENELEC

European Committee for Electrotechnical Standardization
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Europäisches Komitee für Elektrotechnische Normung

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

Foreword

The text of document 3B/289/FDIS, future edition 1 of IEC 62027, prepared by IEC TC 3, Documentation and graphical symbols, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62027 on 2000-06-01.

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- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2001-03-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2003-06-01

Annexes designated “normative” are part of the body of the standard.

Annexes designated “informative” are given for information only.

In this standard, annex ZA is normative and annexes A, B, C and D are informative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International standard IEC 62027:2000 was approved by CENELEC as a European Standard without any modification.

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INTRODUCTION

A parts list is primarily used to list and specify the constituent objects (components) of the overall object or system to which the parts list applies.

It is generally recognized that information on products, installations and systems can be organized on the basis of tree-like, hierarchical structures. The structure represents the way in which an industrial process or a product is subdivided into smaller processes or sub-products, designated by the general term "objects". In the context of this International Standard, "object" refers to any entity treated in the process of design, engineering, realization, operation, maintenance, and demolition of a plant, installation, system, equipment, etc., or part thereof, in accordance with the definition in 3.1.1.

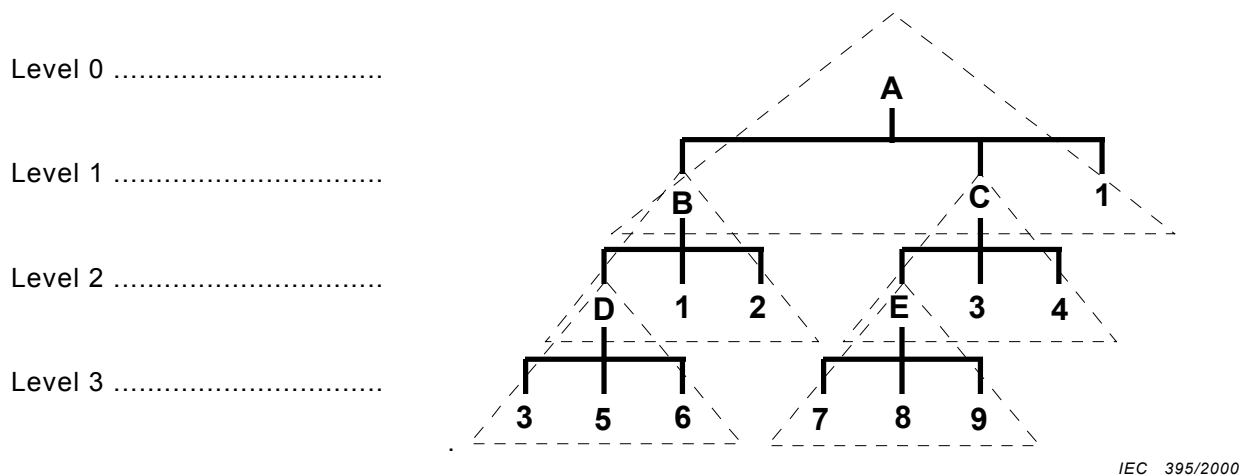
NOTE In the context of other standards, the term "item" is sometimes used with the same meaning as "object".

Depending on the "aspect" (see 3.1.3), different structures can be recognized, for example a "product-oriented structure", a "function-oriented structure" or a "location-oriented structure". A specific constituent object may be of relevance in one structure only, or in more than one. For further information on structures and structuring, see IEC 61346-1 and IEC 61346-4.

A parts list is implicitly or explicitly associated with such a structure. The parts list concept described in this International Standard is therefore applicable in all structures defined in accordance with IEC 61346-1.

Parts lists relevant to the physical manufacturing and assembly of a product, associated with the product-oriented structure, usually cover only one assembly level each, and the main assembly is normally described by a system of single-level parts lists. An example of a system of single-level parts lists is shown in the figure below.

Parts lists are often generated as reports from a database containing information on the entire structure.



NOTE A is the main assembly; B, C, D and E are subassemblies; 1, 2, 3, etc. are parts. A, B, C, D and E are defined by single-level parts lists, the content of each indicated by means of dashed lines.

PREPARATION OF PARTS LISTS

1 Scope

This International Standard provides rules for the preparation of parts lists.

This standard is applicable to parts lists used in the design and engineering process intended to be supplied with the documentation.

NOTE The role of the parts list as a main document in structured documentation is described in IEC 62023.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard 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.

IEC 61082-1:1991, *Preparation of documents used in electrotechnology – Part 1: General requirements*
Amendment 2 (1996)

IEC 61346-1:1996, *Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations – Part 1: Basic rules*

IEC 61346-2:2000, *Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations – Part 2: Classification of objects and codes for classes*

IEC 61355:1997, *Classification and designation of documents for plants, systems and equipment*

IEC 61360-1:1995, *Standard data element types with associated classification scheme for electric components – Part 1: Definitions – Principles and methods*

IEC 61360-4:1997, *Standard data element types with associated classification scheme for electric components – Part 4: IEC reference collection of standard data element types, component classes and terms*

IEC 62023:2000, *Structuring of technical information and documentation*

IEC 81714-2:1998, *Design of graphical symbols for use in the technical documentation of products – Part 2: Specification for graphical symbols in a computer sensible form including graphical symbols for a reference library, and requirements for their interchange*

ISO 639, *Code for the representation of names of languages*

ISO 1000, *SI units and recommendations for the use of their multiples and of certain other units*

ISO 6433:1981, *Technical drawings – Item references*

ISO/DIS 7200-1, — *Technical product documentation – Document headers and title blocks – Part 1: General structure and content*

ISO/DIS 13584-1, *Industrial automation systems and integration – Parts library – Part 1: Overview and fundamental principles*

ISO 13584-26:2000, *Industrial automation systems and integration – Parts library – Part 26: Supplier identification*

3 Definitions

For the purpose of this International Standard, the following terms and definitions apply. In the definitions, terms that are defined elsewhere in this clause are shown in *italics*.

3.1 General terms, related to structuring

3.1.1 **object**

entity treated in the process of design, engineering, realization, operation, maintenance and demolition

NOTE 1 The entity may refer to a physical or non-physical "thing", or to a set of information associated with it.

NOTE 2 Depending on its purpose, an object may be viewed in different ways called "aspects".

[IEC 61346-1, definition 3.1]

3.1.2 **system**

set of interrelated *objects*

NOTE 1 Examples of a system: a drive system, a water supply system, a stereo system, a computer.

NOTE 2 When a system is part of another system, it may be considered as an object.

[IEC 61346-1, definition 3.2]

3.1.3 **aspect**

specific way of selecting information on or describing a *system* or an *object* of a *system*

NOTE Such ways may be:

- what the system or object does (function viewpoint);
- how the system or object is constructed (product viewpoint);
- where the system or object is located (location viewpoint).

[IEC 61346-1, definition 3.3]