



SLOVENSKI STANDARD

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Generic specification of information on products by properties - Part 1: Principles and methods (IEC 62569-1:2017)

Allgemeine Regeln zur Erstellung von Produktspezifikationen - Teil 1: Grundsätze und Methoden (IEC 62569-1:2017)

Spécification générique relative aux informations sur les produits données par les propriétés - Partie 1: Principes et méthodes (IEC 62569-1:2017)

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EUROPEAN STANDARD

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Generic specification of information on products by properties -
Part 1: Principles and method
(IEC 62569-1:2017)

Spécification générique relative aux informations sur les
produits données par les propriétés - Partie 1: Principes et
méthodes
(IEC 62569-1:2017)

Allgemeine Regeln zur Erstellung von
Produktspezifikationen - Teil 1: Grundsätze und Methoden
(IEC 62569-1:2017)

This European Standard was approved by CENELEC on 2017-08-16. 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.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 62569-1:2017**European foreword**

The text of document 3/1310/FDIS, future edition 1 of IEC 62569-1, prepared by IEC/TC 3 "Information structures and elements, identification and marking principles, documentation and graphical symbols" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62569-1:2017.

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

IEC 60027 (series)	NOTE	Harmonized as EN 60027 (series).
IEC 61360-6:2016	NOTE	Harmonized as EN 61360-6:2017.
IEC 61987-10:2009	NOTE	Harmonized as EN 61987-10:2009.
IEC 62264 (series)	NOTE	Harmonized as EN 62264 (series).
IEC 81346-1	NOTE	Harmonized as EN 81346-1.
IEC 82079-1:2012	NOTE	Harmonized as EN 82079-1:2012.
IEC 80000 (series)	NOTE	Harmonized as EN 80000 (series).
ISO 80000 (series)	NOTE	Harmonized as EN ISO 80000 (series).
ISO 14040:2006	NOTE	Harmonized as EN ISO 14040:2006.

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 When 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 61360-1	-	Standard data element types with associated classification scheme - Part 1: Definitions - Principles and methods	EN 61360-1	-
IEC/TS 62720	-	Identification of units of measurement for computer-based processing		-

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IEC 62569-1

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INTERNATIONAL STANDARD



HORIZONTAL STANDARD

**Generic specification of information on products by properties –
Part 1: Principles and methods**

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CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	10
2 Normative references	10
3 Terms, definitions and abbreviated terms	10
3.1 Terms and definitions.....	10
3.2 Abbreviated terms.....	15
4 Specifications	15
5 Properties.....	16
5.1 Object properties versus dictionary properties.....	16
5.2 Sets of properties for specific purposes	18
5.3 Properties of components	18
6 Property qualifiers	19
6.1 General.....	19
6.2 Life cycle qualifier.....	20
6.2.1 General	20
6.2.2 SPE	20
6.2.3 INQ.....	20
6.2.4 OFF.....	21
6.2.5 CON.....	21
6.2.6 SUP.....	21
6.2.7 BUILT.....	21
6.2.8 OP.....	21
6.2.9 DECOM.....	21
6.2.10 Example of the use of the life cycle qualifier	21
6.2.11 Example of the use of life cycle qualifier associated with a single property within a transaction applying the XML notation.....	22
6.3 Applicability qualifier.....	22
6.3.1 General	22
6.3.2 AVP.....	23
6.3.3 AVN.....	23
6.3.4 AVA.....	23
6.3.5 NA.....	23
6.3.6 Application example – Method A (implicit marking)	23
6.3.7 Application example – Method B (explicit marking)	24
6.4 Value origin qualifier	24
6.4.1 General	24
6.4.2 EST.....	25
6.4.3 CAL.....	25
6.4.4 MEA.....	25
6.4.5 SET.....	25
6.4.6 Example of the use of the value origin qualifier.....	25
6.5 Value processing qualifier	25
6.5.1 General	25
6.5.2 ARITHM.....	26
6.5.3 MED.....	26

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SIST EN 62569-1:2018

<https://standards.iteh.ai/catalog/standards/sist/05b31ecf-fd28-4ae4-99ab-9c546cc311c7/sist-en-62569-1-2018>

6.5.4	MOD	26
6.5.5	WARITHM	27
6.5.6	GEOM	27
6.5.7	WGEOM	27
6.5.8	HARM	28
6.5.9	RMS	28
6.6	Multiple qualifiers	28
6.7	When to use a qualifier	28
6.8	Example of the use of multiple qualifiers associated with a single property within a transaction applying, for example, the XML notation based on the example shown in 6.6	29
7	Property values	29
7.1	General	29
7.2	How to deal with special values	29
7.3	How to use the level type concept	30
7.4	Availability of values associated with (dictionary) properties	30
7.5	Application of unit systems	30
7.6	Use of units in software applications	30
8	Data reliability and quality	31
8.1	General	31
8.2	Description of inaccuracies of quantitative values	31
8.3	Intended design tolerances on products	32
Annex A (normative)	(Dictionary) property definitions	33
A.1	General	33
A.2	Source definitions of (dictionary) properties and classes of (dictionary) properties in this document	33
A.2.1	Definitions of class of (dictionary) properties	33
A.2.2	Definition of (dictionary) properties to class AAB001:	34
Bibliography	36
Figure 1	– Context of generic specification for information on products	8
Figure 2	– Business scenario between parties	9
Figure 3	– Import and export possibilities using tagged formats	9
Figure 4	– Relation between the properties of a product type and the (dictionary) properties of a data dictionary used for their expression	17
Figure 5	– Inclusion of sets of properties	18
Figure 6	– Relation between the components of a product type and the product type used for their implementation	19
Figure 7	– Development of life cycle qualifier over time	22
Table 1	– Example of the use of the life cycle qualifier	21
Table 2	– Example of the use of the value origin qualifier	25
Table 3	– Example of the use of multiple qualifiers	28
Table 4	– Tolerance concept	32

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**GENERIC SPECIFICATION OF INFORMATION
ON PRODUCTS BY PROPERTIES –**

Part 1: Principles and methods

FOREWORD

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International Standard IEC 62569-1 has been prepared by IEC technical committee 3: Information structures and elements, identification and marking principles, documentation and graphical symbols.

This first edition cancels and replaces IEC PAS 62569-1:2009. This edition constitutes a technical revision.

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

FDIS	Report on voting
3/1310/FDIS	3/1314/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.

Terms which are defined in Clause 3 are *italicized* when they occur in definitions of other terms in Clause 3.

A list of all parts in the IEC 62569 series, published under the general title *Generic specification of information on products by properties*, 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.

A bilingual version of this publication may be issued at a later date.

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INTRODUCTION

This document establishes general principles and methods required for all parts of IEC 62569, to manage the product-related information as described in the following parts along the life cycle of an object, e.g. a product during its operational use.

IEC 62569-2 provides a generally applicable structure of a generic specification of information on products presenting those common clauses which are independent of any specific equipment, component and device. It serves as a guide for the preparation of technical specifications for various objects. Due to its generic type, particular issues referring to specific product groups are excluded. These need to be obtained from the specific product descriptions within product standards.

IEC 62569-3 provides a collection of generally applicable object properties used in conjunction with the predefined structure in IEC 62569-2, being the basis for, for example, an XML-based electronic template, serving as generic template for the development of product-specific specifications of information by product committees within IEC and ISO, industrial consortia or other industrial organizations.

Figure 1 provides an overview of the intention of this standard. The generic specification for information of objects represents an overall approach for those mainly technical information issues which are generally required by users of an object, and being independent of any specific product class, such as identification, classification or accessibility information for logical or physical interconnection to other products. It provides sets of object properties which may contain quantitative, non-quantitative or conditional types, containing predefined value sets for the non-quantitative, or units for the quantitative types.

The next step is the application of the available generic information on a specific product class such as motor, transformer or resistor. In this step the previously available generic information is aggregated by additional information focusing on that information which is typically applicable for the considered specific class. The result is applicable only for that considered class, and named product-class-specific blank detail specification. For each further class, such a step is repeated. The object properties contained in a blank detail specification for a specific product class are either of the quantitative or non-quantitative type and also foreseen with predefined value sets for the non-quantitative, or units for the quantitative types.

These blank detail specifications should be made available (e.g. as a web-based collection), allowing users to establish the detail specifications (instantiate or populate with data) for automated and controlled use by industry in the business process.

The next step is the application of blank detail specifications in daily practice in industry, when a user populates the object properties of the blank detail specification with required values for his specific application. Depending on the needs, further object properties may be added, marked as not applicable or complemented by qualifiers, etc.

The result may be used, for example, as a functional specification for a specific object within a system or plant, or used for an inquiry.

From this perspective it is easy to deduce that a prerequisite for an economic implementation of the above specifications is the existence of an internationally available data dictionary with public access, providing internationally standardized collections of (dictionary) properties following common methods as defined in the IEC 61360 series.

Referring from object descriptions to previously defined standardized semantic (dictionary) property descriptions is the key issue of an effective, reliable and secure electronic business. For the relations among (dictionary) properties, the associated data dictionary and the different specifications, see Figure 1.

Within this document two main concepts are differentiated:

- A. a specification concept for “real or abstract” objects;
- B. a data dictionary containing predefined information elements, each described by a rigorous set of attributes and unambiguously identified, so that its information elements can be used as a reference when preparing the concept A. Such a data dictionary is an optional tool to make the descriptions for concept A. It is of course a “real world” object but a quite different one and separated from the “real world” intended to be described.

For concept A, the term object property and set of object properties will be applied. For issues relating to concept B, the term (dictionary) property and set of (dictionary) properties will be applied to indicate that here a property or set of properties residing in a data dictionary is meant.

The purpose of this document is to describe how real world specifications or descriptions are to be prepared by making use of the data dictionary defined in IEC 61360.

The IEC 62569 series is a companion standard providing methods of expanding the use of existing standardized (dictionary) properties as provided in the IEC CDD (Common Data Dictionary) along the life cycle periods without the need to define additional (dictionary) properties or to redefine such supporting economic engineering and data management.

NOTE 1 As the referred data dictionary of IEC 61360 is quite different from a dictionary, the term “data dictionary” is consistently used within this document.

NOTE 2 Such a data dictionary is available as a data base application to be found under <http://std.iec.ch/iec61360> [retrieved 2016-05-03].

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