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

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Foreword

GB/T 38984 "General Specification for Attribute-Based Product Information" is divided into the following parts.

---Part 1.Principles and methods;

This part is Part 1 of GB/T 38984.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

The translation method used in this part is equivalent to the adoption of IEC 62569-1.2017 ``General Specification for Attribute-Based Product Information Part 1.Principles and method".

The Chinese documents that have a consistent correspondence with the international documents cited in this section are as follows.

---GB/T 17564.1-2011 Standard data element types and related classification modes of electrical items Part 1.Definitions

Rules and methods (IEC 61360-1.2009, IDT)

This part is proposed and managed by the National Standardization Technical Committee on Electrical Information Structure, Documentation and Graphic Symbols (SAC/TC27).

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Introduction

This part provides the general principles and methods required by all parts of GB/T 38984, which are used to manage the relevant products in the life cycle.

Information, such as the operation process of the product.

IEC 62569-2 will provide a generally applicable structure of general specifications for product information, which provide independent

General terms for equipment, components and devices. It is a guide for compiling technical specifications for various objects. Due to its versatility, no specific product is involved

Specific issues, these need to be obtained in the specific product description of the product standard.

IEC 62569-3 will provide a series of common object attributes, which are combined with the predefined structure in IEC 62569-2.

Use, for example, an XML-based basic electronic template, as a product committee in IEC and ISO, industry alliances or other industrial organizations

General information templates for specific products will be developed.

Figure 1 describes the application scenario of this part. The general specification of object information provides the main technical problems that object users need to solve

The overall solution. For example, identification, classification or accessibility information used for logical or physical interconnection with other products, and does not depend on

Any specific product category. It provides a set of object attributes, which can include quantitative, non-quantitative, or conditional types, as well as non-definite

A pre-defined value set or unit of a quantitative type.

The next step is where the information generally applies to the specific class under consideration. Can be applied to specific product categories (such as motors, transformers or resistors)

General information used. In this step, the previously available general information is aggregated by focusing on the additional information of the information. This result is only suitable for

Used for the category under consideration, and named as the blank detail specification of the specific product category. For each further class, repeat such steps. in

The object attributes contained in the blank detail specification of a specific product category can be quantitative or non-quantitative, or non-quantitative forecasts can be preset.

Define the value set, or the unit of the quantitative type.

These blank detailed specifications should be provided (e.g., as a web-based collection), allowing users to establish detailed specifications (instancing or filling numbers)

Data) in order to be automatically controlled and used by the industry in business processes.

The next step is to apply the blank detail specification in daily industrial practice, when the user fills the blank detail with the values required by his specific application.

When specifying the object properties in detail, other object properties can be added as needed, marked as not applicable or supplemented by qualifiers.

For example, the result can be used as a functional specification of a specific object in a system or factory, or for query.

According to this point of view, the prerequisite for effective implementation of the above specifications is the existence of an international data dictionary that is available and accessible to the public. according to

The common methods defined in the IEC 61360 series provide an internationally standardized (dictionary) attribute set.

The key to effective, reliable and secure e-commerce is that the object description refers to the previously defined standardized semantic (dictionary) attributes. (dictionary)

The relationship between attributes, associated data dictionary and different specifications is shown in Figure 1.

In this section, two main concepts are distinguished.

A. The normative concept of "real or abstract" objects;

B. A data dictionary containing predefined information elements, each information element is described by a strict attribute set and clearly identified, so that

The information elements can be used as a reference when preparing Concept A. The data dictionary is an optional tool for describing concept A. It is one

A "real world" object, but also a completely different object from the "real world" that I want to describe.

For concept A, the terms object attribute and object attribute set are used. For questions related to concept B, apply term (dictionary) attributes

And (dictionary) attribute set to indicate that this refers to the attribute or attribute set in the data dictionary.

The purpose of this section is to describe how to compile real-world specifications or descriptions by using the data dictionary defined in IEC 61360.

The GB/T 38984 series is a supporting standard that provides the extension of the existing standard in the IEC CDD (Common Data Dictionary) during the life cycle.

Standardize the use of (dictionary) attributes without the need to define additional (dictionary) attributes or redefine this supporting economic engineering and data

management.

Note 1.Since the reference data dictionary of IEC 61360 is completely different from the dictionary, the term "data dictionary" is always used in this section.

Note 2.This kind of data dictionary can be found in http.//std.iec.ch/iec61360[search.2016-05-03] as a database application.

* Developed by product committees, associations or other related organizations, such as cranes, capacitors, resistors, power transformers.

** Including data at the specified time in the life cycle of a specific product of power transformer; used to define business scenarios among industrial partners, such as sellers and buyers.

Figure 1 Application scenarios of general specifications for product information

Figure 2 shows a business scenario where detailed specifications of product information (based on common specifications) are applied between business partners.

Figure 2 Business scenario between partners

If an information specification is associated with an architecture in the form of an electronic