

<b>STN</b>	<b>Meranie a riadenie priemyselných procesov Štruktúra údajov a prvky v katalógoch procesných prístrojov Časť 100: Databázová norma pre zariadenie na meranie, riadenie a automatizáciu procesov</b>	<b>STN EN IEC 61987-100</b>  18 0109
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Industrial-process measurement and control - Data structures and elements in process equipment catalogues - Part 100: Data base standard for process measurement, control and automation equipment

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 05/25

Obsahuje: EN IEC 61987-100:2025, IEC 61987-100:2025

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EUROPEAN STANDARD

**EN IEC 61987-100**

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2025

ICS 25.040.40; 35.240.50

English Version

**Industrial-process measurement and control - Data structures  
and elements in process equipment catalogues - Part 100: Data  
base standard for process measurement, control and automation  
equipment  
(IEC 61987-100:2025)**

Mesure et commande dans les processus industriels -  
Éléments et structures de données dans les catalogues  
d'équipements de processus - Partie 100: Norme de base  
de données des équipements de mesure, de commande et  
d'automation pour les processus  
(IEC 61987-100:2025)

Industrielle Automatisierungs- und Leittechnik -  
Datenstrukturen und -elemente in Katalogen der  
Prozessleittechnik - Teil 100 Norm im Datenbank-Format  
für Geräte und deren Anlagen der Automatisierungs- und  
Leittechnik  
(IEC 61987-100:2025)

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

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

**EN IEC 61987-100:2025 (E)****European foreword**

The text of document 65E/1089/CDV, future edition 1 of IEC 61987-100, prepared by SC 65E "Devices and integration in enterprise systems" of IEC/TC 65 "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61987-100:2025.

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- |                    |      |                                   |
|--------------------|------|-----------------------------------|
| IEC 61360-2        | NOTE | Approved as EN 61360-2            |
| IEC 61987 (series) | NOTE | Approved as EN IEC 61987 (series) |
| IEC 62656-1        | NOTE | Approved as EN 62656-1            |



# IEC 61987-100

Edition 1.0 2025-01

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

**Industrial-process measurement and control – Data structures and elements in process equipment catalogues –  
Part 100: Data base standard for process measurement, control and automation equipment**

**Mesure et commande dans les processus industriels – Éléments et structures de données dans les catalogues d'équipements de processus –  
Partie 100: Norme de base de données des équipements de mesure, de commande et d'automatisation pour les processus**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**INDUSTRIAL-PROCESS MEASUREMENT AND CONTROL –  
DATA STRUCTURES AND ELEMENTS IN PROCESS  
EQUIPMENT CATALOGUES –****Part 100: Data base standard for process measurement,  
control and automation equipment**

## FOREWORD

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IEC 61987-100 has been prepared by subcommittee SC 65E: Devices and integration in enterprise systems, of IEC technical committee TC 65: Industrial-process measurement, control and automation. It is an International Standard.

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

Draft	Report on voting
65E/1089/CDV	65E/1145/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

A list of all parts in the IEC 61987, published under the general title *Industrial-process measurement and control – Data structures and elements in process equipment catalogues*, can be found on the IEC website.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

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- reconfirmed,
- withdrawn, or
- revised.

## INTRODUCTION

IEC common data dictionary (CDD – <https://cdd.iec.ch>) provides classifications and descriptions of products to enable unambitious electronic data exchange for e-commerce and business opportunities along the product life cycle.

Several IEC standards for classifying and describing products with classes and properties have been developed as database standards (DB standards) and published via IEC CDD, e.g. IEC 62683 and IEC 63213. Today, numerous parts of IEC 61987, which also classify and describe products with classes and properties, have already been created and published via IEC CDD.

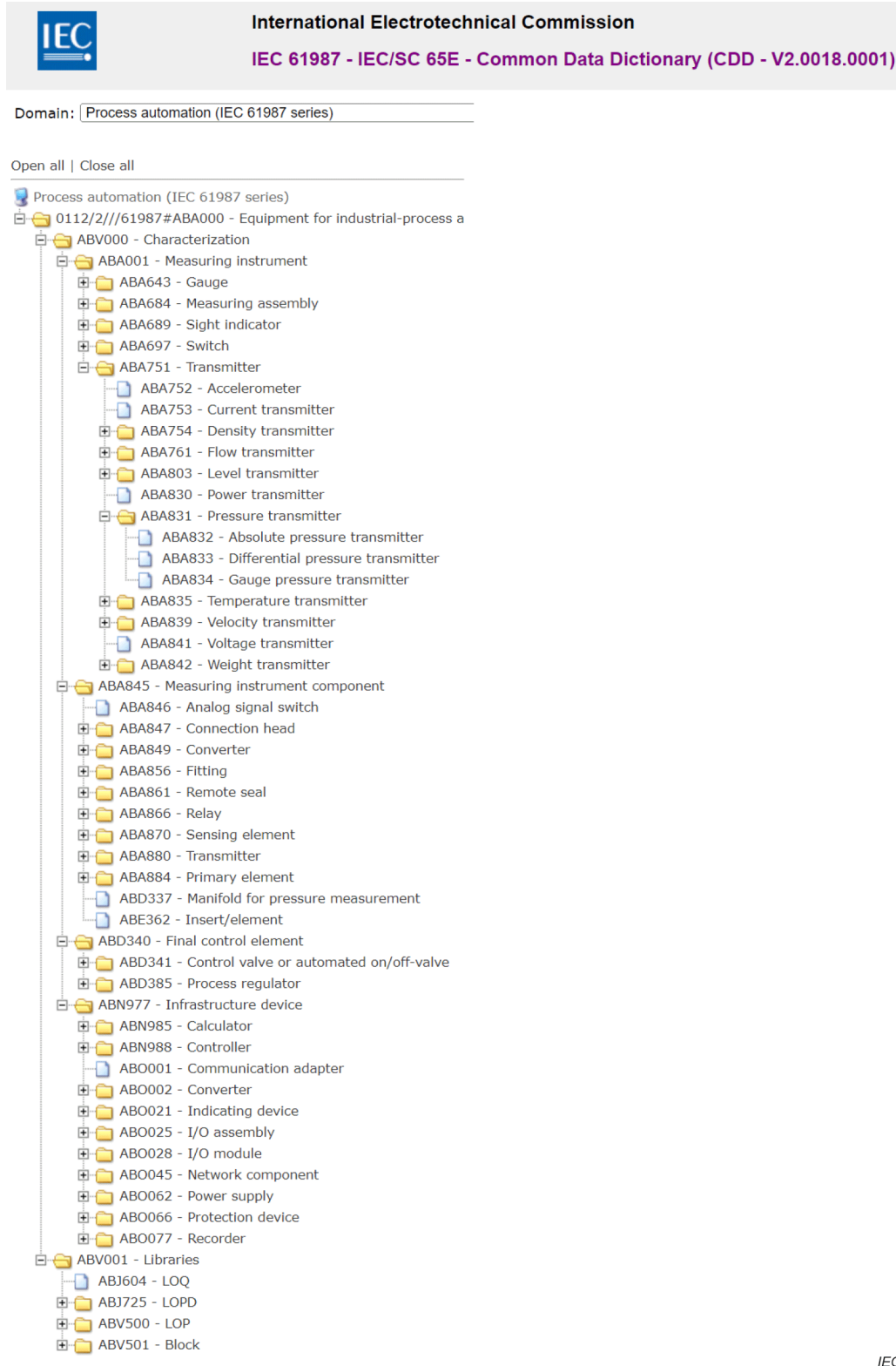
With IEC 61987 DB, IEC responds to the rising market needs to support machine-sensible communication for e-commerce, engineering, maintenance and Smart Manufacturing.

The IEC CDD (common data dictionary) is an IEC-hosted system that includes a common repository with data dictionaries for all ISO and IEC industrial/technical related-domains and that complies with the data model for data dictionaries defined in IEC 61360-2/ISO 13584-42 with an enhancement of its modelling capability adopted from IEC 62656-1.

NOTE 1 Data dictionaries can include data from electrotechnical and non-electrotechnical domains.

NOTE 2 Content published in data dictionaries will become an ISO or IEC standard.

By using the dictionary, applications can interact and share data in an unambiguous way with clear semantic meaning.



**Figure 1 – Screenshot of the current content of the IEC 61987 public domain**

The characterization, found in Figure 1, is an ontology of device classes that have already been developed and are being worked on in ongoing projects. All created property classes are summarized in the libraries. Further extensions of device classes will be found in the characterization tree.

**INDUSTRIAL-PROCESS MEASUREMENT AND CONTROL –  
DATA STRUCTURES AND ELEMENTS IN PROCESS  
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**Part 100: Data base standard for process measurement,  
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## **1 Scope**

This part of the IEC 61987 series provides the semantics of the data needed for the area of process automation, the Industrial Internet of Things (IIoT), and smart manufacturing. Classification and description of products with classes and properties for future objects within the scope of TC 65 (Industrial-process measurement, control and automation) will be developed as IEC 61987 DB standard and published via IEC CDD data dictionary IEC 61987.

## **2 Normative references**

There are no normative references in this document.

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**