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Electromechanical equipment guidance for small hydroelectric installations

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN IEC 61116:2025 sisaldab Euroopa standardi EN IEC 61116:2025 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 21.11.2025.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN IEC 61116:2025 consists of the English text of the European standard EN IEC 61116:2025.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 21.11.2025.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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ICS 27.140, 29.160.20

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EUROPEAN STANDARD

EN IEC 61116

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2025

ICS 29.160.20; 27.140

Supersedes EN 61116:1994

English Version

**Electromechanical equipment guidance for small hydroelectric
installations
(IEC 61116:2025)**

Recommandations pour l'équipement électromécanique
des petits aménagements hydroélectriques
(IEC 61116:2025)

Anleitung für die elektromechanische Ausrüstung von
kleinen Wasserkraftanlagen
(IEC 61116:2025)

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

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

European foreword

The text of document 4/510/CDV, future edition 2 of IEC 61116, prepared by TC 4 "Hydraulic turbines" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61116:2025.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2026-11-30 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2028-11-30 document have to be withdrawn

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IEC 60034-2-1:2024	NOTE Approved as EN IEC 60034-2-1:2024 (not modified)
IEC 60034-5:2020	NOTE Approved as EN IEC 60034-5:2020 (not modified)
IEC 60041:1991	NOTE Approved as EN 60041:1994
IEC 60076-1:2011	NOTE Approved as EN 60076-1:2011 (not modified)
IEC 60193:2019	NOTE Approved as EN IEC 60193:2019 (not modified)
IEC 60308:2024	NOTE Approved as EN IEC 60308:2024 (not modified)
IEC 60545:2021	NOTE Approved as EN IEC 60545:2021 (not modified)
IEC 60609-1	NOTE Approved as EN 60609-1
IEC 60609-2:1997	NOTE Approved as EN 60609-2:1999 (not modified)
IEC 60831-1:2014	NOTE Approved as EN 60831-1:2014 (not modified)
IEC 60871-1:2014	NOTE Approved as EN 60871-1:2014 (not modified)
IEC 61362:2024	NOTE Approved as EN IEC 61362:2024 (not modified)
IEC 61869-2:2012	NOTE Approved as EN 61869-2:2012 (not modified)
IEC 61869-3:2011	NOTE Approved as EN 61869-3:2011 (not modified)

INTERNATIONAL STANDARD

Electromechanical equipment guidance for small hydroelectric installations



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**Electromechanical equipment guidance for
small hydroelectric installations**

FOREWORD

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IEC 61116 has been prepared by IEC technical committee 4: Hydraulic turbines. It is an International Standard.

This second edition cancels and replaces the first edition published in 1992. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) harmonization of scope with IEC 62006;
- b) introduction of new technical aspects;
- c) overall editorial revision.

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

Draft	Report on voting
4/510/CDV	4/521A/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.

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. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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- reconfirmed,
- withdrawn, or
- revised.

1 Scope

This document is used as a guidance that applies to hydroelectric installations containing impulse or reaction turbines with unit power up to about 15 MW and reference diameter of about 3 m. These figures do not represent absolute limits.

This document deals only with the direct relations between the purchaser or the consulting engineer and the supplier. It does not deal with civil works, administrative conditions or commercial conditions.

This document is intended to be used by all concerned in the installation of electromechanical equipment for small hydroelectric plants.

This document, based essentially on practical information, aims specifically at supplying the purchaser of the equipment with information which will assist him with the following:

- preparation of the call for tenders;
- evaluation of the tenders;
- contact with the supplier during the design and manufacture of the equipment;
- quality control during the manufacture and shop-testing;
- follow-up of site erection;
- commissioning;
- acceptance tests;
- operation and maintenance.

The document comprises the following:

- a) general requirements for the electromechanical equipment of small hydroelectric installations;
- b) technical specifications for the electromechanical equipment, excluding its dimensioning and standardization;
- c) requirements for acceptance, operation and maintenance.

Bearing in mind the type of installation considered, the relevant documents are intended to be as simple as possible but to satisfactorily define the particular operation conditions. Over-specification is harmful to the economy of the project.

This document does not cover the initial stage of investigations, that is to say the preliminary study and feasibility study. Neither does it deal with the economic study concerning the supply and demand of energy.

To conclude, the document does not replace the applicable engineering studies for the selection, design, manufacture, installation and testing of the equipment. It is intended only to make the purchaser aware of the important points and data to be furnished, specified and kept in due consideration in the construction of small hydroelectric plants.

2 Normative references

There are no normative references in this document.