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## Vägledning för vattenkraftmaskiner – Montagemetoder och toleranser – Del 2: Vertikala generatorer

*Guidance for installation procedures and tolerances of hydroelectric machines –  
Part 2: Vertical generators*

Som svensk standard gäller europastandarden EN IEC 63132-2:2020. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 63132-2:2020.

### Nationellt förord

Europastandarden EN IEC 63132-2:2020

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 63132-2, First edition, 2020 - Guidance for installation procedures and tolerances of hydroelectric machines - Part 2: Vertical generators**

utarbetad inom International Electrotechnical Commission, IEC.

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Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

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ICS 27.140

English Version

## Guidance for installation procedures and tolerances of hydroelectric machines - Part 2: Vertical generators (IEC 63132-2:2020)

Lignes directrices des procédures et tolérances  
d'installation des machines hydroélectriques - Partie 2:  
Alternateurs verticaux  
(IEC 63132-2:2020)

Leitfaden für Installations-Prozeduren und -Toleranzen von  
hydroelektrischen Maschinen - Teil 2: Vertikale  
Generatoren  
(IEC 63132-2:2020)

This European Standard was approved by CENELEC on 2020-05-25. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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**

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## **European foreword**

The text of document 4/381/FDIS, future edition 1 of IEC 63132-2, prepared by IEC/TC 4 "Hydraulic turbines" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63132-2:2020.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-02-25
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-05-25

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

## **Endorsement notice**

The text of the International Standard IEC 63132-2:2020 was approved by CENELEC as a European Standard without any modification.

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

IEC 63132-1	NOTE	Harmonized as EN IEC 63132-1
IEC 63132-3	NOTE	Harmonized as EN IEC 63132-3
IEC 63132-4	NOTE	Harmonized as EN IEC 63132-4

## 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 Where 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60034-7 <sup>1</sup>	-	Rotating electrical machines - Part 7: Classification of types of construction, mounting arrangements and terminal box position (IM Code)	-	-

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<sup>1</sup> Third edition under preparation. Stage at the time of publication: IEC/ACDV 60034-7:2019.

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**GUIDANCE FOR INSTALLATION PROCEDURES  
AND TOLERANCES OF HYDROELECTRIC MACHINES –**
**Part 2: Vertical generators****FOREWORD**

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International Standard IEC 63132-2 has been prepared by IEC technical committee 4: Hydraulic turbines.

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

FDIS	Report on voting
4/381/FDIS	4/391/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.

A list of all parts in the IEC 63132 series, published under the general title *Guidance for installation procedures and tolerances of hydroelectric machines*, 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.

**IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.**



# GUIDANCE FOR INSTALLATION PROCEDURES AND TOLERANCES OF HYDROELECTRIC MACHINES –

## Part 2: Vertical generators

### 1 Scope

The purpose of this part of IEC 63132 is to establish, in a general way, suitable procedures and tolerances for installation of generator. This document presents a typical assembly. There are many possible ways to assemble a unit. The size of the machines, design of the machines, layout of the powerhouse or delivery schedule of the components are some of the elements that could result in additional steps, the elimination of some steps and/or assembly sequences.

It is understood that a publication of this type will be binding only if, and to the extent that, both contracting parties have agreed upon it.

This document excludes matters of purely commercial interest, except those inextricably bound up with the conduct of installation.

This document applies to vertical generators according to IEC 60034-7<sup>1</sup>.

The tolerances in this document have been established upon best practices and experience, although it is recognized that other standards specify different tolerances.

Brushless excitation system is not included in this document.

Wherever this document specifies that documents, drawings or information is supplied by a manufacturer (or by manufacturers), each individual manufacturer will furnish the appropriate information for their own supply only.

### 2 Normative references

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.

IEC 60034-7:-, *Rotating electrical machines - Part 7: Classification of types of constructions, mounting arrangements and terminal box position (IM Code)*<sup>2</sup>

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<sup>1</sup> Third edition under preparation. Stage at the time of publication: IEC/ACDV 60034-7:2019.

<sup>2</sup> Third edition under preparation. Stage at the time of publication: IEC/ACDV 60034-7:2019.