Guidance for installation procedures and tolerances of hydroelectric machines - Part 3: Vertical Francis turbines or pump-turbines

EESTI STANDARDIKESKUS
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NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 63132-3:2020 sisaldab Euroopa standardi EN IEC 63132-3:2020 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 63132-3:2020 consists of the English text of the European standard EN IEC 63132-3:2020.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 26.06.2020.	Date of Availability of the European standard is 26.06.2020.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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EUROPEAN STANDARD

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English Version

Guidance for installation procedures and tolerances of hydroelectric machines - Part 3: Vertical Francis turbines or pump-turbines (IEC 63132-3:2020)

Lignes directrices des procédures et tolérances d'installation des machines hydroélectriques - Partie 3: Turbines ou pompe-turbines Francis verticales (IEC 63132-3:2020)

Leitfaden für Installations-Prozeduren und -Toleranzen von hydroelektrischen Maschinen - Teil 3: Vertikale Francis- oder Pumpturbinen (IEC 63132-3:2020)

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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

Ref. No. EN IEC 63132-3:2020 E

European foreword

The text of document 4/382/FDIS, future edition 1 of IEC 63132-3, prepared by IEC/TC 4 "Hydraulic turbines" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63132-3:2020.

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) 2021-03-02
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-06-02

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The text of the International Standard IEC 63132-3:2020 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 63132-2	NOTE	Harmonized as EN IEC 63132-2

IEC 63132-3

Edition 1.0 2020-04

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NORME INTERNATIONALE

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IEC 63132-3:2020-04(en-fr)

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GUIDANCE FOR INSTALLATION PROCEDURES AND TOLERANCES OF HYDROELECTRIC MACHINES –

Part 3: Vertical Francis turbines or pump-turbines

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International Standard IEC 63132-3 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
4/382/FDIS	4/392/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.

GUIDANCE FOR INSTALLATION PROCEDURES AND TOLERANCES OF HYDROELECTRIC MACHINES –

Part 3: Vertical Francis turbines or pump-turbines

1 Scope

The purpose of this this part of IEC 63132 is to establish, in a general way, suitable procedures and tolerances for the installation of a vertical Francis turbine or pump-turbine. This document presents a typical assembly and whenever the word “turbine” is used in this document, it refers to a vertical Francis turbine or a pump-turbine. There are many possible ways to assemble a unit. The size of the machine, design of the machine, 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.

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

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

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

4 Installation flowchart

4.1 Turbine embedded parts

Figure 1 shows a generic installation flowchart for Francis turbine or pumped-turbine embedded parts.