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Bushings above 1 kV up to 52 kV and from 250 A to 3,15 kA for liquid filled transformers - Part 3: Requirements for bushing fixations

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 50180-3:2015 sisaldab Euroopa standardi EN 50180-3:2015 ingliskeelset teksti.	This Estonian standard EVS-EN 50180-3:2015 consists of the English text of the European standard EN 50180-3:2015.
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.
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EUROPEAN STANDARD

EN 50180-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2015

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English Version

**Bushings above 1 kV up to 52 kV and from 250 A to 3,15 kA for
liquid filled transformers - Part 3: Requirements for bushing
fixations**

Traversées de tensions supérieures à 1 kV jusqu'à 52 kV et
de 250 A à 3,15 kA pour transformateurs immergés dans un
liquide - Partie 3: Exigences relatives aux fixations de
traversée

Durchführungen über 1 kV bis 52 kV und von 250 A bis
3,15 kA für flüssigkeitsgefüllte Transformatoren - Teil 3:
Anforderungen an Einzelteile der Befestigung

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

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European foreword

This document (EN 50180-3:2015) has been prepared by CLC/TC 36A "Insulated Bushings".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2016-08-10
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2018-08-10

This document supplements EN 50180-1:2015 by design details for fastenings and their components with dimensions for bushings, which are of importance for utilities concerning compatibility.

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

EN 50180 "*Bushings above 1 kV up to 52 kV and from 250 A to 3,15 kA for liquid filled transformers*" consists of the following parts:

- *Part 1: General requirements for bushings;*
- *Part 2: Requirement for bushing components;*
- *Part 3: Requirements for bushing fixations.*

1 Scope

This European Standard should be considered in factual context with EN 50180-1 only. Constructional details for fastenings and their details are supplementing EN 50180-1. This information is of importance for utilities concerning compatibility.

For a better understanding of additional information some dimension from EN 50180-1 are repeated in this European Standard.

This European Standard was extended for fastenings of bushings for a highest voltage of 52 kV.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 50180-1:2015, *Bushings above 1 kV up to 52 kV and from 250 A to 3,15 kA for liquid filled transformers — Part 1: General requirements for bushings*

EN 22768-1, *General tolerances – Part 1: Tolerances for linear and angular dimensions without individual tolerance indications (ISO 2768-1)*

EN 22768-2, *General tolerances – Part 2: Geometrical tolerances for features without individual tolerance indications (ISO 2768-2)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 50180-1:2015 apply.

4 Dimensions and designations

Permissible deviations for tolerances without specified limits: EN 22768 (series).

4.1 Fixations for bushings

The fixation of the bushing is made with a flange ring and a defined number of clamping paws as illustrated in Figure 1.

Example: designation A

