

Irish Standard I.S. EN 50180-3:2015&A1:2017

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

© CENELEC 2017 No copying without NSAI permission except as permitted by copyright law.

#### I.S. EN 50180-3:2015&A1:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

EN 50180-3:2015/A1:2017

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

Published:

EN 50180-3:2015

2015-10-09

This document was published under the authority of the NSAI and comes into effect on:

ICS number:

2017-07-11

NOTE: If blank see CEN/CENELEC cover page

NSAI T +353 1 807 3800 Sales:

 1 Swift Square,
 F +353 1 807 3838
 T +353 1 857 6730

 Northwood, Santry
 E standards@nsai.ie
 F +353 1 857 6729

 Dublin 9
 W NSAI.ie
 W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

#### National Foreword

I.S. EN 50180-3:2015&A1:2017 is the adopted Irish version of the European Document EN 50180-3:2015, 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

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This is a free page sample. Access the full version online.

This page is intentionally left blank

This is a free page sample. Access the full version online. I.S. EN 50180-3:2015&A1:2017

**EUROPEAN STANDARD** 

EN 50180-3:2015/A1

NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

June 2017

ICS 29.080.20

#### **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

This amendment A1 modifies the European Standard EN 50180-3:2015; it was approved by CENELEC on 2017-05-10. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, 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: Avenue Marnix 17, B-1000 Brussels

### EN 50180-3:2015/A1:2017

Со	Contents	
Euro	opean foreword	3
1	Modification to Clause 1, Scope	4
2	Modifications to 4.1, Fixation for bushings	4
3	Modifications to 4.2 Details for fixations	Δ

EN 50180-3:2015/A1:2017

## **European foreword**

This document [EN 50180-3:2015/A1:2017] has been prepared by CLC/TC 36A "Insulated bushings".

The following dates are fixed:

•	latest date by which this document has to be	(dop)	2018-05-10
	implemented at national level by publication of an		
	identical national standard or by endorsement		

• latest date by which the national standards conflicting (dow) 2020-05-10 with this document have to be withdrawn

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.

This is a free page sample. Access the full version online. I.S. EN 50180-3:2015&A1:2017

**EUROPEAN STANDARD** 

EN 50180-3

NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

October 2015

ICS 29.080.20

#### **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

This European Standard was approved by CENELEC on 2015-08-10. 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, 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: Avenue Marnix 17, B-1000 Brussels

### Content

		page
Europ	pean foreword	3
1	Scope	4
2	Normative references	5
3	Terms and definitions	5
4	Dimensions and designations	5
4.1	Fixations for bushings	5
4.2	Details for fixations	7
Biblic	ography	11
Figui	re	
Figur	e 1 – Fastening with flange ring A and four clamping paws E	5
Figur	e 2 – Flange ring A for bushing 250 A	7
Figur	e 3 – Flange ring B for bushing 630 A, Flange ring C for bushing 1 250 A, Flange ring D for bushing 2 000 A and 3 150 A	8
Figur	re 4 – Clamping paw E for bushing 250 A and 630 A, 12 kV to 36 kV	9
Figur	e 5 – Clamping paw F for bushing 1 250 A to 3 150 A, 12 kV to 36 kV, and for bushing 250 A to 3 150 A, 52 kV	10
Table	9	
Table	e 1 – Dimensions for fixation components, 12 kV to 52 kV	6
Table	e 2 – Flange ring dimension	9
Table	e 3 – Material for flange rings	9

#### **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.



This is a free preview	<ul> <li>Purchase the entire</li> </ul>	e publication at the link below:
------------------------	---	----------------------------------

**Product Page** 

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation