

BSI Standards Publication

Household and similar electrical appliances — Safety

Part 2-51: Particular requirements for stationary circulation pumps for heating and service water installations

bsi.

AVA Documents
Document Sharing Hub

Full document details: BS EN IEC 60335-2-51:2023+A11:2023

National foreword

This British Standard is the UK implementation of EN IEC 60335-2-51:2023+A11:2023. It is derived from IEC 60335-2-51:2019. It supersedes BS EN 60335-2-51:2003+A2:2012, which will be withdrawn on 2 August 2026.

The start and finish of text introduced or altered by amendment A11 is indicated in the text by tags. Tags indicating changes to text carry the number of the CENELEC amendment. For example, text altered by CENELEC amendment A11 is indicated by ⟦A11⟩ ⟨A11⟩.

The UK participation in its preparation was entrusted to Technical Committee CPL/61/1, Motorised appliance group.

A list of organizations represented on this committee can be obtained on request to its committee manager.

Contractual and legal considerations

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

This publication has been prepared under a mandate given to the European Standards Organizations by the European Commission and the European Free Trade Association. It is intended to support requirements of the EU legislation detailed in the European Foreword. A European Annex, usually Annex ZA or ZZ, describes how this publication relates to that EU legislation.

For the Great Britain market (England, Scotland and Wales), if UK Government has designated this publication for conformity with UKCA marking (or similar) legislation, it may contain an additional National Annex. Where such a National Annex exists, it shows the correlation between this publication and the relevant UK legislation. If there is no National Annex of this kind, the relevant Annex ZA or ZZ in the body of the European text will indicate the relationship to UK regulation applicable in Great Britain. References to EU legislation may need to be read in accordance with the UK designation and the applicable UK law. Further information on designated standards can be found at www.bsigroup.com/standardsandregulation.

For the Northern Ireland market, UK law will continue to implement relevant EU law subject to periodic confirmation. Therefore Annex ZA/ZZ in the European text, and references to EU legislation, are still valid for this market.

AVA Documents
Document Sharing Hub

UK Government is responsible for legislation. For information on legislation and policies relating to that legislation, consult the relevant pages of www.gov.uk.

© The British Standards Institution 2023
Published by BSI Standards Limited 2023

ISBN 978 0 580 51388 6

ICS 23.080; 91.140.10

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 December 2023.

Amendments/corrigenda issued since publication

Date	Text affected

Documents
Document Sharing Hub

Full document details: BS EN IEC 60335-2-51:2023+A11:2023

Documents
Document Sharing Hub

Full document details: BS EN IEC 60335-2-51:2023+A11:2023

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60335-2-51:2023+A11

November 2023

ICS 23.080; 91.140.10

Supersedes EN 60335-2-51:2003; EN 60335-2-51:2003/A1:2008; EN 60335-2-51:2003/A2:2012

English Version

Household and similar electrical appliances - Safety - Part 2-51: Particular requirements for stationary circulation pumps for heating and service water installations (IEC 60335-2-51:2019)

Appareils électrodomestiques et analogues - Sécurité - Partie 2-51: Exigences particulières pour les pompes de circulation fixes pour installations de chauffage et de distribution d'eau
(IEC 60335-2-51:2019)

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-51: Besondere Anforderungen für ortsfeste Umwälzpumpen für Heizungs- und Brauchwasseranlagen
(IEC 60335-2-51:2019)

This European Standard was approved by CENELEC on 2023-08-02. 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, Türkiye 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

© 2023 CENELEC All rights of exploitation in any form and by any means reserved worldwide for CENELEC Members.

Ref. No. EN IEC 60335-2-51:2023 E

Documents
Document Sharing Hub

Full document details: BS EN IEC 60335-2-51:2023+A11:2023

European foreword

This document (EN IEC 60335-2-51:2023) consists of the text of IEC 60335-2-51:2019 prepared by IEC/TC 61 “Safety of household and similar electrical appliances”.

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)	2024–08–02
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2026–08–02

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.

This document is read in conjunction with EN IEC 60335-2-51:2023/A11:2023.

This document has been prepared under a standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Directives see informative Annexes ZZA, which is an integral part of EN IEC 60335-2-51:2023/A11:2023.

Any feedback and questions on this document should be directed to the users’ national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 60335-2-51:2019 was approved by CENELEC as a European Standard without any modification.

European foreword to amendment A11

This document (EN IEC 60335-2-51:2023/A11:2023) has been prepared by CLC/TC 61 “Safety of household and similar electrical appliances”.

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)	2024–08–02
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2026–08–02

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.

This document is read in conjunction with EN IEC 60335-2-51:2023.

The numbering system for European clauses, subclauses, notes, tables, figures and annexes that are additional to those in the IEC standard are prefixed with the letter “Z”.

This document has been prepared under a standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For relationship with EU Directive(s) / Regulation(s), see Annexes ZZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users’ national committee. A complete listing of these bodies can be found on the CENELEC website.

Documents
Document Sharing Hub
Full document details: BS EN IEC 60335-2-51:2023+A11:2023

CONTENTS

FOREWORD 3
INTRODUCTION 5
1 Scope 6
2 Normative references 6
3 Terms and definitions 7
4 General requirement 7
5 General conditions for the tests 7
6 Classification 7
7 Marking and instructions 8
8 Protection against access to live parts 8
9 Starting of motor-operated appliances 8
10 Power input and current 8
11 Heating 9
12 Void 9
13 Leakage current and electric strength at operating temperature 9
14 Transient overvoltages 9
15 Moisture resistance 9
16 Leakage current and electric strength 9
17 Overload protection of transformers and associated circuits 10
18 Endurance 10
19 Abnormal operation 10
20 Stability and mechanical hazards 10
21 Mechanical strength 10
22 Construction 10
23 Internal wiring 10
24 Components 11
25 Supply connection and external flexible cords 11
26 Terminals for external conductors 11
27 Provision for earthing 11
28 Screws and connections 11
29 Clearances, creepage distances and solid insulation 11
30 Resistance to heat and fire 11
31 Resistance to rusting 11
32 Radiation, toxicity and similar hazards 11
Annexes 12
Annex A (informative) Routine tests 12
Bibliography 13

Table 101 – Temperature classification of circulation pumps 7

Documents
Document Sharing Hub

Full document details: BS EN IEC 60335-2-51:2023+A11:2023