

BS EN 61770:2009
Incorporating corrigendum March 2011



BSI Standards Publication

Electric appliances connected to the water mains — Avoidance of backsiphonage and failure of hose-sets

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National foreword

This British Standard is the UK implementation of EN 61770:2009, incorporating corrigendum March 2011. It is identical to IEC 61770:2008. It supersedes BS EN 61770:1999+A2:2006, which will be withdrawn on 1 May 2012.

The UK participation in its preparation was entrusted by Technical Committee CPL/61, Safety of household and similar electrical appliances, to Subcommittee CPL/61/14, Home laundry and dishwashers.

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

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

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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 July 2009

Amendments/corrigenda issued since publication

Date	Text affected
30 June 2011	Incorporation of CENELEC corrigendum March 2011: Addition of Annex ZB

**Electric appliances connected to the water mains -
Avoidance of backsiphonage and failure of hose-sets
(IEC 61770:2008)**

Appareils électriques raccordés
au réseau d'alimentation en eau -
Exigences pour éviter le retour d'eau
par siphonnage et la défaillance
des ensembles de raccordement
(CEI 61770:2008)

Elektrische Geräte zum Anschluss
an die Wasserversorgungsanlage -
Vermeidung von Rücksaugung
und des Versagens von Schlauchsätzen
(IEC 61770:2008)

This European Standard was approved by CENELEC on 2009-04-22. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 61/3647/FDIS, future edition 2 of IEC 61770, prepared by IEC TC 61, Safety of household and similar electrical appliances, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61770 on 2009-04-22.

This European Standard supersedes EN 61770:1999 + A1:2004 + A2:2006 + corrigendum August 2007.

The principal changes in EN 61770:2009 as compared with EN 61770:1999 are as follows (minor changes are not listed):

- normative references are updated;
- some notes have been converted to normative text (3.10, 5.2, 6.3, 7.2 and Annex A);
- the type of petroleum spirit has been specified (9.3).

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2010-05-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2012-05-01

NOTE The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type*;
- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61770:2008 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60730-2-8 (mod)	- ¹⁾	Automatic electrical controls for household and similar use - Part 2-8: Particular requirements for electrically operated water valves, including mechanical requirements	EN 60730-2-8	2002 ²⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

Annex ZB (informative)

A-deviations

A-deviation: National deviation due to regulations, the alteration of which is for the time being outside the competence of the CEN/CENELEC member.

This European Standard falls under Directive 2006/95/EC.

A-deviations in an EFTA-country are **valid instead** of the relevant provisions of the European Standard in that country until they have been removed.

<u>Clause</u>	<u>Deviation</u>
1	United Kingdom (The England and Wales Water Supply (Water Fittings) Regulations 1999 and equivalent Water Byelaws in Scotland and Northern Ireland) The following additional requirement applies: Constructional materials of the appliance shall not adversely affect the quality of the water with which they may come into contact upstream of the backflow prevention device. <i>Compliance is checked by the tests specified in BS 6920.</i>
4.1	United Kingdom (The England and Wales Water Supply (Water Fittings) Regulations 1999 and equivalent Water Byelaws in Scotland and Northern Ireland) The following additional requirement applies: The backflow prevention device shall be in accordance with the Secretary of State Specification for the Requirements for the Prevention of Backflow.



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Edition 2.0 2008-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Electric appliances connected to the water mains – Avoidance of
backsiphonage and failure of hose-sets**

**Appareils électriques raccordés au réseau d'alimentation en eau – Exigences
pour éviter le retour d'eau par siphonnage et la défaillance des ensembles de
raccordement**

INTERNATIONAL
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INTERNATIONALE

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ELECTRIC APPLIANCES CONNECTED TO THE WATER MAINS – AVOIDANCE OF BACKSIPHONAGE AND FAILURE OF HOSE-SETS

1 Scope

This International Standard specifies requirements for appliances for household and similar purposes to prevent the backsiphonage of **non-potable water** into the water mains. It also specifies requirements for **hose-sets** used for connecting such appliances to the water mains that supply water at a pressure not exceeding 1 MPa.

NOTE 1 Examples of similar purposes are the installation of appliances in canteens, restaurants, launderettes and communal flats.

NOTE 2 This standard does not apply to

- appliances used for dry cleaning;
- appliances for medical purposes;
- appliances intended for industrial purposes;
- water heaters that are an integral part of the water supply system;
- water coolers that are an integral part of the water supply system.

NOTE 3 The connection of the appliance to the water mains may be temporary or permanent.

NOTE 4 When reference is made to the water mains, water supplied from a cistern or similar system is also included.

NOTE 5 Many countries have requirements concerning the prevention of contamination of potable water as a result of contact with unsuitable materials upstream of a **backflow prevention device**.

2 Normative references

The following referenced documents are indispensable for the application 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 60730-2-8, *Automatic electrical controls for household and similar use – Part 2: Particular requirements for electrically operated water valves, including mechanical requirements*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

potable water

water which is obtained directly from the potable water mains and remains in a closed system up to the **backflow prevention device**

3.2

non-potable water

water which leaves the closed system after having passed the **backflow prevention device**

3.3

backflow prevention device

means to prevent contamination of **potable water** by backflow of **non-potable water**

NOTE Examples are **airgaps**, **dynamic backflow preventers** and **pipe interrupters**.