## Veevõrguga ühendatud elektriseadmed. Tagasivoolu ja voolikute tõrke vältimine

iet onagt. Electric appliances connected to the water mains -Avoidance of backsiphonage and failure of hose-sets



## **EESTI STANDARDI EESSÕNA**

## **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 61770:2009 sisaldab Euroopa standardi EN 61770:2009 ingliskeelset teksti.

This Estonian standard EVS-EN 61770:2009 consists of the English text of the European standard EN 61770:2009.

Standard on kinnitatud Eesti Standardikeskuse 30.06.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.06.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 07.05.2009.

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ICS 91.140.60, 97.030

**Võtmesõnad:** connection to the water mains, electrical household appliances, protection against electric shock, safety requirements

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## **EUROPEAN STANDARD**

## EN 61770

## NORME EUROPÉENNE EUROPÄISCHE NORM

May 2009

ICS 91.140.60; 97.030

Supersedes EN 61770:1999 + A1:2004 + A2:2006

English version

# 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.

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

<sup>1)</sup> Undated reference.

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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.