

# CONSOLIDATED VERSION

# VERSION CONSOLIDÉE



**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**



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## VERSION REDLINE



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

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This consolidated version of IEC 61770 bears the edition number 2.1. It consists of the second edition (2008-07) [documents 61/3647/FDIS and 61/3687/RVD] and its amendment 1 (2015-10) [documents 61/4952/FDIS and 61/5004/RVD]. The technical content is identical to the base edition and its amendment.

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

International Standard IEC 61770 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

The principal changes in this edition as compared with the first edition 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).

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

NOTE 1 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.

The committee has decided that the contents of the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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- amended.

NOTE 2 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this standard be adopted for implementation nationally not earlier than 12 months and later than 36 months from the date of its publication.

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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, laundrettes 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**.