

# INTERNATIONAL STANDARD

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AMENDMENT 1  
2000-02

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## Amendment 1

### **Safety of household and similar electrical appliances –**

#### **Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers**

## *Amendement 1*

### *Sécurité des appareils électrodomestiques et analogues –*

#### *Partie 2-40: Règles particulières pour les pompes à chaleur électriques, les climatiseurs et les déshumidificateurs*

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Международная Электротехническая Комиссия

PRICE CODE

**D**

*For price, see current catalogue*

## FOREWORD

This amendment has been prepared by subcommittee 61D: Appliances for air-conditioning for household and similar purposes, of IEC technical committee 61: Safety of household and similar electrical appliances.

The text of this amendment is based on the following documents:

|             |                  |
|-------------|------------------|
| FDIS        | Report on voting |
| 61D/82/FDIS | 61D/85/RVD       |

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above tablea.

A bilingual version of this amendment may be issued at a later date.

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### 1 Scope

*Add to the third line of the first paragraph, after the words "... motor compressors", the words "and room fan coils".*

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### 2 Definitions

*Add, on page 13, the following new definitions:*

**2.120 Fan coil/air handling unit.** A factory-made assembly which provides one or more of the functions of forced circulation of air, heating, cooling, dehumidification and filtering of air, but which does not include the source of cooling or heating.

The device is normally designed for free intake of air from a room and delivery of air into the same room, but may be applied with duct work. This device may be designed for furred-in application or with an enclosure for application within the conditioned space.

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### 7 Marking and instructions

#### 7.1 Addition

Add, as the sixth dash, the following:

- The maximum operating pressure for the heat exchanger;

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## 11 Heating

**11.2** *Add, at the end of the second dash, the following:*

“... except for fan coils where the flow rates and liquid temperatures shall be the maximum specified in the manufacturer's instructions;”

Page 27

### Table 3 – Temperature limits

*Replace the fourth line by the following:*

External enclosure of appliances with or without supplementary heaters...85 (°C).

Page 33

## 15 Moisture resistance

**15.1** *Replace the last paragraph by the following new paragraph:*

The motor-compressor is not operated and detachable parts are removed during the tests of 15.2 and 15.3.

*Add the following new subclause:*

### 15.4 Spillage test

The appliance is installed according to the manufacturer's installation instructions but not operated.

Covers which provide access for manual operation of electrical controls are set in the open position, unless such covers are of the self-closing type.

A solution of 0,25 l of water containing 0,25 g of ordinary table salt is poured onto the unit in a manner which is most likely to cause entrance of water into or on electrical controls or uninsulated live parts.

After spillage is completed, the appliances shall withstand the tests of clause 16.

The spillage test is not applicable to units if the minimum linear dimension of a horizontal or near horizontal top surface of the cabinet is 75 mm or less.

A unit with a height of greater than 2 m need not be tested.

NOTE The intent is that a 75 mm diameter glass cannot be placed on the surface of the appliance and spill.

## 19 Abnormal operation

*Add, on page 49, the following new subclause:*

**19.15** All appliances provided with supplementary heaters and with free air discharge are subjected to the following test in each mode of operation.

Appliances are operated under the conditions specified in clause 11, with any controls which limit the temperature during the test of clause 11 short-circuited, and with the appliance covered.

The covering is made with felt strips each having a width of 100 mm and lined with a single layer of textile material.

The felt has a specified mass of  $(4 \pm 0,4)$  kg/m<sup>2</sup> and a thickness of 25 mm.

The textile material consists of a prewashed double-hemmed cotton sheet having a mass between 140 g/m<sup>2</sup> and 175 g/m<sup>2</sup> in the dry condition.

Thermocouples are attached to the back of small blackened disks of copper or brass, 15 mm in diameter and 1 mm thick.

The disks are spaced 50 mm apart and placed between the textile material and the felt on the vertical centre line of each strip.

The disks are supported in such a way as to prevent them from sinking into the felt.

The strips are applied with the textile material in contact with the appliance so that they cover the whole vertical dimension of the front, pass over the top and extend down the rear surface.

If the appliance is constructed to stand away from the wall or if it is for fixing to a wall so that the gap between the heater and the wall exceeds 30 mm and the horizontal components of the distance between any two fixing points or spacers or between such points and the end of the appliance exceed 100 mm, the rear surface of the appliance shall be completely covered.

Otherwise, the rear surface is covered over a distance approximately equal to one-fifth of the vertical dimension of the heater.

The strips are applied to each half of the appliance in turn and then to the complete appliance.

During the test the temperature rise shall not exceed 150 °C but an overshoot of 25 °C is permitted during the first hour.

NOTE Thermal protective devices are allowed to operate.

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