

INTERNATIONAL STANDARD

AMENDMENT 1

**Household and similar electrical appliances – Safety –
Part 2-40: Particular requirements for electrical heat pumps, air-conditioners
and dehumidifiers**

WITHDRAWN

<https://standards.iteh.ai/catalog/standards/iec/3072eeb3-61af-4529-92b9-28ebdec29d00/iec-60335-2-40-2013-amd1-2016>

Document Preview





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**Household and similar electrical appliances – Safety –
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and dehumidifiers**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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FOREWORD

This amendment has been prepared by IEC 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/333/FDIS	61D/334/RVD

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

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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

NOTE The attention of the National Committees is drawn to the fact that this amendment is intended to make the information available before a full revision of IEC 60335-2-40 will be launched.

IEC 60335-2-40:2013/AMD1:2016

<https://standards.iteh.ai/catalog/standards/iec/3072eeb3-61af-4529-92b9-28ebdec29d00/iec-60335-2-40-2013-amd1-2016>

1 Scope

Replace the second paragraph by the following:

This part of IEC 60335 deals with the safety of electric **heat pumps**, including **sanitary hot water heat pumps**, **air conditioners**, and **dehumidifiers** incorporating motor-compressors and **hydronic fan coil units**, their maximum **rated voltages** being not more than 250 V for single phase appliances and 600 V for all other appliances. **Partial units** are within the scope of this International Standard.

Replace the first sentence in the sixth paragraph by the following:

This standard does not take into account refrigerants other than those classified as A1, A2L, A2 or A3 under ISO 817 or ANSI/ASHRAE 34.

3 Terms and definitions

3.101 heat pump

Add the following Note 2:

Note 2 to entry: A **heat pump** can contain a combination of **condensing unit or condenser unit** and an **evaporating unit or evaporator unit** and can be equipped to operate in a reverse cycle mode.

3.103 air conditioner

Add the following Note 3:

Note 3 to entry: An **air conditioner** can contain a combination of **condensing unit or condenser unit** and an **evaporating unit or evaporator unit**.

Replace the term and definition by the following:

3.120 fan coil air handling unit

Replace the term and definition by the following:

3.120 hydronic fan coil unit

factory-made assembly which provides the function of forced circulation of air for heating and/or cooling, which may also include the function of **dehumidification** and/or filtering of air, but which does not include the source of cooling or heating

Note 1 to entry: **Hydronic fan coil units** can include provision for electric resistance heating. **Heat exchanger coils** are intended for hydronic heating and cooling only.

3.121 flammable refrigerant

Replace the definition by the following:

refrigerant listed under ISO 817 or ASHRAE 34 with a classification of A2L, A2 or A3

Add the following new definitions:

3.129**condenser**

heat exchanger in which refrigerant vapor is condensed by removal of heat

3.130**condensing unit**

factory-made assembly that includes one or more motor-compressors, **condenser** in cooling mode and motor-driven fan, blower or pump to circulate the heat transfer fluid through the **condenser** with associated operational controls in addition to the necessary wiring

Note 1 to entry: These units are intended for field connection to an **evaporator unit**. A **condensing unit** can also be equipped to operate in the reverse cycle mode. A **condensing unit** can include expansion device(s).

3.131**condenser unit**

factory-made assembly that includes one or more **condensers** in cooling mode and motor-driven fan, blower or pump to circulate the heat transfer fluid through the **condenser** with associated operational controls in addition to the necessary wiring

Note 1 to entry: These units are intended for field connection to an **evaporating unit**. A **condenser unit** can also be equipped to operate in the reverse cycle mode.

Note 2 to entry: A **condenser unit** does not include a motor compressor or expansion device.

3.132**evaporating unit**

factory-made assembly that includes one or more motor-compressors, **evaporator** in cooling mode, expansion device(s), and motor-driven fan, blower or pump to circulate fluid through the **evaporator** with associated operational controls in addition to the necessary wiring

Note 1 to entry: These units are intended for field connection to a **condenser unit**. An **evaporating unit** can also be equipped to operate in the reverse cycle mode and can include provision for electric resistance heating or similar sources of auxiliary heat.

3.133**evaporator unit**

factory-made assembly that includes one or more **evaporators** in cooling mode, and may include a motor-driven fan, blower or pump to circulate fluid through the **evaporator** with associated operational controls in addition to the necessary wiring

Note 1 to entry: These units are intended for field connection to a **condensing unit**. An **evaporator unit** can also be equipped to operate in the reverse cycle mode and can include provision for electric resistance heating or similar sources of auxiliary heat. An **evaporator unit** can include expansion device(s).

Note 2 to entry: An **evaporator unit** does not include a motor compressor.

3.134**partial unit**

condensing unit, evaporating unit, condenser unit, or evaporator unit which are part of a total assembly of a **heat pump, air-conditioner, or sanitary hot water heat pumps** where not all assemblies to create the complete **refrigeration system** are specified by the manufacturer

Note 1 to entry: **Partial units** are evaluated for safety as stand-alone.

3.135**installed height**

h_{inst}

height of the bottom of the appliance relative to the floor of the room after installation

Note 1 to entry: The installed height is given in metres.