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This full version of IEC 60335-2-81:2024 includes the content of the references made to IEC 60335-1:2020

**Household and similar electrical appliances – Safety –
Part 2-81: Particular requirements for foot warmers and heating mats**

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HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 1: General requirements

INTERPRETATION SHEET 1

This interpretation sheet has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

The text of this Interpretation Sheet is based on the following documents:

Draft	Report on voting
61/5999/DISH	61/6009/RVDISH

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

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INTRODUCTION

Edition 6 of IEC 60335-1:2020 defines and introduces requirements for a detachable power supply part of an appliance. In the document, 24.2 prohibits the use of a power supply in a flexible cord.

QUESTION:

Does Subclause 24.2 prohibit the use of a detachable power supply part?

ANSWER

No, a "detachable power supply part" is a defined term and is not captured by the term "power supply" as used in Subclause 24.2.

NOTE A detachable power supply part is captured by the defined term when the output of the power supply part is detachable from the class III construction part of the appliance at:

- the power supply part, or
- the class III construction part of the appliance.

However, the supply cord (if any) does not have to be detachable from the detachable power supply part.

CONTENTS

FOREWORD.....	6
INTRODUCTION to IEC 60335-1:2020.....	9
INTRODUCTION to IEC 60335-2-81:2024.....	11
1 Scope.....	12
2 Normative references.....	12
3 Terms and definitions.....	17
4 General requirement.....	29
5 General conditions for the tests.....	29
6 Classification.....	34
7 Marking and instructions.....	34
8 Protection against access to live parts.....	43
9 Starting of motor-operated appliances.....	45
10 Power input and current.....	45
11 Heating.....	47
12 Charging of metal-ion batteries.....	53
13 Leakage current and electric strength at operating temperature.....	55
14 Transient overvoltages.....	58
15 Moisture resistance.....	58
16 Leakage current and electric strength.....	61
17 Overload protection of transformers and associated circuits.....	63
18 Endurance.....	64
19 Abnormal operation.....	64
20 Stability and mechanical hazards.....	74
21 Mechanical strength.....	76
22 Construction.....	80
23 Internal wiring.....	93
24 Components.....	95
25 Supply connection and external flexible cords.....	100
26 Terminals for external conductors.....	108
27 Provision for earthing.....	111
28 Screws and connections.....	112
29 Clearances, creepage distances and solid insulation.....	115
30 Resistance to heat and fire.....	123
31 Resistance to rusting.....	129
32 Radiation, toxicity and similar hazards.....	129
Annex A (informative) Routine tests.....	148
Annex B (normative) Battery-operated appliances, separable batteries and detachable batteries for battery-operated appliances.....	150
Annex C (normative) Ageing test on motors.....	171
Annex D (normative) Thermal motor protectors.....	172
Annex E (normative) Needle-flame test.....	173
Annex F (normative) Capacitors.....	174

Annex G (normative) Safety isolating transformers	176
Annex H (normative) Switches	177
Annex I (normative) Motors having basic insulation that is inadequate for the rated voltage of the appliance	179
Annex J (normative) Coated printed circuit boards	181
Annex K (informative) Overvoltage categories	182
Annex L (informative) Guidance for the measurement of clearances and creepage distances	183
Annex M (informative) Pollution degree	186
Annex N (normative) Proof tracking test.....	187
Annex O (informative) Selection and sequence of the tests of Clause 30	188
Annex P (informative) Guidance for the application of this standard to appliances used in tropical climates	193
Annex Q (informative) Sequence of tests for the evaluation of electronic circuits	195
Annex R (normative) Software evaluation	198
Annex S (informative) Guidance for the application of this standard on measurement of power input and current based on the requirements of 10.1 and 10.2 concerning the representative period	212
Annex T (normative) UV-C radiation effect on non-metallic materials	213
Annex U (normative) Appliances intended for remote communication through public networks	216
Bibliography.....	220
Index of defined terms	223
Figure 1 – Circuit diagram for leakage current measurement at operating temperature for single-phase connection of class II appliances and for parts of class II construction	130
Figure 2 – Circuit diagram for leakage current measurement at operating temperature for single-phase connection of other than class II appliances or parts of class II construction	131
Figure 3 – Circuit diagram for leakage current measurement at operating temperature for three-phase with neutral class II appliances and for parts of class II construction	132
Figure 4 – Circuit diagram for leakage current measurement at operating temperature for three-phase with neutral appliances other than those of class II or parts of class II construction	133
Figure 5 – Small part	134
Figure 6 – Example of an electronic circuit with low-power points	134
Figure 7 – Test finger nail	135
Figure 8 – Flexing test apparatus.....	136
Figure 9 – Constructions of cord anchorages	137
Figure 10 – An example of parts of an earthing terminal	138
Figure 11 – Examples of clearances	139
Figure 12 – Example of the placement of the cylinder	140
Figure 13 – Small parts cylinder.....	141
Figure 14 – Example of a specified operating region of a lithium-ion cell during charging	142
Figure 101 – Probe for measuring surface temperatures	142
Figure 102 – Equipment for the flexing test for foot warmers.....	143

Figure 103 – Equipment for flexing heating elements and internal wiring	144
Figure 104 – Apparatus for pressure test on connectors	145
Figure 105 – Equipment for the spark ignition test	146
Figure 106 – Details of the mask.....	147
Figure B.1 – Examples of battery-operated appliance constructions and application of normative Annex B (1 of 2)	169
Figure B.2 – Examples of correct polarity connection marking representing three batteries	170
Figure I.1 – Simulation of faults	180
Figure L.1 – Sequence for the determination of clearances.....	183
Figure L.2 – Sequence for the determination of creepage distances	184
Figure L.3 – Measurement of clearances	185
Figure O.1 – Tests for resistance to heat	188
Figure O.2 – Selection and sequence of tests for resistance to fire in hand-held appliances	189
Figure O.3 – Selection and sequence of tests for resistance to fire in attended appliances	189
Figure O.4 – Selection and sequence of tests for resistance to fire in unattended appliances	190
Figure O.5 – Some applications of the term "within a distance of 3 mm"	192
Figure Q.1 – Flowchart outlining the sequence of tests for the evaluation of electronic circuits (1 of 2).....	196
Figure S.1 – Flowchart giving guidance on measurement of power input and current concerning the representative period	212
Table 1 – Power input deviation.....	45
Table 2 – Current deviation.....	46
Table 3 – Maximum normal temperature rises.....	50
Table 101 – Maximum temperature rises for specified external and other surfaces under normal operating conditions	53
Table 4 – Voltage for electric strength test.....	57
Table 5 – Characteristics of high-voltage sources	57
Table 6 – Impulse test voltage	58
Table 7 – Test voltages.....	63
Table 8 – Maximum winding temperature	67
Table 9 – Maximum abnormal temperature rise.....	72
Table 10 – Dimensions of cables and conduits.....	101
Table 11 – Minimum cross-sectional area of conductors	103
Table 12 – Pull force and torque	105
Table 13 – Nominal cross-sectional area of conductors	110
Table 14 – Torque for testing screws and nuts.....	114
Table 15 – Rated impulse voltage	116
Table 16 – Minimum clearances.....	116
Table 17 – Minimum creepage distances for basic insulation	120
Table 18 – Minimum creepage distances for functional insulation	121

Table 19 – Minimum thickness for accessible parts of reinforced insulation consisting of a single layer	123
Table A.1 – Test voltages	149
Table B.1 – Artificial source characteristics.....	152
Table B.2 – Total area of openings for metal-ion cells.....	160
Table B.3 – Volume of air injected at 2 070 kPa.....	160
Table C.1 – Test conditions	171
Table R.1 – General fault/error conditions.....	200
Table R.2 – Specific fault/error conditions.....	202
Table R.3 – Semi-formal methods	208
Table R.4 – Software architecture specification	208
Table R.5 – Module design specification	209
Table R.6 – Design and coding standards.....	210
Table R.7 – Software safety validation	210
Table T.1 – Minimum property retention limits after UV-C exposure	214
Table T.2 – Minimum electric strength for internal wiring after UV-C exposure.....	215
Table U.1 – Examples of acceptable measures against unauthorised access and transmission fault/error modes.....	218

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-81: Particular requirements for foot warmers and heating mats

FOREWORD

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This extended version (EXV) of the official IEC Standard provides the user with the full content of the Standard.

IEC 60335-2-81:2024 EXV includes the content of IEC 60335-2-81:2024, and the references made to IEC 60335-1:2020.

The specific content of IEC 60335-2-81:2024 is displayed on a blue background.

IEC 60335-2-81 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2015, Amendment 1:2017 and Amendment 2:2020. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) alignment with IEC 60335-1:2020;
- b) conversion of some notes to normative text (Clause 1, 13.2, 16.2, 21.103, 21.104, 21.105, 21.106);
- c) addition of test probe 19 for accessibility (8.1.1, 8.1.3, 20.2, B.22.3, B.22.4);
- d) addition of external surface temperatures (Clause 11);
- e) addition of the test of 21.107 for control units intended to be placed on a surface;
- f) alignment of 30.102 with IEC 60335-2-17.

The text of this International Standard is based on the following documents:

Draft	Report on voting
61/7272/FDIS	61/7298/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts of the IEC 60335 series, under the general title: *Household and similar electrical appliances – Safety*, can be found on the IEC website.

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments unless that edition precludes it; in that case, the latest edition that does not preclude it is used. It was established on the basis of the sixth edition (2020) of that standard.

NOTE 1 When "Part 1" is mentioned in this standard, it refers to IEC 60335-1.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Particular requirements for foot warmers and heating mats.

When a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text in Part 1 is to be adapted accordingly.

NOTE 2 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.

NOTE 3 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 following differences exist in the countries indicated below.

- 6.1: Class 0 appliances are allowed if their rated voltage does not exceed 150 V (Japan)

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

- reconfirmed,
- withdrawn, or
- revised.

NOTE 4 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations can 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 publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

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INTRODUCTION to IEC 60335-1:2020

It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

Guidance documents concerning the application of the safety requirements for appliances can be accessed via TC 61 supporting documents on the IEC website –

www.iec.ch/tc61/supportingdocuments

This information is given for the convenience of users of this International Standard and does not constitute a replacement for the normative text in this standard.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. It also covers abnormal situations that can be expected in practice and takes into account the way in which electromagnetic phenomena can affect the safe operation of appliances.

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules may differ.

If the functions of an appliance are covered by different parts 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

Throughout this publication, when "part 2" is mentioned, it refers to the relevant part of IEC 60335.

When a part 2 standard does not include additional requirements to cover hazards dealt with in Part 1, Part 1 applies.

NOTE 1 This means that the technical committees responsible for the part 2 standards have determined that it is not necessary to specify particular requirements for the appliance in question over and above the general requirements.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

NOTE 2 Horizontal publications, basic safety publications and group safety publications covering a hazard are not applicable since they have been taken into consideration when developing the general and particular requirements for the IEC 60335 series of standards.

Individual countries may wish to consider the application of this standard, as far as is reasonable, to appliances not mentioned in a part 2, and to appliances designed on new principles. In this case, consideration should be given to defining normal operation, specifying the classification of the appliance according to Clause 6 and specifying whether the appliance is operated attended or unattended. Consideration should also be given to particular categories of likely users and to related specific risks such as access to live parts, hot surfaces or hazardous moving parts.

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of this standard if, when examined and tested, it is found to have other features which impair the level of safety covered by these requirements.

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with this standard.

NOTE 3 Standards dealing with non-safety aspects of household appliances are:

- IEC standards published by TC 59 concerning methods of measuring performance;
- CISPR 11, CISPR 14-1 and relevant IEC 61000-3 series standards concerning electromagnetic emissions;
- CISPR 14-2 concerning electromagnetic immunity;
- IEC standards published by TC 111 concerning environmental matters.

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