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Household and similar electrical appliances – Safety –
Part 2-34: Particular requirements for motor-compressors

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-34: Particular requirements for motor-compressors

FOREWORD

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This commented version (CMV) of the official standard IEC 60335-2-34:2024 edition 7.0 allows the user to identify the changes made to the previous IEC 60335-2-34:2021 edition 6.0. Furthermore, comments from IEC SC 61C experts are provided to explain the reasons of the most relevant changes, or to clarify any part of the content.

A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text. Experts' comments are identified by a blue-background number. Mouse over a number to display a pop-up note with the comment.

This publication contains the CMV and the official standard. The full list of comments is available at the end of the CMV.

IEC 60335-2-34 has been prepared by subcommittee 61C: Safety of refrigeration appliances for household and commercial use, of IEC technical committee 61: Safety of household and similar electrical appliances. It is an International Standard.

This seventh edition cancels and replaces the sixth edition published in 2021. 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) in the scope added the rating up to 600 V (Clause 1);
- c) the definition of design pressure has been changed in maximum allowable pressure (3.1.101, 7.102, 22.7);
- d) introduction of maximum load conditions (MLC) as declared by the manufacturer (3.1.103, 5.6, 7.12, Annex AA);
- e) transcritical back pressure categories (R-744) have been introduced (3.1.102, Table AA.1, Table AA.2);
- f) new definition of coilette has been introduced (3.8.103);
- g) new definition of bypass valve has been introduced (3.8.104);
- h) the evaluation of motor-compressors using a motor-compressor control system has been clarified (6.101, 6.103, 6.104, 19.1);
- i) modification of electric strength test has been added (16.2);
- j) reference to the fatigue test has been deleted (Clause 18);
- k) compliance for pressure tests has been updated (22.7, Annex EE);
- l) reference for the motorette has been transferred from Annex BB to the new Annex FF;
- m) annex for insulation materials and parts has been updated and tie cord relaxation has been removed (Annex CC);
- n) new annex for motorette or coilette has been introduced (Annex FF).

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

Draft	Report on voting
61C/924/FDIS	61C/926/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.