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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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**Safety of household and similar electrical appliances - Part 17:
Particular requirements for motor-compressors
(English Translation)**

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Foreword

This document was drafted in accordance with the rules given in GB/T 1.1-2020

"Directives for standardization - Part 1.Rules for the structure and drafting of standardizing documents".

This document is Part 17 of GB/T 4706 "Safety of household and similar electrical appliances". The following parts of GB/T 4706 have been issued.

- Part 1.General requirements;
- Part 2.Particular requirements for electric irons;
- Part 121.Particular requirements for professional ice-cream makers.

This document replaces GB 4706.17-2010 "Safety of household and similar electrical appliances -- Particular requirements for motor-compressors". Compared with GB 4706.17-2010, in addition to structural adjustments and editorial changes, the main technical changes in this document are as follows.

- Change the applicable range of rated voltage of the appliance (see Chapter 1 of this Edition; Chapter 1 of Edition 2010). Add examples of types of devices equipped with motor-compressors (see Chapter 1 of this Edition);
- Add the term definitions and related test requirements for application categories (see 3.1.102, Annex AA of this Edition);
- Add the definition of two-stage motor-compressor (see 3.5.102 of this Edition);
- Add the term and definition of motorette and winding wire compatibility test (see 3.8.102, Annex BB of this Edition);
- Add speed requirements for variable speed motor-compressor tests (see 5.6 of this Edition);

- Add the requirement to declare the type of protection used by the motor (see 5.102,

6.104 of this Edition);

- Add test requirements for cascade systems containing two or more motor-compressors (see 5.103 of this Edition);
- Add the fire protection signs for flammable refrigerants and their use requirements (see 7.1 and 7.6 of this Edition);
- Add requirements for warning sign height (see 7.14 of this Edition);
- Add requirements to replace the heating test in Chapter 11 with Annex AA. Clarify the heating test requirements for motor-compressors that do not need to undergo the Annex AA test according to classification (see Chapter 11 of this Edition);
- Add optional fatigue test (see 18.101, Annex EE of this Edition);
- Add motor-compressor fault test with electronic circuit (see 19.11.2, AA.3 of this Edition);
- Add requirements for motor-compressors when using flammable refrigerants for related tests (see 19.13, 24.101 of this Edition);
- Add pressure test for subcritical refrigeration system and transcritical refrigeration system using R744 refrigerant (see 22.7 of this Edition);
- Add insulation material compatibility test (see 22.9, Annex BB and Annex CC of this Edition);
- Add the minimum insulation thickness requirements for easily accessible reinforced insulation at different rated voltages (see 29.1, 29.3.4 of this Edition);
- Add the requirements for electrical clearances for motor-compressors applicable to high altitudes (see 29.1 of this Edition);
- Change the operating overload test conditions (see AA.1, AA.2, AA.3 of this Edition; Annex AA of Edition 2010).

This document identically adopts IEC 60335-2-34:2021 "Household and similar electrical appliances - Safety - Part 2-34.Particular requirements for motor-compressors".

The following minimal editorial changes were made to this document.

- The name of the standard was changed to "Safety of household and similar electrical appliances - Part 17.Particular requirements for motor-compressors" to enhance the coordination of the standard system.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. The issuing authority shall not be held responsible for identifying any or all such patent rights.

This document was proposed by China Light Industry Federation.

This document shall be under the jurisdiction of National Technical Committee on The drafting organizations of this document. China Household Electrical Appliances Research Institute, Guangdong Meizhi Refrigeration Equipment Co., Ltd., Gasperella Compressor Co., Ltd., China Household Electrical Appliances Research Institute (Beijing) Testing and Certification Co., Ltd., Zhuhai Lingda Compressor Co., Ltd., Huangshi Dongbei Compressor Co., Ltd., Shanghai Haili Electric Co., Ltd., Xi'an Qing'an Refrigeration Equipment Co., Ltd., Shenyang AVIC Electromechanical Sanyo Refrigeration Equipment Co., Ltd., Daikin Electromechanical Equipment (Xi'an) Co., Ltd., Jiangsu Baixue Electric Co., Ltd., Bingshan Songyang Compressor (Dalian) Co., Ltd., Mitsubishi Electric (Guangzhou) Compressor Co., Ltd., and Weike Testing Technology Co., Ltd.

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Versions of standard substituted by this document are.

- It was first published in 1988 as GB 4706.17-1988.It was first revised in 1996.It was second revised in 2004.The third revision was in 2010;
- This is the fourth revision.