MAURITIAN STANDARD

MS ISO 5149-2:2014

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Refrigerating systems and heat pumps — Safety and environmental requirements

Part 2:

Design, construction, testing, marking and documentation

PREVIEW

ICS 27.080; 27.200

Mauritius Standards Bureau
Moka

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National foreword

This Mauritian Standard is identical with the International Standard **ISO 5149-2:2014**, *Refrigerating systems and heat pumps – Safety and environmental requirements – Part 2: Design construction, testing, marking and documentation*. It was adopted by the Mauritius Standards Bureau on the recommendation of the **Environmental Management, Tourism & Related Services Standards Committee** and approval of the **Standards Council** on 31 August 2018. It was notified in the Government Gazette on **29 September 2018***

For the purpose of this standard the following changes should be made:

(i) the words 'International Standard' should be replaced by 'Mauritian Standard';

(ii) the 'decimal comma' should be replaced by 'decimal point'.

***General Notice No. 1400 of 2018.**

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 86, *Refrigeration and air conditioning*, Subcommittee SC 1, *Safety and environmental requirements for refrigerating systems*.

ISO 5149-2, together with ISO 5149-1, ISO 5149-3, and ISO 5149-4, cancels and replaces ISO 5149:1993, which has been technically revised.

ISO 5149 consists of the following parts, under the general title *Refrigerating systems and heat pumps — Safety and environmental requirements*:

— *Part 1: Definitions, classification and selection criteria*

— *Part 2: Design, construction, testing, marking and documentation*

— *Part 3: Installation site*

— *Part 4: Operation, maintenance, repair and recovery*

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Refrigerating systems and heat pumps — Safety and environmental requirements —

Part 2:
Design, construction, testing, marking and documentation

1 Scope

This part of ISO 5149 is applicable to the design, construction, and installation of refrigerating systems, including piping, components, materials, and ancillary equipment directly associated with such systems, which are not covered in ISO 5149-1, ISO 5149-3, or ISO 5149-4. It also specifies requirements for testing, commissioning, marking, and documentation. Requirements for secondary heat-transfer circuits are excluded except for any safety devices associated with the refrigerating system.

This part of ISO 5149 is applicable to new refrigerating systems, extensions or modifications of already existing systems, and for used systems, being transferred to and operated on another site.

This part of ISO 5149 applies to:

a) refrigerating systems, stationary or mobile, of all sizes including heat pumps;

b) secondary cooling or heating systems;

c) the location of the refrigerating systems;

d) replaced parts and added components after the adoption of this part of ISO 5149, if they are not identical in function and in capacity.

This part of ISO 5149 does not cover "motor vehicle air conditioners". It does not apply to goods in storage, with respect to spoilage or contamination, but it also applies in the case of the conversion of a system for another refrigerant.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 817*Refrigerants — Designation system*

ISO 4126-1, *Safety devices for protection against excessive pressure — Part 1: Safety valves*

ISO 4126-2, *Safety devices for protection against excessive pressure — Part 2: Bursting disc safety devices*

ISO 5149-1, *Refrigerating systems and heat pumps — Safety and environmental requirements — Part 1: Definitions, classification and selection criteria*

ISO 5149-4, *Refrigerating systems and heat pumps — Safety and environmental requirements — Part 4: Operation, maintenance, repair and recovery*

ISO 6708, *Pipework components — Definition and selection of DN (nominal size)*

ISO 7010:2011, *Graphical symbols — Safety colours and safety signs — Registered safety signs*

ISO 12100, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

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