This is a preview of "ISO 5149-2:2014". Click here to purchase the full version from the ANSI store.

First edition 2014-04-15

# Refrigerating systems and heat pumps — Safety and environmental requirements —

### Part 2:

## Design, construction, testing, marking and documentation

Systèmes frigorifiques et pompes à chaleur — Exigences de sécurité et d'environnement —

Partie 2: Conception, construction, essais, marquage et documentation



#### ISO 5149-2:2014(E)

This is a preview of "ISO 5149-2:2014". Click here to purchase the full version from the ANSI store.



#### COPYRIGHT PROTECTED DOCUMENT

© ISO 2014

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

This is a preview of "ISO 5149-2:2014". Click here to purchase the full version from the ANSI store.

Con	tents		Page
Forev	word		iv
1	Scope	2	1
2	Norm	native references	1
3		s and definitions	
4	Requi 4.1 4.2 4.3 4.4 4.5	irements for components and piping General requirements Specific requirements for particular components Materials Testing Marking and documentation	2 4 4
5	Requi 5.1 5.2 5.3 5.4	irements for assemblies General Design and construction Testing Marking and documentation	8 9 28
Anne	<b>x A</b> (inf	ormative) Checklist for external visual inspection of the refrigerating system	36
Anne	x B (no	rmative) Additional requirements for refrigerating systems and heat pumps with onia (NH <sub>3</sub> )	37
Anne	<b>x C</b> (inf	ormative) <b>Determination of category for assemblies</b>	38
Anne	<b>x D</b> (no	rmative) Requirements for intrinsic safety test	44
Anne		ormative) Examples for arrangement of pressure relief devices in gerating systems	46
Anne	x F (no	rmative) Allowable equivalent length of discharge piping	51
Anne	<b>x G</b> (inf	ormative) Stress corrosion cracking	53
Biblio	ograph	y	56

This is a preview of "ISO 5149-2:2014". Click here to purchase the full version from the ANSI store.

#### 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