BS ISO 16358-3:2013



BSI Standards Publication

Air-cooled air conditioners and air-to-air heat pumps — Testing and calculating methods for seasonal performance factors

Part 3: Annual performance factor

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



BS ISO 16358-3:2013

This is a preview of "BS ISO 16358-3:2013". Click here to purchase the full version from the ANSI store.

This British Standard is the UK implementation of ISO 16358-3:2013.

The UK participation in its preparation was entrusted to Technical Committee RHE/17, Testing of air conditioning units.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2013. Published by BSI Standards Limited 2013

ISBN 978 0 580 72754 2

ICS 23.120; 27.080

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 April 2013.

Amendments issued since publication

Date Text affected

ISO

This is a preview of "BS ISO 16358-3:2013". Click here to purchase the full version from the ANSI store.

First edition 2013-04-15

Air-cooled air conditioners and airto-air heat pumps — Testing and calculating methods for seasonal performance factors —

Part 3: **Annual performance factor**

Climatiseurs à condenseur à air et pompes à chaleur air/air — Essais et méthodes de calcul des coefficients de performance saisonniers — Partie 3: Coefficient de performance annuel (COPA)



BS ISO 16358-3:2013 **ISO 16358-3:2013(E)**

This is a preview of "BS ISO 16358-3:2013". Click here to purchase the full version from the ANSI store.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2013

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

Con	tents	Page
Forev	vord	iv
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols	3
5	Calculation of annual performance factor (APF) and total annual performance factor (TAPF)	3
6	Test report	3
Anne	x A (informative) Calculation of total annual performance factor (TAPF)	4

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. 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. www.iso.org/patents

Any trade name used in this document is information given for the convenience of users of this document and does not constitute an endorsement. Equivalent products can be used if they can be shown to lead to the same results.

The committee responsible for this document is ISO/TC 86, *Refrigeration and air-conditioning*, Subcommittee SC 6, *Testing and rating of air-conditioners and heat pumps*.

The parts of ISO 16358 are given below:

- Part 1: Cooling seasonal performance factor
- Part 2: Heating seasonal performance factor
- Part 3: Annual performance factor

Air-cooled air conditioners and air-to-air heat pumps — Testing and calculating methods for seasonal performance factors —

Part 3:

Annual performance factor

1 Scope

- **1.1** This part of ISO 16358 specifies the testing and calculating methods for seasonal performance factor of equipment covered by ISO 5151, ISO 13253 and ISO 15042.
- **1.2** This part of ISO 16358 also specifies the seasonal performance test conditions and the corresponding test procedures for determining the seasonal performance factor of equipment, as specified in 1.1., under mandatory test conditions and is intended for use only in marking, comparison, and certification purposes.
- **1.3** This part of ISO 16358 does not apply to the testing and rating of:
- a) water-source heat pumps or water-cooled air conditioners;
- b) portable units having a condenser exhaust duct;
- c) individual assemblies not constituting a complete refrigeration system; or
- d) equipment using the absorption refrigeration cycle.

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 5151, Non-ducted air conditioners and heat pumps — Testing and rating for performance

ISO 13253, Ducted air-conditioners and air-to-air heat pumps — Testing and rating for performance

 $ISO\,15042, \textit{Multiple split-system air-conditioners and air-to-air heat pumps} - \textit{Testing and rating for performance}$

ISO 16358-1, Air-cooled air conditioners and air-to-air heat pumps — Testing and calculating methods for seasonal performance factors — Part 1: Cooling seasonal performance factor

ISO 16358-2, Air-cooled air conditioners and air-to-air heat pumps — Testing and calculating methods for seasonal performance factors — Part 2: Heating seasonal performance factor

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5151, ISO 13253, ISO 15042 and the following apply.