
**Earth-moving machinery — Operator
enclosure environment —**

**Part 4:
Heating, ventilating and air conditioning
(HVAC) test method and performance**

*Engins de terrassement — Environnement de l'enceinte de
l'opérateur —*

*Partie 4: Performances et méthode d'essai des systèmes de chauffage,
de ventilation et de climatisation (CVCA)*



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

This document is a preview generated by EVS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2009

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing 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

Contents

Page

Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions.....	1
4 Test equipment and instruments	2
5 Measurement locations	2
6 Heating, ventilating and air conditioning system.....	3
7 Air conditioning systems	4
8 Heating system	5
9 Ventilating system	6
10 Test report	6
Annex A (informative) Example of test report form for operator enclosure air conditioning, heating and ventilating systems	7
Bibliography	9

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 10263-4 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 2, *Safety, ergonomics and general requirements*.

This second edition cancels and replaces the first edition (ISO 10263-4:1994), which has been technically revised.

ISO 10263 consists of the following parts, under the general title *Earth-moving machinery — Operator enclosure environment*:

- *Part 1: Terms and definitions*
- *Part 2: Air filter element test method*
- *Part 3: Pressurization test method*
- *Part 4: Heating, ventilating and air conditioning (HVAC) test method and performance*
- *Part 5: Windscreen defrosting system test method*
- *Part 6: Determination of effect of solar heating*

Earth-moving machinery — Operator enclosure environment —

Part 4:

Heating, ventilating and air conditioning (HVAC) test method and performance

1 Scope

This part of ISO 10263 specifies a uniform test method for measuring the contribution to operator environmental temperature provided by a heating, ventilating and air conditioning system operating in a specific ambient environment. The method might not determine the complete climatic environment of the operator since this is also affected by heat load from sources other than those on the machine, for example solar heating. ISO 10263-6 is to be used in conjunction with this part of ISO 10263 to determine more accurately the complete heat loading on the operator enclosure. Minimum performance levels for the machine's operator enclosure heating, ventilating and air conditioning systems are established in this part of ISO 10263.

NOTE The HVAC is also referred to as the climate control system.

2 Normative references

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

ISO 5353:1995, *Earth-moving machinery, and tractors and machinery for agriculture and forestry — Seat index point*

ISO 9249:2007, *Earth-moving machinery — Engine test code — Net power*

ISO 10263-1, *Earth-moving machinery — Operator enclosure environment — Part 1: Terms and definitions*

ISO 10263-2, *Earth-moving machinery — Operator enclosure environment — Part 2: Air filter element test method*

ISO 10263-3, *Earth-moving machinery — Operator enclosure environment — Part 3: Pressurization test method*

ISO 10263-6, *Earth-moving machinery — Operator enclosure environment — Part 6: Determination of effect of solar heating*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 10263-1 and the following apply.