Third edition 2010-04-15

Road vehicles — Environmental conditions and testing for electrical and electronic equipment —

Part 4: Climatic loads

Véhicules routiers — Spécifications d'environnement et essais de l'équipement électrique et électronique —

Partie 4: Contraintes climatiques



Reference number ISO 16750-4:2010(E)

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.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2010

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

Forewordiv		
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Operating temperature ranges	2
5 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9 5.10	Tests and requirements Tests at constant temperature Temperature step test Temperature cycling tests Ice water shock test Salt spray tests Humid heat, cyclic test Damp heat, steady-state test Corrosion test with flow of mixed gas Solar radiation Dust test	3 4 15 13 15 15 16
6	Codes for climatic loads	18
7	Protection against dust and water	18
8	Documentation	18
Annex	A (informative) Usual tests and requirements for equipment depending on the mounting location	19
Bibliog	Bibliography	

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 16750-4 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 3, *Electrical and electronic equipment*.

This third edition cancels and replaces the second edition (ISO 16750-4:2006), which has been technically revised.

ISO 16750 consists of the following parts, under the general title *Road vehicles* — *Environmental conditions and testing for electrical and electronic equipment*:

- Part 1: General
- Part 2: Electrical loads
- Part 3: Mechanical loads
- Part 4: Climatic loads
- Part 5: Chemical loads