

CONSOLIDATED VERSION



**Household and similar electrical appliances – Safety –
Part 2-50: Particular requirements for commercial electric bains-marie**

This is a preview. [Click here to purchase the full publication.](#)



THIS PUBLICATION IS COPYRIGHT PROTECTED

Copyright © 2017 IEC, Geneva, Switzerland

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 IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigenda or an amendment might have been published.

IEC Catalogue - webstore.iec.ch/catalogue

The stand-alone application for consulting the entire bibliographical information on IEC International Standards, Technical Specifications, Technical Reports and other documents. Available for PC, Mac OS, Android Tablets and iPad.

IEC publications search - www.iec.ch/searchpub

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee,...). It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and also once a month by email.

Electropedia - www.electropedia.org

The world's leading online dictionary of electronic and electrical terms containing 20 000 terms and definitions in English and French, with equivalent terms in 16 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

IEC Glossary - std.iec.ch/glossary

65 000 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

IEC Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: csc@iec.ch.

CONSOLIDATED VERSION



**Household and similar electrical appliances – Safety –
Part 2-50: Particular requirements for commercial electric bains-marie**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 97.040.20

ISBN 978-2-8322-4483-8

Warning! Make sure that you obtained this publication from an authorized distributor.

REDLINE VERSION



**Household and similar electrical appliances – Safety –
Part 2-50: Particular requirements for commercial electric bains-marie**

This is a preview. [Click here to purchase the full publication.](#)

CONTENTS

FOREWORD.....	4
INTRODUCTION.....	7
1 Scope.....	8
2 Normative references	8
3 Terms and definitions	9
4 General requirement.....	10
5 General conditions for the tests	10
6 Classification.....	10
7 Marking and instructions.....	11
8 Protection against access to live parts.....	13
9 Starting of motor-operated appliances	13
10 Power input and current	14
11 Heating	14
12 Void.....	15
13 Leakage current and electric strength at operating temperature.....	15
14 Transient overvoltages	16
15 Moisture resistance	16
16 Leakage current and electric strength.....	18
17 Overload protection of transformers and associated circuits	19
18 Endurance.....	19
19 Abnormal operation	19
20 Stability and mechanical hazards	19
21 Mechanical strength	19
22 Construction	20
23 Internal wiring.....	21
24 Components	21
25 Supply connection and external flexible cords	22
26 Terminals for external conductors.....	22
27 Provision for earthing	22
28 Screws and connections.....	23
29 Clearances, creepage distances and solid insulation	23
30 Resistance to heat and fire.....	24
31 Resistance to rusting.....	24
32 Radiation, toxicity and similar hazards.....	24
Annexes	28
Annex N (normative) Proof tracking test.....	28
Annex P (informative) Guidance for the application of this standard to appliances used in tropical climates	29
Bibliography.....	30
Figure 101 – Splash apparatus	25

Figure 102 – Identification of surfaces for temperature measurement	26
Figure 103 – Probe for measuring surface temperatures	27
Table 101 – Maximum temperature rises for specified external accessible surfaces under normal operating conditions	15
Table 102 – Assembling torques for screwed connections providing earthing continuity	23