

# TECHNICAL REPORT

# IEC TR 61010-3-045

First edition  
2003-04

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## **Safety requirements for electrical equipment for measurement, control, and laboratory use –**

### **Part 3-045:**

### **Conformity verification report for IEC 61010-2-045:2000 –**

### **Particular requirements for washer disinfectors used in medical, pharmaceutical, veterinary and laboratory fields**

*Règles de sécurité pour appareils électriques  
de mesurage, de régulation et de laboratoire –*

### *Partie 3-045:*

*Rapport de vérification de la conformité  
de la CEI 61010-2-045:2000 –*

*Prescriptions particulières pour appareils de désinfection/  
lavage utilisés dans les domaines médical, pharmaceutique,  
vétérinaire et en laboratoire*



Reference number  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

# SAFETY REQUIREMENTS FOR ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL, AND LABORATORY USE –

## Part 3-045: Conformity verification report for IEC 61010-2-045:2000 – Particular requirements for washer disinfectors used in medical, pharmaceutical, veterinary and laboratory fields

## FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
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- 6) Attention is drawn to the possibility that some of the elements of this Technical Report may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

The main task of IEC technical committees is to prepare International Standards. However, a technical committee may propose the publication of a technical report when it has collected data of a different kind from that which is normally published as an International Standard, for example "state of the art".

Technical reports do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

IEC 61010-3-045, which is a technical report, has been prepared by IEC technical committee 66: Safety of measuring, control and laboratory equipment.

The text of this technical report is based on the following documents:

Committee draft	Report on voting
66/274/CDV	66/301/RVC

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This report is a Technical Report and is of a purely informative nature and is therefore by itself not to be regarded as an International Standard. It is for use by users to assist them with determining and recording verification of conformity of the equipment under test with the requirements of:

IEC 61010-2-045: 2000

and

IEC 61010-1: 1990 + amendment 1:1992 + amendment 2:1995

The protocol for completion of this report is contained in publication IEC 61010-3: 1997.

The IEC sells read-only PDF files as a general rule. In the present instance, and quite exceptionally, to enable the user to fill in the forms, a revisable file is included in a pocket affixed to the back cover of this publication.

This file can be downloaded from the Web as a PDF file. There is, however, at the end of the document, a revisable file containing the forms. Please use the zip/unzip function.

The committee has decided that the contents of this publication will remain unchanged until 2005. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

IEC TR 61010-3-045:2003

<https://standards.iteh.ai/catalog/standards/iec/0288b605-aa3e-472f-b189-3b091a3bc566/iec-tr-61010-3-045-2003>

<p align="center"><b>Conformity Verification Report</b>  <b>IEC 61010-2-045</b>  <b>Safety requirements for electrical equipment</b>  <b>for measurement, control, and laboratory use</b>  <b>Particular requirements for washer disinfectors used in</b>  <b>medical, pharmaceutical, veterinary and laboratory fields</b></p>	
Report reference No.....:	
Compiled by (+ signature).....:	
Approved by (+ signature).....:	
Date of issue.....:	
Testing organization.....:	
Address.....:	
Testing location .....	
Applicant.....:	
Address.....:	
Standard.....:	IEC 61010-2-045: 2000 and IEC 61010-1:1990 + A 1:1992 + A 2:1995
Copyright blank test report...: This report has been prepared by IEC TC 66, which retains responsibility for any changes or corrections required.	
Test procedure.....:	
Procedure deviation.....:	
Non-standard test method.....:	

Type of item tested.....:	Measurement	Control	Laboratory
Trademark.....:			
Model/type reference.....:			
Manufacturer.....:			
Rating.....:			
Copy of rating plate:			

iTeh Standards  
(<https://standards.itih.ai>)  
Document Preview

IEC TR 61010-3-045:2003

<https://standards.itih.ai/catalog/standards/iec/028eb605-aa3e-472f-b189-3b091a3bc566/iec-tr61010-3-045-2003>



Description of equipment function.....:				
INSTALLATION/OVERVOLTAGE CATEGORY:				
POLLUTION DEGREE:				
Environmental rating:	Standard	Other (specify):		
Equipment mobility:	Portable Built in	Hand-held Bench mounted	Floorstanding Other (specify):	Fixed
Connection to mains supply:	Permanent	Detachable	Non detachable	None
Operating conditions:	Continuous	Short-time	Intermittent	
Overall size of the equipment (Length x Width x Height):				
Mass of the equipment (kg):				
Marked degree of protection to IEC 60529: IP ____				
Accessories and detachable parts included in the evaluation:				
Options:				
NOTE – "(see form A.X)" refers to a form appended to the report.				

### Table 1 – Documents attached to this report

[illegible]

### Table 2 – Test equipment list

[illegible]

**Table 3 – List of components relied on for safety**

Unique component reference or location (including drawing reference if required)	Application/Function	Manufacturer and part number (note 1)	RATING (note 2)	Licence number, file number or other documentary evidence of acceptance
NOTE 1 List all manufacturers concerned.				
NOTE 2 Electrical, mechanical, flammability, etc.				

Clause	Requirement - Test	Result Comments	Verdict
<b>5</b>	<b>Marking and documentation</b>		
5.1.1	<p>General</p> <p>Required equipment markings are:</p> <p>a) visible:</p> <ul style="list-style-type: none"> <li>– from the exterior</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>– after removing a cover</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>– opening a door</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>– after removal from a rack or panel</li> </ul> <p>b) not put on parts which can be removed by an OPERATOR</p> <p>c) Letter symbols (IEC 60027) used</p> <p>d) Graphic symbols (IEC 61010-1:table 1) used</p>		
5.1.2	<p>Identification</p> <p>Equipment is identified by:</p> <ul style="list-style-type: none"> <li>– manufacturer's name or registered trade mark</li> <li>– model number, name or other means</li> <li>– PRESSURE VESSEL markings</li> </ul>		
5.1.3	<p>Mains supply</p> <p>Equipment is marked as follows:</p> <p>a) nature of supply:</p> <ul style="list-style-type: none"> <li>– a.c. RATED mains frequency or range of frequencies</li> <li>– d.c. with symbol 1</li> </ul> <p>b) RATED supply voltage(s) or range</p> <p>c) maximum RATED power (w or VA) or input current</p> <p>If more than one voltage range:</p> <ul style="list-style-type: none"> <li>– separate values marked</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>– values differ by less than 20 %</li> </ul> <p>d) OPERATOR –set for different RATED supply voltages:</p> <ul style="list-style-type: none"> <li>– indicates the equipment set voltage</li> <li>– PORTABLE EQUIPMENT indication is visible from the exterior</li> <li>– changing the setting changes the indication</li> </ul> <p>e) Accessory mains socket-outlets accepting standard mains plugs are marked:</p> <ul style="list-style-type: none"> <li>– with the voltage if it is different from the mains supply voltage</li> <li>– for use only with specific equipment</li> </ul>	(see Form A.3)	
F			

Clause	Requirement - Test	Result Comments	Verdict
F	If not marked for specific equipment it is marked with: – the maximum RATED current or power, and maximum permitted leakage current or – symbol 14 with full details in the documentation	(see Form A.3)	
	The measured value not more than 110 %		
5.1.4	Fuses OPERATOR replaceable fuse marking (see also 5.4.5)		
5.1.5	Measuring circuit TERMINALS RATED maximum working voltage or current marked Unless clear indication that below limits: – maximum RATED voltage to earth is marked or – for specific connection only, and means for identifying provided – is adjacent to TERMINALS or – if insufficient space: – on the RATING plate or scale plate or – if the TERMINAL is marked with symbol 14 INSTALLATION CATEGORY marked TERMINALS permanently connected and not ACCESSIBLE		
5.1.6	TERMINALS and operating devices Where necessary for safety, indication of purpose of TERMINALS, connectors, controls and indicators Mains supply TERMINALS identified Power supply switch on or off position marked if used as disconnecting device TERMINAL marking: a) FUNCTIONAL EARTH TERMINALS b) PROTECTIVE CONDUCTOR TERMINALS: – symbol 6 is placed close to or on the TERMINAL or – part of appliance inlet c) TERMINALS of measuring and control circuits d) TERMINALS supplied from the interior e) ACCESSIBLE FUNCTIONAL EARTH TERMINALS In normal use, change of setting a control could not cause a hazard, an indicating device is provided		