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**High-voltage test techniques for low-voltage equipment - Part 2: Test equipment**

## EESTI STANDARDI EESSÖNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 61180-2:2002 sisaldb Euroopa standardi EN 61180-2:1994 ingliskeelset teksti.	This Estonian standard EVS-EN 61180-2:2002 consists of the English text of the European standard EN 61180-2:1994.
Käesolev dokument on jõustatud 18.12.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 18.12.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.
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ICS 29.020

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English version

High-voltage test techniques for low-voltage equipment  
Part 2 : Test equipment

(IEC 1180-2 : 1994)

Techniques des essais à haute tension  
pour matériel à basse tension  
Partie 2: Matériel d'essai  
(CEI 1180-2 : 1994)

Hochspannungs-Prüftechnik für  
Niederspannungsgeräte  
Teil 2: Prüfgeräte  
(IEC 1180-2 : 1994)

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## **Foreword**

The text of document 42(CO)53, as prepared by IEC Technical Committee 42: High-voltage testing techniques, was submitted to the IEC-CENELEC parallel vote in December 1993.

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The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1995-07-01
- latest date of withdrawal of conflicting national standards (dow) 1995-07-01

Annexes designated 'normative' are part of the body of the standard. Annexes designated 'informative' are given only for information. In this standard, annex A is informative and annex ZA is normative.

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## HIGH-VOLTAGE TEST TECHNIQUES FOR LOW-VOLTAGE EQUIPMENT –

### Part 2: Test equipment

#### 1 Scope

This part of IEC 1180 is applicable to the test equipment used for dielectric tests on low-voltage equipment. It covers tests with direct, alternating or impulse voltage, impulse current, and tests with a combination of impulse voltage and impulse current. Verification procedures necessary for ensuring that the dielectric tests comply with the voltage, or current, requirements stated in part 1 of this standard in shape and magnitude are stated.

The test equipment comprises a voltage and/or current generator and a measuring system. This standard covers test equipment in which the measuring system is protected against external interference and coupling by appropriate screening, for example a continuous conducting shield. Therefore, simple comparison tests are sufficient to ensure valid results.

Test equipment having measuring systems composed of non-screened components and/or connected by long leads is not covered in this standard. In this case guidance can be obtained from IEC 60-2 keeping in mind the less stringent requirements of this standard.

#### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 1180. At the time of publication of this standard, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 1180 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 68-1: 1988, *Environmental testing – Part 1: General and guidance*

IEC 790: 1984, *Oscilloscopes and peak voltmeters for impulse test*

IEC 1083-1: 1991, *Digital recorders for measurements in high-voltage impulse tests – Part 1: Requirements for digital recorders*

IEC 1180-1: 1992, *High-voltage test techniques for low-voltage equipment – Part 1: Definitions, test and procedure requirements*

NOTE – The requirements of IEC 790 and IEC 1083-1 may be reduced because the uncertainty limits of this part of 1180 are less stringent than those in IEC 60-1, for example,  $\pm 5\%$  for peak value ( $\pm 3\%$  in IEC 60-1).