Välised vahelduvvoolu-alalisvoolu- ja vahelduvvoolu-vahelduvvoolu-toitemuundurid. Tühijooksuvõimsuse ja aktiivtalitlusviiside keskmise kasuteguri määramine

External a.c. - d.c. and a.c. - a.c. power supplies – Determination of no-load power and average efficiency of active modes

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 50563:2011 sisaldab Euroopa standardi EN 50563:2011 ingliskeelset teksti.	This Estonian standard EVS-EN 50563:2011 consists of the English text of the European standard EN 50563:2011.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 28.10.2011.	Date of Availability of the European standard is 28.10.2011.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 29.200

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50563

October 2011

ICS 29.200

English version

External a.c. - d.c. and a.c. - a.c. power supplies – Determination of no-load power and average efficiency of active modes

Sources d'alimentation externes en courant alternatif et en courant continu - Détermination de la consommation hors charge et du rendement moyen en mode actif

Externe AC/DC- und AC/AC-Netzteile - Bestimmung von Nulllast und durchschnittlicher Effizienz im Betrieb

This European Standard was approved by CENELEC on 2011-10-10. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 50563:2011 E

Contents

Figure

Tables

Foreword

This document (EN 50563:2011) has been prepared by the Technical Committee CENELEC TC 108X, Safety of electronic equipment within the fields of audio/video, information technology and communication technology and the Technical Committee CENELEC TC 59X, Performance of household and similar electrical appliances.

The following dates are fixed:

• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2012-10-10
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2014-10-10

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

———————

Introduction

This European Standard was written in response to an EC mandate requesting the creation of a harmonised standard providing a reliable, accurate and reproducible method of measuring the no-load power consumption and determining the average efficiency of active modes for external power supplies, which takes into account the generally recognised state of the art measurement methods.

This standard makes extensive reference to EN 50564 *Electrical and electronic household and office equipment - Measurement of low power consumption,* which was also prepared under an EC mandate to support the ecodesign Directive. Other provisions are based on the test method published by the EPA and the Australian/NZ Standard AS/NZS 4665.1.

The methods defined in this standard are intended to cover no-load power consumption and average efficiency of active modes for a.c. - a.c. and a.c. – d.c. external power supplies.

The aim is to ensure this European Standard is compatible with the objectives of EU legislation for ecodesign. This standard is applicable to a wider range of products than EC Regulation No 278/2009.

1 Scope

This European Standard specifies methods of measurement of electrical power consumption, and the reporting of results, for external power supplies. This standard is applicable to external power supplies with a rated input voltage within the range 100 V a.c. to 250 V a.c. having a single output with a rated output power not exceeding 250 W and a rated output voltage not exceeding 230 V a.c. or 325 V d.c. The output voltage may be either at a fixed voltage, or at a voltage which is user selectable, or at a voltage that is automatically selectable by the external power supply so as to be compatible with one or more product-loads.

NOTE 1 This document has been written in particular to support EC Regulation No 278/2009 for the measurement of no-load condition electric power and average efficiency of active modes for external power supplies.

NOTE 2 This standard does not specify safety requirements for products nor safety precautions to be taken by those performing measurements. It does not specify minimum performance requirements, nor does it set maximum limits on power or energy consumption.

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.

EN 50564:2011, *Electrical and electronic household and office equipment – Measurement of low power consumption (IEC 62301:2011, modified)*

IEC 60050-131:2002, *International Electrotechnical Vocabulary – Part 131: Circuit theory*

IEC 60050-300:2001, *International Electrotechnical Vocabulary – Electrical and electronic measurements and measuring instruments – Part 311: General terms relating to measurements – Part 312: General terms relating to electrical measurements – Part 313: Types of electrical measuring instruments – Part 314: Specific terms according to the type of instrument*