



NSAI
Standards

Irish Standard
I.S. EN 50597:2015

Energy Consumption of Vending Machines

I.S. EN 50597:2015

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

EN 50597:2015

Published:

2015-10-16

This document was published under the authority of the NSAI and comes into effect on:

2015-11-03

ICS number:

NOTE: If blank see CEN/CENELEC cover page

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

I.S. EN 50597:2015 is the adopted Irish version of the European Document EN 50597:2015, Energy Consumption of Vending Machines

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This page is intentionally left blank

EUROPEAN STANDARD

EN 50597

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2015

ICS 27.010; 55.230; 97.040.30

English Version

Energy Consumption of Vending Machines

Consommation d'énergie des distributeurs automatiques

Energieverbrauch von Verkaufsautomaten

This European Standard was approved by CENELEC on 2015-09-07. 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 50597:2015 (E)

Contents	Page
European foreword.....	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 General requirements.....	9
4.1 Applicability.....	9
4.2 Test room.....	9
4.3 Instruments, measuring equipment and measuring accuracy.....	10
4.4 Power supply	10
5 Conditions for the tests.....	10
5.1 General	10
5.2 Equipment location for test	10
5.3 Energy consumption and recording	11
5.4 Product Temperature sensors	11
5.5 Product loading for test.....	11
5.6 Product storage temperatures	11
5.7 Stabilization	12
6 Energy consumption measurement	12
6.1 General	12
6.2 Ready mode, energy saving mode and recovery period measurements.....	13
6.2.1 General	13
6.2.2 Test procedure.....	13
6.2.3 Measurement.....	14
6.3 Reloading and pull down test	14
6.3.1 Test procedure.....	14

6.3.2	Loading for reloading and pull-down test.....	14
6.3.3	Measurement for reloading and pull-down test	15
6.4	Measurement of the net volume	15
7	Calculations — Energy consumption	16
Annex A (informative)	Test timeline.....	17
Annex B (informative)	List of measurements to be reported	18
Bibliography	24

EN 50597:2015 (E)

European foreword

This document (EN 50597:2015) has been prepared by CLC/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) 2016-09-07
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2018-09-07

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

Vending machines are included in the European Commission's eco-design study on ENER Lot 12. It is foreseen that an Ecodesign Regulation implementing Directive 2009/125/EC on the eco-design of energy-related products will be adopted in the future, and a corresponding standardization request will be issued to CEN and CENELEC accordingly. The development of the present European Standard was deemed necessary in a view to anticipate the above-mentioned developments.

EN 50597:2015 (E)

1 Scope

This European Standard defines methods for the measurement of energy consumption of vending machines, whether or not fitted with refrigerating appliances.

The European Standard applies (but is not limited) to the following categories of machine types:

Table 1 — Vending machine categories

CATEGORY	MACHINE TYPE
1	Refrigerated closed fronted can and bottle machines where the products are held in stacks
2	Refrigerated glass fronted can and bottle, confectionery & snack machines
3	Refrigerated glass fronted machines entirely for perishable foodstuffs
4	Refrigerated multi-temperature glass fronted machines
5	Confectionery and snack machines that are not refrigerated

For verification purposes all the tests specified need to be applied to a single unit. The tests may also be made individually for the study of a particular characteristic.

This European Standard does not deal with any characteristics of machine design other than energy consumption.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 50564, *Electrical and electronic household and office equipment — Measurement of low power consumption*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1 Relating specifically to the vending process:

3.1.1

automatic defrosting

defrosting where no action is necessary by the user to initiate the removal of frost accumulation and to restore normal operation

Note 1 to entry: It includes the automatic removal of defrost water.

3.1.2

cabinet

enclosure within a vending machine in which products are held ready to be vended

3.1.3

automatic energy saving mode

mode of a vending machine in which energy reducing measures are automatically applied as a result of operational controls fitted by the manufacturer

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-