



BSI Standards Publication

## Energy efficiency systems — Simple external consumer display

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## National foreword

This British Standard is the UK implementation of EN IEC 63345:2023. It is identical to IEC 63345:2023. It supersedes BS EN 50491-11:2015+A1:2020, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PEL/23, Electrical accessories.

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Published by BSI Standards Limited 2023

ISBN 978 0 539 15679 9

ICS 27.015; 29.020

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 November 2023.

### Amendments/corrigenda issued since publication

Date	Text affected
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EUROPEAN STANDARD

**EN IEC 63345**

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2023

ICS 27.015; 29.020

Supersedes EN 50491-11:2015;  
EN 50491-11:2015/A1:2020

English Version

**Energy efficiency systems - Simple external consumer display  
(IEC 63345:2023)**Systèmes pour l'efficacité énergétique - Affichage simple et  
externe du client  
(IEC 63345:2023)Energie-Effizienz-Systeme - Einfache externe  
Verbraucheranzeige  
(IEC 63345:2023)

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## European foreword

The text of document 23K/87/FDIS, future edition 1 of IEC 63345, prepared by SC 23K "Electrical Energy Efficiency products" of IEC/TC 23 "Electrical accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63345:2023.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2024-07-25
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2026-10-25

This document supersedes EN 50491-11:2015 and all of its amendments and corrigenda (if any).

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In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 62056 (series) NOTE Approved as EN 62056 (series)

IEC 62056-5-3:2017 NOTE Approved as EN 62056-5-3:2017 (not modified)

IEC 62056-6-1:2017 NOTE Approved as EN 62056-6-1:2017 (not modified)

IEC 62056-6-2:2017 NOTE Approved as EN IEC 62056-6-2:2018 (not modified)

IEC 62746 (series) NOTE Approved as EN IEC 62746 (series)<sup>1</sup>

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<sup>1</sup> To be published.

## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cencenelec.eu](http://www.cencenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 4217	-	Codes for the representation of currencies	-	-
ISO/IEC 8859-1	-	Information technology - 8-bit single-byte coded graphic character sets - Part-1: Latin alphabet No. 1	-	-

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**ENERGY EFFICIENCY SYSTEMS –  
SIMPLE EXTERNAL CONSUMER DISPLAY**
**FOREWORD**

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IEC 63345 has been prepared by subcommittee 23K: Electrical energy efficiency products, of IEC technical committee 23: Electrical accessories. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
23K/87/FDIS	23K/89/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

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- reconfirmed,
- withdrawn,
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- amended.

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## INTRODUCTION

The reduction of CO<sub>2</sub> emissions is one the most challenging tasks today.

Providing the consumers with more information about their energy usage will allow them to make more informed choices and hence reductions.

Standardizing the communications interfaces between the metering systems and display will allow interoperability between the meter and display.

## ENERGY EFFICIENCY SYSTEMS – SIMPLE EXTERNAL CONSUMER DISPLAY

### 1 Scope

This document specifies a data model to abstract the metering world towards a simple external consumer display. The data model, as described by means of functional blocks contained in this document, lays down the format of metering data accessible by a simple external consumer display. This data interface would be typically part of the meter communication functions and be accessed by a simple external consumer display via the H1 interface of CEN/CLC/ETSI TR 50572 between the display and the meter communication functions.

The data interface specified in this document may also be accessed by the LNAP or NNAP through the C or M interface, after which the data could be accessed by HBES devices through the H2 and H3 interfaces.

In other words, in this way the same data model can be used both on the H1 as well as the H2 and H3 interfaces.

This document does not specify the communication mechanisms used on the data interface, nor the applied data privacy and security mechanisms, nor the ergonomics of the simple external consumer displays, where national regulations can apply.

The document does also not specify the communication protocol used between the meters and the meter communication functions. However, it takes into account existing standards such as the EN 13757 series (in particular EN 13757-3:2018 and its Annex H) and the IEC 62056 series for the definition of the data model.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO/IEC 8859-1, *Information technology – 8-bit single-byte coded graphic character sets – Part 1: Latin alphabet No. 1*

ISO 4217, *Codes for the representation of currencies*

### 3 Terms, definitions and abbreviated terms

#### 3.1 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>