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## Trådlös energöverföring med magnetisk resonans – Airfuel alliance grundläggande systemspecifikation (BSS) för interoperabilitet

*Wireless power transfer –  
Airfuel alliance resonant baseline system specification (BSS)*

Som svensk standard gäller europastandarden EN 63028:2017. Den svenska standarden innehåller den officiella engelska språkversionen av EN 63028:2017.

### Nationellt förord

Europastandarden EN 63028:2017

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 63028, First edition, 2017 - Wireless power transfer - Airfuel alliance resonant baseline system specification (BSS)**

utarbetad inom International Electrotechnical Commission, IEC.

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ICS 29.240.99; 33.160.99; 35.200.00

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**EN 63028**

September 2017

ICS 29.240.99; 33.160.99; 35.200

English Version

**Wireless Power Transfer - AirFuel Resonant Baseline System  
Specification (BSS)  
(IEC 63028:2017)**

Transfert d'énergie sans fil - Interopérabilité relative à la  
résonance magnétique - Spécification du système de  
référence (BSS) A4WP  
(IEC 63028:2017)

Drahtlose Energieübertragung - Magnetische Resonanz  
Interoperabilität - A4WP Grundlegende System  
Spezifikation (BSS)  
(IEC 63028:2017)

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Europäisches Komitee für Elektrotechnische Normung

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### **European foreword**

The text of document 100/2901/FDIS, future edition 1 of IEC 63028, prepared by Technical Area 15 "Wireless power transfer" of IEC/TC 100 "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 63028:2017.

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) 2018-04-24
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-07-24

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**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 When 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.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
Airfuel Wireless	-	Available		-
Power Transfer		at: <a href="http://www.airfuel.org/technologies/specification-download">http://www.airfuel.org/technologies/specification-download</a>		
System Baseline				
System Specification (BSS) v1.3				
Airfuel Wireless Power Transfer System Baseline System Specification (BSS) v1.2.1		Available at: <a href="http://www.airfuel.org/technologies/specification-download">http://www.airfuel.org/technologies/specification-download</a>		
Bluetooth core specification v4.0		Available at: <a href="https://www.bluetooth.org/docman/handler/s/downloaddoc.ashx?doc_id=229737">https://www.bluetooth.org/docman/handler/s/downloaddoc.ashx?doc_id=229737</a>		
CSA4		Available at: <a href="https://www.bluetooth.org/docman/handler/s/downloaddoc.ashx?doc_id=269452">https://www.bluetooth.org/docman/handler/s/downloaddoc.ashx?doc_id=269452</a>		

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### **WIRELESS POWER TRANSFER – AIRFUEL ALLIANCE RESONANT BASELINE SYSTEM SPECIFICATION (BSS)**

#### FOREWORD

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International Standard IEC 63028 has been prepared by technical area 15: Wireless power transfer, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

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

FDIS	Report on voting
100/2901/FDIS	100/2941/RVD

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

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

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

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

A bilingual version of this publication may be issued at a later date.

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## INTRODUCTION

In today's world, mainstream consumer mobile devices are ubiquitously supported by wireless technologies for data communication and connectivity functions while charging function is primarily supported by wired technologies. The development of wireless power transfer technologies offers increased user convenience for charging mobile devices; technologies include inductive, resonant, uncoupled (RF, ultrasonic, laser) methods.

IEC 63028 defines a specific wireless charging approach based on resonant technology and specifies technical requirements for the AirFuel<sup>TM</sup><sup>1</sup> resonant wireless power transfer (WPT) systems.

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<sup>1</sup> AirFuel<sup>TM</sup> is the trade name of a product supplied by AirFuel Alliance. This information is given for the convenience of users of this document and does not constitute an endorsement by IEC of the product named.

## **WIRELESS POWER TRANSFER – AIRFUEL ALLIANCE RESONANT BASELINE SYSTEM SPECIFICATION (BSS)**

### **1 Scope**

This document defines technical requirements, behaviors and interfaces used for ensuring interoperability for flexibly coupled wireless power transfer (WPT) systems for AirFuel Resonant WPT. This document is based on AirFuel Wireless Power Transfer System Baseline System Specification (BSS) v1.3.

Products implementing this document are expected to follow applicable regulations and global standards.

### **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.

AirFuel Wireless Power Transfer System Baseline System Specification (BSS) v1.3 [viewed 2017-03-13]. Available at: <http://www.airfuel.org/technologies/specification-download>

AirFuel Wireless Power Transfer System Baseline System Specification (BSS) v1.2.1 [viewed 2017-03-13]. Available at: <http://www.airfuel.org/technologies/specification-download>

Bluetooth core specification v4.0, or later versions as they are available [viewed 2017-03-13]. Available at: [https://www.bluetooth.org/docman/handlers/downloaddoc.ashx?doc\\_id=229737](https://www.bluetooth.org/docman/handlers/downloaddoc.ashx?doc_id=229737)

CSA4, or later versions as they are available [viewed 2017-03-13]. Available at: [https://www.bluetooth.org/docman/handlers/DownloadDoc.ashx?doc\\_id=269452](https://www.bluetooth.org/docman/handlers/DownloadDoc.ashx?doc_id=269452)