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Wireless Power Transfer - AirFuel Resonant Baseline  
System Specification (BSS)

## ESTI STANDARDI EESSÕNA

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ICS 29.240.99, 33.160.99, 35.200

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

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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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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

## 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 (dop) 2018-04-24  
implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-07-24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 Power Transfer System Baseline System Specification (BSS) v1.3	-	Available at: <a href="http://www.airfuel.org/technologies/specification-download">http://www.airfuel.org/technologies/specification-download</a>		-
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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## 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.