

<b>STN</b>	<b>Ovládacie a ochranné prístroje v kábli pre režim nabíjania 2 elektrických vozidiel (IC-CPD) Zmena A1</b>	<b>STN EN 62752/A1</b>
		34 1590

In-cable control and protection device for mode 2 charging of electric road vehicles (IC-CPD)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola označená vo Vestníku ÚNMS SR č. 08/20

STN EN 62752 z apríla 2017 sa bez tejto zmeny A1 môže používať do 8. 5. 2023.

Obsahuje: EN 62752:2016/A1:2020, IEC 62752:2016/AMD1:2018

**131345**

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 62752:2016/A1**

May 2020

ICS 29.120.50

English Version

**In-cable control and protection device for mode 2 charging of  
electric road vehicles (IC-CPD)  
(IEC 62752:2016/A1:2018)**

Appareil de contrôle et de protection intégré au câble pour  
la charge en mode 2 des véhicules électriques (IC-CPD)  
(IEC 62752:2016/A1:2018)

Ladeleitungsintegrierte Steuer- und Schutzeinrichtung für  
die Ladebetriebsart 2 von Elektro-Straßenfahrzeugen (IC-  
CPD)  
(IEC 62752:2016/A1:2018)

This amendment A1 modifies the European Standard EN 62752:2016; it was approved by CENELEC on 2018-10-18. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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.

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

**EN 62752:2016/A1:2020 (E)****European foreword**

The text of document 23E/1055/FDIS, future IEC 62752/A1, prepared by SC 23E "Circuit-breakers and similar equipment for household use" of IEC/TC 23 "Electrical accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62752:2016/A1:2020.

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) 2020-11-08
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-05-08

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This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s), see informative Annex ZZ.

**Endorsement notice**

The text of the International Standard IEC 62752:2016/A1:2018 was approved by CENELEC as a European Standard without any modification.

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60065 (mod)	-	Audio, video and similar electronic apparatus - Safety requirements	EN 60065	2014
			+ A11	2017
IEC 60068-2-1	-	Environmental testing - Part 2-1: Tests - EN 60068-2-1 Test A: Cold	EN 60068-2-1	2007
IEC 60068-2-5	-	Environmental testing – Part 2-5: Tests – EN IEC 60068-2-5 2018 Test Sa: Simulated solar radiation at ground level and guidance for solar radiation testing	EN IEC 60068-2-5	2018
IEC 60068-2-11	-	Basic environmental testing procedures - EN 60068-2-11 Part 2-11: Tests - Test Ka: Salt mist	EN 60068-2-11	1999
IEC 60068-2-27	-	Environmental testing - Part 2-27: Tests - EN 60068-2-27 Test Ea and guidance: Shock	EN 60068-2-27	2009
IEC 60068-2-30	-	Environmental testing - Part 2-30: Tests - EN 60068-2-30 Test Db: Damp heat, cyclic (12 h + 12 h cycle)	EN 60068-2-30	2005
IEC 60068-2-31	-	Environmental testing - Part 2-31: Tests - EN 60068-2-31 Test Ec: Rough handling shocks, primarily for equipment-type specimens	EN 60068-2-31	2008
IEC 60068-2-64	-	Environmental testing - Part 2-64: Tests - EN 60068-2-64 Test Fh: Vibration, broadband random and guidance	EN 60068-2-64	2008
			+ A1	2019
IEC 60068-3-4	-	Environmental testing - Part 3-4: EN 60068-3-4 Supporting documentation and guidance - Damp heat tests	EN 60068-3-4	2002
IEC 60112	-	Method for the determination of the proof EN 60112 and the comparative tracking indices of solid insulating materials	EN 60112	2003
			+ A1	2009

**EN 62752:2016/A1:2020 (E)**

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60227	series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V		series
IEC 60245	series	Rubber insulated cables - Rated voltages EN 50525 up to and including 450/750 V		series
IEC 60309	series	Plugs, socket-outlets and couplers for EN 60309 industrial purposes		series
IEC 60309-1	1999	Plugs, socket-outlets and couplers for EN 60309-1 industrial purposes - Part 1: General requirements		1999
+ A1 (mod)	2005		+ A1	2007
+ A2	2012		+ A2	2012
IEC 60309-2		Plugs, socket-outlets and couplers for EN 60309-2 industrial purposes - Part 2: Dimensional interchangeability requirements for pin and contact-tube accessories		1999
			+ A1 (mod)	2007
			+ A2	2012
IEC 60364-4-44 (mod)	2007	Low-voltage electrical installations - Part 4- HD 60364-4-442 44: Protection for safety - Protection against voltage disturbances and electromagnetic disturbances		2012
IEC 60384-14	series	Fixed capacitors for use in electronic equipment - Part 14: Sectional specification – Fixed capacitors for electromagnetic interference suppression and connection to the supply mains		series
IEC 60417	1973 <sup>1</sup>	Graphical symbols for use on equipment. - Index, survey and compilation of the single sheets.		-
IEC 60529	1989	Degrees of protection provided by EN 60529 enclosures (IP Code)		1991
-	-		+ corrigendum May	1993
IEC 60664-1	2007	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests		2007
IEC 60664-3	-	Insulation coordination for equipment within low-voltage systems - Part 3: Use of coating, potting or moulding for protection against pollution		2017
IEC 60695-2-10	-	Fire hazard testing - Part 2-10: EN 60695-2-10 Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure		2013

<sup>1</sup> Dated as no equivalent European Standard exists.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60695-2-11	-	Fire hazard testing - Part 2-11: EN 60695-2-11 Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products (GWEPT)	EN 60695-2-11	2014
IEC 60884-1	2002	Plugs and socket-outlets for household and - similar purposes -- Part 1: General requirements		-
+ A1	2006		-	-
+ A2	2013		-	-
IEC 61249-2	series	Materials for printed boards and other EN 61249-2 interconnecting structures		series
IEC/TS 61439-7	2014	Low-voltage switchgear and controlgear - assemblies - Part 7: Assemblies for specific applications such as marinas, camping sites, market squares, electric vehicles charging stations		-
IEC 61540	-	Electrical accessories - Portable residual current devices without integral overcurrent protection for household and similar use (PRCDs)	HD 639 S1 (mod)	2002
-	-		+ A1	2003
-	-		+ corrigendum Jul.	2003
-	-		+ A2	2010
IEC 61543	1995	Residual current-operated protective devices (RCDs) for household and similar use - Electromagnetic compatibility	EN 61543	1995
+ A1	2004		-	-
-	-		+ corrigendum	1997 Dec.
-	-		+ A11	2003
-	-		+ A12	2005
+ A2	2005		+ A2	2006
IEC 61851-1	2017	Electric vehicle conductive charging system - Part 1: General requirements	EN IEC 61851-1	2019
IEC 62196	series	Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles	EN 62196	series
IEC 62196-1	-	Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 1: General requirements	EN 62196-1 (mod)	2014
IEC 62196-2	-	Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories	EN 62196-2	2017

**EN 62752:2016/A1:2020 (E)**

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
CISPR 14	series	Electromagnetic compatibility Requirements for household appliances, electric tools and similar apparatus	- EN 55014	series
CISPR 14-1	2016	Electromagnetic compatibility Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	- EN 55014-1	2017
-	-		+ A11	2020
ISO 178	2019	Plastics – Determination of flexural properties	EN ISO 178	2019
ISO 179	series	Plastics - Determination of Charpy impact properties	EN ISO 179	series
ISO 179-1	-	Plastics – Determination of Charpy impact properties – Part 1: Non-instrumented impact test	EN ISO 179-1	2010
ISO 2409	-	Paints and varnishes - Cross-cut test	EN ISO 2409	2013
ISO 4628-3	-	Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 3: Assessment of degree of rusting	EN ISO 4628-3	2016
ISO 4892-2	2013	Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps	EN ISO 4892-2	2013
ISO 16750-5	2010	Road vehicles_- Environmental conditions - and testing for electrical and electronic equipment_- Part_5: Chemical loads		-
ISO 17409	2015	Electrically propelled road vehicles -- Connection to an external electric power supply - Safety requirements		-

## Annex ZZ

(informative)

### **Relationship between this European standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered**

This European Standard has been prepared under a Commission's standardization request relating to harmonized standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZ.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

**Table ZZ.1 – Correspondence between this European standard and Article 3 of Directive 2014/35/EU [2014 OJ L153]**

Safety Objectives of Directive 2014/35/EU	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
(1)(a)	1, 2, 3, 4, 5, 6 and 9.3	
(1)(b)	8.1, 8.2, 8.3, 9.4, 9.6, 9.20, 9.21, 9.22, 9.23, 9.24 and 9.25	
(1)(c)	7, 9.1 and 9.2 plus Annex B	
(2) (a)	8.5, 8.8, 8.6, 8.9, 8.15, 8.16, 8.23, 8.22, 9.4, 9.5, 9.7, 9.7.7, 9.7.10, 9.8, 9.13, 9.15, 9.16 and 9.14 plus Annex A	
(2) (b)	8.7, 8.9, 8.10, 8.17, 9.6, 9.8 and 9.9 plus Annex A	
(2) (c)	8.4.2, 8.14, 9.7 and 9.13	
(2) (d)	8.4.3, 8.6, 8.19, 9.5, 9.19, 9.27, 9.28 and 9.34 plus Annex C	
(3) (a)	8.11, 8.18, 8.25, 9.10, 9.17, 9.18, 9.29, 9.32 and 9.36	
(3) (b)	8.12, 8.13, 8.16, 8.20, 8.21, 8.24, 9.7.3.7, 9.7.3.8, 9.11, 9.12, 9.16, 9.26, 9.29, 9.30, 9.31, 9.32, 9.33, 9.34 and 9.35	
(3) (c)	8.7, 8.10, 9.6 and 9.10	

**WARNING 1 —** Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

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# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

### AMENDMENT 1

### AMENDEMENT 1

**In-cable control and protection device for mode 2 charging of electric road vehicles (IC-CPD)**

**Appareil de contrôle et de protection intégré au câble pour la charge en mode 2 des véhicules électriques (IC-CPD)**





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IEC 62752

Edition 1.0 2018-09

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

## AMENDMENT 1

## AMENDEMENT 1

**In-cable control and protection device for mode 2 charging of electric road vehicles (IC-CPD)**

**Appareil de contrôle et de protection intégré au câble pour la charge en mode 2 des véhicules électriques (IC-CPD)**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## FOREWORD

This amendment has been prepared by subcommittee 23E: Circuit-breakers and similar equipment for household use, of IEC technical committee 23: Electrical accessories.

The text of this amendment is based on the following documents:

FDIS	Report on voting
23E/1055/FDIS	23E/1072/RVD

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

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

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

## CONTENTS

*Add the following new headings:*

### **4.6 Classification according to the usage**

#### **4.6.1 IC-CPD for portable use**

#### **4.6.2 IC-CPD for wall mounting**

#### **4.6.3 IC-CPD for portable use and for wall mounting**

### **9.10.5 Verification requirements for IC-CPD according to 4.6.2 and 4.6.3**

## FOREWORD

*Delete the existing Note.*

IEC 62752:2016/AMD1:2018  
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– 3 –

## INTRODUCTION

*Delete the last paragraph.*

## 1 Scope

*Replace the first bullet point of the third paragraph by the following:*

- has a control pilot function controller in accordance with IEC 61851-1:2017, Annex A;

*Add, after the last paragraph, the following new paragraph:*

The IC-CPD is not considered to be a protective device for use in fixed installations.

## 2 Normative references

*Replace the reference to IEC 61851-1:2010 by the following:*

IEC 61851-1:2017, *Electric vehicle conductive charging system – Part 1: General requirements*

*Add the following new references:*

IEC TS 61439-7:2014, *Low-voltage switchgear and controlgear assemblies – Part 7: Assemblies for specific applications such as marinas, camping sites, market squares, electric vehicles charging stations*

IEC 62196 (all parts), *Plugs, socket-outlets, vehicle connectors and vehicle inlets – Conductive charging of electric vehicles*

CISPR 14-1, *Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus – Part 1: Emission*

*Delete reference to IEC TS 62763:2013.*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**