SVENSK STANDARD SS-EN 61851-1

Fastställd	Utgåva	Sida	Ingår i
2001-10-26	1	1 (1+39)	SEK Område 69

Svenska Elektriska Kommissionen, SEK

Elbilsdrift – Konduktiv laddning – Del 1: Allmänna fordringar

Electric vehicle conductive charging system – Part 1: General requirements

Som svensk standard gäller europastandarden EN 61851-1:2001. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61851-1:2001.

Nationellt förord

Europastandarden EN 61851-1:2001

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC

– **IEC 61851-1, First edition, 2001 - Electric vehicle conductive charging system - Part 1: General requirements**

utarbetad inom International Electrotechnical Commission, IEC.

ICS 43.120

Denna standard är fastställd av Svenska Elektriska Kommissionen, SEK,
som också kan lämna upplysningar om **sakinnehållet** i standarden.
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EUROPEAN STANDARD **EN 61851-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM April 2001

ICS 43.120

English version

Electric vehicle conductive charging system
Part 1: General requirements
(IEC 61851-1:2001)

Dispositif de charge conductive
pour véhicules électriques
Partie 1: Prescriptions générales
(CEI 61851-1:2001)

Konduktive Ladung von
Elektrofahrzeugen
Teil 1: Allgemeine Anforderungen
(IEC 61851-1:2001)

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 61851-1:2001 E

Foreword

The text of document 69/124/FDIS, future edition 1 of IEC 61851-1, prepared by IEC TC 69, Electric road vehicles and electric industrial trucks, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61851-1 on 2001-03-01.

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2001-12-01

– latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2004-03-01

NOTE The series EN 61851 will supersede the series ENV 50275.

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given for information only.
In this standard, annexes A and ZA are normative and annexes B to E are informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61851-1:2001 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 61140 NOTE: Harmonized as EN 61140:2001 (not modified).

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60038 (mod)	1983	IEC Standard voltages[1)]	HD 472 S1	1989
IEC 60245-1[2)]	1994	Rubber insulated cables of rated	-	-
A1	1997	voltages up to and including 450/750 V	-	-
A2	1997	Part 1: General requirements	-	-
IEC 60245-2[3)]	1994	Part 2: Test methods	-	-
A1	1997		-	-
A2	1997		-	-
IEC 60245-3[4)]	1994	Part 3: Heat resistant silicone insulated	-	-
A1	1997	cables	-	-
IEC 60245-4 (mod)	1994	Part 4: Cords and flexible cables	HD 22.4 S3 + A1	1995 1999
A1	1997		-	-
IEC 60309-1	1999	Plugs, socket-outlets and couplers for industrial purposes Part 1: General requirements	EN 60309-1	1999
IEC 60364-4-41 (mod)	1992	Electrical installations of buildings Part 4: Protection for safety --	HD 384.4.41 S2	1996
A1	1996	Chapter 41: Protection against electric	-	-
A2	1999	shock	-	-
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 1992
IEC 60950 (mod) + corr. January	1999 2000	Safety of information technology equipment	EN 60950	2000

1) The title of HD 472 S1 is: Nominal voltages for low voltage public electricity supply systems.

2) HD 22.1 S3:1997, which is related to, but not directly equivalent with, IEC 60245-1:1994, applies instead.

3) HD 22.2 S3:1997, which is related to, but not directly equivalent with, IEC 60245-2:1994, applies instead.

4) HD 22.3 S3:1995 + A1:1999, which is related to, but not directly equivalent with, IEC 60245-3:1980, applies instead.

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ELECTRIC VEHICLE CONDUCTIVE CHARGING SYSTEM –

Part 1: General requirements

1 Scope

This part of IEC 61851 applies to equipment for charging electric road vehicles at standard a.c. supply voltages (as per IEC 60038) up to 690 V and at d.c. voltages up to 1 000 V, and for providing electrical power for any additional services on the vehicle if required when connected to the supply network.

The aspects covered include characteristics and operating conditions of the supply device and the connection to the vehicle; operators and third party electrical safety; and the characteristics to be complied with by the vehicle with respect to the a.c./d.c. EVSE, only when the EV is earthed.

NOTE 1 Class II vehicles are not excluded, but the lack of information on this type of vehicle means that the requirements for the standard are unavailable at present.

NOTE 2 This standard applies to EVSE with on-site storage capability.

NOTE 3 Requirements for specific inlet, connector, plug and socket-outlets for EVs are also under consideration. They shall be incorporated in a separate standard (in the IEC 60309 series) when complete.

This standard does not cover all safety aspects related to maintenance.

This standard is not applicable to trolley buses, rail vehicles, industrial trucks and vehicles designed primarily for use off-road.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61851. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 61851 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60038:1983, *IEC standard voltages*

IEC 60245-1:1994, *Rubber insulated cables – Rated voltages up to and including 450/750 V – Part 1: General requirements* [1]
Amendment 1 (1997)
Amendment 2 (1997)

IEC 60245-2:1994, *Rubber insulated cables – Rated voltages up to and including 450/750 V – Part 2: Test methods* [2]
Amendment 1 (1997)
Amendment 2 (1997)

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[1] There is a consolidated edition 3.2 (1998) that includes IEC 60245-1 (1994) and its amendment 1 (1997) and amendment 2 (1997).

[2] There is a consolidated edition 2.2 (1998) that includes IEC 60245-2 (1994) and its amendment 1 (1997) and amendment 2 (1997).