SVENSK STANDARD SS-EN 61851-22

Fastställd	Utgåva	Sida	Ingår i
2002-04-18	1	1 (1+23)	SEK Område 69

Svenska Elektriska Kommissionen, SEK

Elbilsdrift – Konduktiv laddning – Del 22: Laddningsstation för växelström

Electric vehicle conductive charging system – Part 22: AC electric vehicle charging station

Som svensk standard gäller europastandarden EN 61851-22:2002. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61851-22:2002.

Nationellt förord

Europastandarden EN 61851-22:2002

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC

– **IEC 61851-22, First edition, 2001 - Electric vehicle conductive charging system - Part 22: AC electric vehicle charging station**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden skall användas tillsammans med tidigare utgiven svensk standard SS-EN 61851-1, utgåva 1, 2001.

ICS 43.120

Denna standard är fastställd av Svenska Elektriska Kommissionen, SEK, som också kan lämna upplysningar om **sakinnehållet** i standarden.
Postadress: SEK, Box 1284, 164 29 KISTA
Telefon: 08 - 444 14 00. *Telefax*: 08 - 444 14 30
E-post: sek@sekom.se. *Internet*: www.sekom.se

EUROPEAN STANDARD **EN 61851-22**

NORME EUROPÉENNE

EUROPÄISCHE NORM January 2002

ICS 43.120

English version

Electric vehicle conductive charging system
Part 22: AC electric vehicle charging station
(IEC 61851-22:2001)

Système de charge conductive
pour véhicules électriques
Partie 22: Borne de charge conductive
en courant alternatif pour véhicules
électriques
(CEI 61851-22:2001)

Konduktive Ladesysteme
für Elektrofahrzeuge
Teil 22: Wechselstrom-Ladestation
für Elektrofahrzeuge
(IEC 61851-22:2001)

This European Standard was approved by CENELEC on 2001-12-04. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard 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 Central Secretariat or to any CENELEC member.

This European Standard 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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 61851-22:2002 E

Foreword

The text of document 69/129/FDIS, future edition 1 of IEC 61851-22, 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 61851-22 on 2001-12-04.

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) 2002-10-01

– latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2005-01-01

This European Standard shall be read in conjunction with EN 61851-1.

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the International Standard IEC 61851-22:2001 was approved by CENELEC as a European Standard without any modification.

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

IEC 60309-1	NOTE	Harmonized as EN 60309-1:1999 (not modified).
IEC 60364-5-54	NOTE	Harmonized as HD 384.5.54 S1:1988 (modified).
CISPR 11	NOTE	Harmonized as EN 55011:1998 (modified).
CISPR 14	NOTE	Harmonized as EN 55014 Series (not modified).

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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	Nominal voltages for low-voltage public electricity supply systems	HD 472 S1 + A1	1989 1995
IEC 60068-2-1	1990	Environmental testing Part 2: Tests - Tests A: Cold	EN 60068-2-1	1993
IEC 60068-2-2	1974	Part 2: Tests - Test B: Dry heat	EN 60068-2-2 [1)]	1993
IEC 60068-2-3	1969	Part 2: Tests - Test Ca: Damp heat, steady state	HD 323.2.3 S2 [2)]	1987
IEC 60068-2-5	1975	Part 2: Tests - Test Sa: Simulated solar radiation at ground level	EN 60068-2-5	1999
IEC 60068-2-14	1984	Part 2: Tests - Test N: Change of temperature	EN 60068-2-14 [3)]	1999
IEC 60068-2-30	1980	Part 2: Tests - Test Db and guidance: Damp heat, cyclic (12 + 12 hour cycle)	EN 60068-2-30 [4)]	1999
IEC 60068-2-52	1996	Part 2: Tests - Test Kb: Salt mist, cyclic (sodium chloride solution)	EN 60068-2-52	1996
IEC 60068-2-75	1997	Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	1997
IEC 60364-4-43 (mod)	1977	Electrical installations of buildings Part 4: Protection for safety -- Chapter 43: Protection against overcurrent	HD 384.4.43 S2 [5)]	2001

1) EN 60068-2-2 includes supplement A:1976 to IEC 60068-2-2.

2) HD 323.2.3 S2 includes A1:1984 to IEC 60068-2-3.

3) EN 60068-2-14 includes A1:1986 to IEC 60068-2-14.

4) EN 60068-2-30 includes A1:1985 to IEC 60068-2-30.

5) HD 384.4.43 S2 includes A1:1997 to IEC 60364-4-43.

Publication	Year	Title	EN/HD	Year
IEC 60364-4-443 (mod)	1995	Part 4: Protection for safety -- Chapter 44: Protection against overvoltages - Section 443: Protection against overvoltages of atmospheric origin or due to switching	HD 384.4.443 S1	2000
A1	1998		-	-
IEC 60439-1	1999	Low-voltage switchgear and controlgear assemblies Part 1: Type-tested and partially type-tested assemblies	EN 60439-1	1999
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 1993
IEC 60664-1 (mod)	1992	Insulation coordination for equipment within low-voltage systems Part 1: Principles, requirements and tests	HD 625.1 S1 + corr. November	1996 1996
IEC 60950 (mod) + corr. January	1999 2000	Safety of information technology equipment	EN 60950	2000
IEC 61000-2-2	1990	Electromagnetic compatibility (EMC) Part 2: Environment -- Section 2: Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems	-	-
IEC 61000-3-2 (mod)	2000	Part 3-2: Limits - Limits for harmonic current emissions (equipment input current up to and including 16 A per phase)	EN 61000-3-2	2000
IEC 61000-4-1	2000	Part 4-1: Testing and measurement techniques - Overview of IEC 61000-4 series	EN 61000-4-1	2000
IEC 61000-4-2	1995	Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	1995
A1 A2	1998 2000		A1 A2	1998 2001
IEC 61000-4-3 (mod)	1995	Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	1996
A1 A2	1998 2000		A1 A2	1998 2001
IEC 61000-4-4	1995	Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	1995
A1	2000		A1	2001

Publication	Year	Title	EN/HD	Year
IEC 61000-4-5	1995	Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	1995
IEC 61000-4-11	1994	Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	EN 61000-4-11	1994
IEC 61036	1996	Alternating current static watt-hour meters for active energy (classes 1 and 2)	EN 61036	1996
IEC 61180-1	1992	High-voltage test techniques for low-voltage equipment	EN 61180-1	1994
CISPR 16	Series	Specification for radio disturbance and immunity measuring apparatus and methods	-	-
CISPR 22 (mod)	1997	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement	EN 55022 + corr. July	2001 2001

CONTENTS

ELECTRIC VEHICLE CONDUCTIVE CHARGING SYSTEM –

Part 22: AC electric vehicle charging station

1 Scope

This part of IEC 61851, together with part 1, gives the requirements for a.c. electric vehicle charging stations for conductive connection to an electric vehicle, with a.c. supply voltages according to IEC 60038 up to 690 V.

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

The scope of this part of IEC 61851 does not cover box type assemblies with socket-outlets, installed for the purpose of delivering energy to the vehicle, which have no charging control functions.

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 ISO and IEC maintain registers of currently valid International Standards.

IEC 60038:1983, *IEC standard voltages*

IEC 60068-2-1:1990, *Environmental testing – Part 2: Tests – Tests A: Cold*

IEC 60068-2-2:1974, *Environmental testing – Part 2: Tests – Tests B: Dry heat*

IEC 60068-2-3:1969, *Environmental testing – Part 2: Tests – Test Ca: Damp heat, steady state*

IEC 60068-2-5:1975, *Environmental testing – Part 2: Tests – Test Sa: Simulated solar radiation at ground level*

IEC 60068-2-14:1984, *Environmental testing – Part 2: Tests – Test N: Change of temperature*

IEC 60068-2-30:1980, *Environmental testing – Part 2: Tests – Test Db and guidance: Damp heat, cyclic (12 + 12-hour cycle)*

IEC 60068-2-52:1996, *Environmental testing – Part 2: Tests – Test Kb: Salt mist, cyclic (sodium chloride solution)*