

**Elektrisõidukite juhtivuslik laadimissüsteem. Osa 24:
Alalisvoolulaadimise kontrolli digitaalkommunikatsioon
elektrisõiduki alalisvoolu-laadimisjaama ja elektrisõiduki
vahel**

**Electric vehicle conductive charging system - Part 24:
Digital communication between a d.c. EV charging
station and an electric vehicle for control of d.c.
charging**

EESTI STANDARDI EESSÕNA

See Eesti standard EVS-EN 61851-24:2014 sisaldab Euroopa standardi EN 61851-24:2014 ingliskeelset teksti.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

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NATIONAL FOREWORD

This Estonian standard EVS-EN 61851-24:2014 consists of the English text of the European standard EN 61851-24:2014.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.

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English Version

Electric vehicle conductive charging system - Part 24: Digital
communication between a d.c. EV charging station and an
electric vehicle for control of d.c. charging
(IEC 61851-24:2014)

Système de charge conductive pour véhicules électriques -
Partie 24: Communication digitale entre la borne de charge
à courant continu et le véhicule électrique pour le contrôle
de la charge à courant continu
(CEI 61851-24:2014)

Konduktive Ladesysteme für Elektrofahrzeuge - Teil 24:
Digitale Kommunikation zwischen einer
Gleichstromladestation für Elektrofahrzeuge und dem
Elektrofahrzeug zur Steuerung des
Gleichstromladevorgangs
(IEC 61851-24:2014)

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

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Foreword

The text of document 69/273/FDIS, future edition 1 of IEC 61851-24, prepared by IEC/TC 69 "Electric road vehicles and electric industrial trucks" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61851-24:2014.

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-04-11

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The text of the International Standard IEC 61851-24:2014 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, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61851-1	2010	Electric vehicle conductive charging system - Part 1: General requirements	EN 61851-1	2011
IEC 61851-23	2014	Electric vehicle conductive charging system - Part 23: D.C. electric vehicle charging station	EN 61851-23	2013
ISO/IEC 15118-1		Road vehicles – Vehicle to grid communication interface - Part 1: General information and use-case definition	-	-
ISO/IEC 15118-2		Road vehicles – Vehicle to grid communication interface - Part 2: Technical protocol description and open systems interconnections (OSI) layer requirements	-	-
ISO/IEC 15118-3		Road vehicles - Vehicle to grid communication-interface - Part 3 Physical layer requirements	-	-
ISO 11898-1	2003	Road vehicles - Controller area network (CAN) - Part 1: Data link layer and physical signalling	-	-
ISO 11898-2	2003	Road vehicles - Controller area network (CAN) - Part 2: High-speed medium access unit	-	-

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INTRODUCTION

The introduction and commercialisation of electric vehicles has been accelerated in the global market, responding to the global concerns on CO₂ reduction and energy security. Concurrently, the development of charging infrastructure for electric vehicles has also been expanding. As supplementary system of a.c. charging system, d.c. charging is recognized as an effective solution to extend the available range of electric vehicles, and different d.c. charging systems are being used over the world. The international standardization in terms of charging infrastructure including d.c. charging systems is indispensable for the diffusion of electric vehicles, and this standard is developed for the manufacturers' convenience by providing general specifications for control communication protocols between off-board d.c. charger and electric vehicles.