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| STN | Systémy nabíjania elektrických vozidiel vodivým prepojením Časť 24: Digitálna komunikácia medzi nabíjacou stanicou EV na jednosmerný prúd a elektrickým vozidlom na riadenie nabíjania jednosmerným prúdom | STN EN IEC 61851-24 34 1590 |
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Electric vehicle conductive charging system - Part 24: Digital communication between a DC EV supply equipment and an electric vehicle for control of DC charging

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/25

Obsahuje: EN IEC 61851-24:2024, IEC 61851-24:2023

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EN IEC 61851-24

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English Version

Electric vehicle conductive charging system - Part 24: Digital communication between a DC EV supply equipment and an electric vehicle for control of DC charging (IEC 61851-24:2023)

Système de charge conductive pour véhicules électriques -
Partie 24: Communication numérique entre le système
d'alimentation à courant continu et le véhicule électrique
pour le contrôle de la charge à courant continu
(IEC 61851-24:2023)

Konduktive Ladesysteme für Elektrofahrzeuge - Teil 24:
Digitale Kommunikation zwischen einer
Gleichstromversorgungseinrichtung für Elektrofahrzeuge
und dem Elektrofahrzeug zur Steuerung des
Gleichstromladevorgangs
(IEC 61851-24:2023)

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

EN IEC 61851-24:2024 (E)**European foreword**

The text of document 69/909/FDIS, future edition 2 of IEC 61851-24, prepared by TC 69 "Electrical power/energy transfer systems for electrically propelled road vehicles and industrial trucks" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61851-24:2024.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2025-12-31 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2027-12-31 document have to be withdrawn

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This document has been prepared under a standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

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The text of the International Standard IEC 61851-24:2023 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 standard indicated:

IEC 61851-1:2017 NOTE Approved as EN IEC 61851-1:2019 (not modified)

ISO 8751 NOTE Approved as EN ISO 8751

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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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.cencenelec.eu.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|---|----------------|-------------|
| IEC 61851-23 | 2023 | Electric vehicle conductive charging system - Part 23: DC electric vehicle supply equipment | - | - |
| ISO/TR 8713 | - | Electrically propelled road vehicles - Vocabulary | - | - |
| ISO 11898-1 | 2015 | Road vehicles - Controller area network (CAN) - Part 1: Data link layer and physical signalling | - | - |
| ISO 11898-2 | 2016 | Road vehicles - Controller area network (CAN) - Part 2: High-speed medium access unit | - | - |
| ISO 15118-2 | 2014 | Road vehicles - Vehicle-to-Grid Communication Interface - Part 2: Network and application protocol requirements | EN ISO 15118-2 | 2016 |



IEC 61851-24

Edition 2.0 2023-12

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Electric vehicle conductive charging system –
Part 24: Digital communication between a DC EV supply equipment and an
electric vehicle for control of DC charging**

**Systeme de charge conductive pour vehicules electriques –
Partie 24: Communication numerique entre le systeme d'alimentation a courant
continu et le vehicule electrique pour le controle de la charge a courant continu**





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IEC 61851-24

Edition 2.0 2023-12

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Electric vehicle conductive charging system –
Part 24: Digital communication between a DC EV supply equipment and an
electric vehicle for control of DC charging**

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Partie 24: Communication numérique entre le système d'alimentation à courant
continu et le véhicule électrique pour le contrôle de la charge à courant continu**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRIC VEHICLE CONDUCTIVE CHARGING SYSTEM –**Part 24: Digital communication between a DC EV supply equipment
and an electric vehicle for control of DC charging**

FOREWORD

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IEC 61851-24 has been prepared by IEC technical committee 69: Electrical power/energy transfer systems for electrically propelled road vehicles and industrial trucks. It is an International Standard.

This second edition cancels and replaces the first edition published in 2014. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) Annex A and Annex B have been updated in line with IEC 61851-23:2023 and relevant standards.

The text of this International Standard is based on the following documents:

| Draft | Report on voting |
|-------------|------------------|
| 69/909/FDIS | 69/914/RVD |

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 61851 series, published under the general title *Electric vehicle conductive charging system*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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ELECTRIC VEHICLE CONDUCTIVE CHARGING SYSTEM –

Part 24: Digital communication between a DC EV supply equipment and an electric vehicle for control of DC charging

1 Scope

This part of IEC 61851, together with IEC 61851-23, applies to digital communication between a DC EV supply equipment and an electric road vehicle (EV) for control of conductive DC power transfer, with a rated supply voltage up to 1 000 V AC or up to 1 500 V DC and a rated output voltage up to 1 500 V DC.

This document also applies to digital communication between the DC EV charging/discharging station and the EV for system A, as specified in Annex A.

The EV charging mode is mode 4, according to IEC 61851-23.

Annex A, Annex B, and Annex C give descriptions of digital communications for control of DC charging specific to DC EV charging systems A, B and C as defined in IEC 61851-23.

2 Normative references

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.

IEC 61851-23:2023, *Electric vehicle conductive charging system – Part 23: DC electric vehicle supply equipment*

ISO TR 8713, *Electrically propelled road vehicles – Vocabulary*

ISO 11898-1:2015, *Road vehicles – Controller area network (CAN) – Part 1: Data link layer and physical signalling*

ISO 11898-2:2016, *Road vehicles – Controller area network (CAN) – Part 2: High-speed medium access unit*

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