

**SLOVENSKI STANDARD**  
**SIST-TS CLC IEC/TS 61851-3-4:2024**  
**01-marec-2024**

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**Sistemi za napajanje električnih vozil - 3-4. del: Oprema za napajanje električnih vozil z enosmernim tokom, kjer varnost zagotavlja dvojna ali ojačena izolacija - Splošne definicije in zahteve za komunikacijo CANopen (IEC/TS 61851-3-4:2023)**

Electric vehicles conductive charging system - Part 3-4: DC EV supply equipment where protection relies on double or reinforced insulation - General definitions and requirements for CANopen communication (IEC/TS 61851-3-4:2023)

Konduktive Ladesysteme für Elektrofahrzeuge - Teil 3-4: Gleichstrom-Versorgungseinrichtungen für Elektrofahrzeuge mit Schutzwirkung durch doppelte oder verstärkte Isolierung – Allgemeine Definitionen und Anforderungen für CANopen Kommunikation (IEC/TS 61851-3-4:2023)

Système de charge conductive pour véhicules électriques - Partie 3-4 : Exigences relatives aux véhicules électriques légers - Définitions générales relatives à la communication (IEC/TS 61851-3-4:2023)

**Ta slovenski standard je istoveten z: CLC IEC/TS 61851-3-4:2023**

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**ICS:**

43.120      Električna cestna vozila      Electric road vehicles

**SIST-TS CLC IEC/TS 61851-3-4:2024      en**



**TECHNICAL SPECIFICATION  
SPÉCIFICATION TECHNIQUE  
TECHNISCHE SPEZIFIKATION**

**CLC IEC/TS 61851-3-4**

December 2023

ICS 43.120

English Version

**Electric vehicles conductive charging system - Part 3-4: DC EV supply equipment where protection relies on double or reinforced insulation - General definitions and requirements for CANopen communication  
(IEC/TS 61851-3-4:2023)**

Système de charge conductive pour véhicules électriques - Partie 3-4 : Exigences relatives aux véhicules électriques légers - Définitions générales relatives à la communication  
(IEC/TS 61851-3-4:2023)

Konduktive Ladesysteme für Elektrofahrzeuge - Teil 3-4: Gleichstrom-Versorgungseinrichtungen für Elektrofahrzeuge mit Schutzwirkung durch doppelte oder verstärkte Isolierung - Allgemeine Definitionen und Anforderungen für CANopen Kommunikation  
(IEC/TS 61851-3-4:2023)

This Technical Specification was approved by CENELEC on 2023-12-04.

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Europäisches Komitee für Elektrotechnische Normung

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

**CLC IEC/TS 61851-3-4:2023 (E)****European foreword**

This document (CLC IEC/TS 61851-3-4:2023) consists of the text of IEC/TS 61851-3-4:2023, prepared by IEC/TC 69 "Electrical power/energy transfer systems for electrically propelled road vehicles and industrial trucks".

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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.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

**Endorsement notice**

The text of the International Technical Specification IEC/TS 61851-3-4:2023 was approved by CENELEC as a European Technical Specification without any modification.

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

IEC 60309 series      NOTE Approved as EN IEC 60309 series

IEC 60364-7-722:2018      NOTE Approved as HD 60364-7-722:2018

IEC 60990:2016      NOTE Approved as EN 60990:2016 (not modified)

ISO 18246:2023      NOTE Approved as EN ISO 18246:2023 (not modified)

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## 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.cencenelec.eu](http://www.cencenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60309	series	Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes	EN IEC 60309	series
IEC 60364	series	Low-voltage electrical installations	HD 60364	series
IEC 60884	series	Plugs and socket-outlets for household and similar purposes	-	-
IEC 61850	series	Communication networks and systems for power utility automation	EN 61850	series
IEC/TS 61851-3-1	2023	Electric vehicles conductive charging system - Part 3-1: DC EV supply equipment where protection relies on double or reinforced insulation - General rules and requirements for stationary equipment	-	-
IEC/TS 61851-3-5	2023	Electric vehicles conductive charging system - Part 3-5: DC EV supply equipment where protection relies on double or reinforced insulation - Pre-defined communication parameters and general application objects	-	-
IEC/TS 61851-3-6	2023	Electric vehicles conductive charging system - Part 3-6: DC EV supply equipment where protection relies on double or reinforced insulation - Voltage converter unit communication	-	-
IEC/TS 61851-3-7	2023	Electric vehicles conductive charging system - Part 3-7: DC EV supply equipment where protection relies on double or reinforced insulation - Battery system communication	-	-
IEC/TS 62196-4	2022	Plugs, socket-outlets, vehicle connectors and vehicles inlet - Conductive charging of electric vehicles - Part 4: Dimensional compatibility and interchangeability requirements for DC pin and contact-tube accessories for class II or class III applications	-	-

**CLC IEC/TS 61851-3-4:2023 (E)**

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO/IEC 646	1991	Information technology - ISO 7-bit coded character set for information interchange	-	-
ISO/IEC 14443	series	Cards and security devices for personal identification - Contactless proximity objects	-	-
ISO/IEC 18092	2013	Information technology - Telecommunications and information exchange between systems - Near Field Communication - Interface and Protocol (NFCIP-1)	-	-
ISO 11898-2	2016	Road vehicles - Controller area network (CAN) - Part 2: High-speed medium access unit	-	-
ISO 11898-5	2007	Road vehicles - Controller area network (CAN) - Part 5: High-speed medium access unit with low-power mode	-	-
ISO 11898-6	2013	Road vehicles - Controller area network (CAN) - Part 6: High-speed medium access unit with selective wake-up functionality	-	-
CiA 302-1	2009	CANopen additional application layer functions - Part 1: General definitions	-	-
CiA 302-2	2009	CANopen additional application layer functions - Part 2: Network management	-	-
CiA 302-3	2010	CANopen additional application layer functions - Part 3: Configuration and program download	-	-
CiA 305	2013	CANopen layer setting services (LSS) and protocols Industrial communications subsystem based on ISO 11898 (CAN) for controller-device interfaces - Part 4: CANopen	-	2002
		Secondary lithium batteries for light EV (electric vehicle) applications - Part 1: General safety requirements and test methods	EN 50604-1	2016



# TECHNICAL SPECIFICATION



**Electric vehicles conductive charging system –  
Part 3-4: DC EV supply equipment where protection relies on double or  
reinforced insulation – General definitions and requirements for CANopen  
communication** (<https://standards.iteh.ai>)  
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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

ICS 43.120

ISBN 978-2-8322-5730-2

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRIC VEHICLES CONDUCTIVE CHARGING SYSTEM –****Part 3-4: DC EV supply equipment where protection relies  
on double or reinforced insulation – General definitions and  
requirements for CANopen communication****FOREWORD**

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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IEC TS 61851-3-4 has been prepared by IEC technical committee 69: Electrical power/energy transfer systems for electrically propelled road vehicles and industrial trucks. It is a Technical Specification.

The text of this Technical Specification is based on the following documents:

Draft	Report on voting
69/650/DTS	69/671/RVDTs 69/671A/RVDTs

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 Technical Specification is English.