
Električni pogonski sistemi z nastavljivo hitrostjo (PDS) - 9-2. del: Okoljsko primerna zasnova za motorne sisteme - Določitev in klasifikacija energijske učinkovitosti (IEC 61800-9-2:2023)

Adjustable speed electrical power drive systems (PDS) - Part 9-2: Ecodesign for motor systems - Energy efficiency determination and classification (IEC 61800-9-2:2023)

Drehzahlveränderbare elektrische Antriebe - Teil 9-2: Ökodesign für Antriebssysteme, Motorstarter, Leistungselektronik und deren angetriebene Einrichtungen - Indikatoren für die Energieeffizienz von Antriebssystemen und Motorstartern (IEC 61800-9-2:2023)

Entraînements électriques de puissance (PDS) à vitesse variable - Partie 9-2: Écoconception des systèmes moteurs - Détermination et classification de l'efficacité énergétique (IEC 61800-9-2:2023)

<https://standards.iteh.ai/SIST/78a16894-da7d-42fc-8fe8-b4ed98c15541/sist-en-iec-61800-9-2-2025>

<https://standards.iteh.ai/catalog/standards/sist/78a16894-da7d-42fc-8fe8-b4ed98c15541/sist-en-iec-61800-9-2-2025>

Ta slovenski standard je istoveten z: EN IEC 61800-9-2:2025

ICS:

27.015	Energijska učinkovitost. Ohranjanje energije na splošno	Energy efficiency. Energy conservation in general
29.200	Usmerniki. Pretvorniki. Stabilizirano električno napajanje	Rectifiers. Convertors. Stabilized power supply

SIST EN IEC 61800-9-2:2025**en,fr,de**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 61800-9-2

March 2025

ICS 29.160.30; 29.130.01; 29.200

Supersedes EN 61800-9-2:2017

English Version

**Adjustable speed electrical power drive systems (PDS) -
Part 9-2: Ecodesign for motor systems - Energy efficiency
determination and classification
(IEC 61800-9-2:2023)**

Entraînements électriques de puissance (PDS) à vitesse variable - Partie 9-2: Écoconception des systèmes moteurs - Détermination et classification de l'efficacité énergétique (IEC 61800-9-2:2023)

Drehzahlveränderbare elektrische Antriebe - Teil 9-2: Ökodesign für Antriebssysteme, Motorstarter, Leistungselektronik und deren angetriebene Einrichtungen - Indikatoren für die Energieeffizienz von Antriebssystemen und Motorstartern (IEC 61800-9-2:2023)

This European Standard was approved by CENELEC on 2023-11-24. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.



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

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

EN IEC 61800-9-2:2025 (E)**European foreword**

The text of document 22G/475/FDIS, future edition 2 of IEC 61800-9-2, prepared by SC 22G "Adjustable speed electric power drive systems (PDS)" of IEC/TC 22 "Power electronic systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61800-9-2:2025.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2026-03-31 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2028-03-31 document have to be withdrawn

This document supersedes EN 61800-9-2:2017 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

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 Standard IEC 61800-9-2:2023 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 60034 (series)	NOTE	Approved as EN IEC 60034 (series)
IEC/TS 60034-25	NOTE	Approved as CLC IEC/TS 60034-25
IEC 60146-1-1	NOTE	Approved as EN IEC 60146-1-1
IEC 60947-4-2	NOTE	Approved as EN IEC 60947-4-2
IEC 61800-1	NOTE	Approved as EN IEC 61800-1
IEC 61800-2	NOTE	Approved as EN IEC 61800-2
IEC 61800-3	NOTE	Approved as EN IEC 61800-3
IEC 61800-5-1	NOTE	Approved as EN IEC 61800-5-1
IEC 61800-9-1	NOTE	Approved as EN 61800-9-1

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.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60034-1	2022	Rotating electrical machines - Part 1: Rating and performance	-	-
IEC 60034-2-1	2014	Rotating electrical machines - Part 2-1: Standard methods for determining losses and efficiency from tests (excluding machines for traction vehicles)	EN 60034-2-1	2014
IEC 60034-2-3	2020	Rotating electrical machines - Part 2-3: Specific test methods for determining losses and efficiency of converter-fed AC motors	EN IEC 60034-2-3	2020
IEC 60034-30-1	2014	Rotating electrical machines - Part 30-1: Efficiency classes of line operated AC motors (IE code)	EN 60034-30-1	2014
IEC/TS 60034-30-2	2016	Rotating electrical machines - Part 30-2: Efficiency classes of variable speed AC motors (IE-code)	CLC IEC/TS 60034-30-2	2021
IEC/TS 60034-31	2021	Rotating electrical machines - Part 31: Selection of energy-efficient motors including variable speed applications - Application guidelines	CLC IEC/TS 60034-31	2024
IEC 60038 (mod) + AMD1	2009 -	IEC standard voltages	EN 60038 -	2011 -
IEC 60050-161	-	International Electrotechnical Vocabulary. Chapter 161: Electromagnetic compatibility	-	-
IEC 60947-4-1	2018	Low-voltage switchgear and controlgear - Part 4-1: Contactors and motor-starters - Electromechanical contactors and motor-starters	EN IEC 60947-4-1	2019

EN IEC 61800-9-2:2025 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-3-12	2011	Electromagnetic compatibility (EMC) - Part 3-12: Limits - Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current > 16 A and ≤ 75 A per phase	EN 61000-3-12	2011
IEC GUIDE 118	2017	Inclusion of energy efficiency aspects in electrotechnical publications	-	-

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[SIST EN IEC 61800-9-2:2025](https://standards.iteh.ai/catalog/standards/sist/78a16894-da7d-42fc-8fe8-b4ed98c15541/sist-en-iec-61800-9-2-2025)

<https://standards.iteh.ai/catalog/standards/sist/78a16894-da7d-42fc-8fe8-b4ed98c15541/sist-en-iec-61800-9-2-2025>



IEC 61800-9-2

Edition 2.0 2023-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE



GROUP ENERGY EFFICIENCY PUBLICATION

PUBLICATION GROUPÉE SUR L'EFFICACITÉ ÉNERGÉTIQUE

**Adjustable speed electrical power drive systems (PDS) –
Part 9-2: Ecodesign for motor systems – Energy efficiency determination and
classification**

**Entraînements électriques de puissance (PDS) à vitesse variable –
Partie 9-2: Écoconception des systèmes moteurs – Détermination et
classification de l'efficacité énergétique**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 29.130.01; 29.160.30; 29.200

ISBN 978-2-8322-7576-4

**Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**