



BSI Standards Publication

Adjustable speed electrical power drive systems (PDS)

Part 9-2: Ecodesign for motor systems — Energy
efficiency determination and classification

This is a preview of BS EN IEC 61800-9-2:2025+A1:2026. [Click here to purchase the full version from the ANSI store](#)

National foreword

This British Standard is the UK implementation of EN IEC 61800-9-2:2025+A1:2026. It is identical to IEC 61800-9-2:2023, incorporating amendment 1:2025. It supersedes BS EN IEC 61800-9-2:2025, which will be withdrawn on 28 February 2029.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by Ⓐ1 Ⓐ1.

The UK participation in its preparation was entrusted to Technical Committee PEL/22, Power electronics.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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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)

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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

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

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European foreword to amendment A1

The text of document 22G/522A/CDV, future edition 2 of IEC 61800-9-2/AMD1, 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/A1:2026.

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(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.

<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

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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	-	-

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