BS EN IEC 61800-2:2021

BSI Standards Publication

Adjustable speed electrical power drive systems

Part 2: General requirements — Rating specifications for adjustable speed AC power drive systems

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National foreword

This British Standard is the UK implementation of EN IEC 61800-2:2021. It is identical to IEC 61800-2:2021. It supersedes BS EN 61800-2:2015, which is withdrawn.

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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Amendments/corrigenda issued since publication

Date	Text affected

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61800-2

April 2021

ICS 29.160.30; 29.200

Supersedes EN 61800-2:2015 and all of its amendments and corrigenda (if any)

English Version

Adjustable speed electrical power drive systems - Part 2: General requirements - Rating specifications for adjustable speed AC power drive systems (IEC 61800-2:2021)

Entraînements électriques de puissance à vitesse variable - Partie 2: Exigences générales - Spécifications de dimensionnement pour entraînements électriques de puissance à vitesse variable en courant alternatif (IEC 61800-2:2021)

Drehzahlveränderbare elektrische Antriebe - Teil 2: Allgemeine Anforderungen - Festlegungen für die Bemessung von Niederspannungs-Wechselstrom-Antriebssystemen mit einstellbarer Frequenz (IEC 61800-2:2021)

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

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European foreword

The text of document 22G/432/FDIS, future edition 3 of IEC 61800-2, 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 61800-2:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-01-07
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-04-07

This document supersedes EN 61800-2:2015 and all of its amendments and corrigenda (if any).

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Endorsement notice

The text of the International Standard IEC 61800-2:2021 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 standards indicated:

IEC 60027-3	NOTE	Harmonized as EN 60027-3
IEC 60034-1	NOTE	Harmonized as EN 60034-1
IEC 60034-14	NOTE	Harmonized as EN IEC 60034-14
IEC 60034-18-31	NOTE	Harmonized as EN 60034-18-31
IEC/TS 60034-25	NOTE	Harmonized as CLC/TS 60034-25
IEC 60034-30 (series)	NOTE	Harmonized as EN 60034-30 (series)
IEC 60068-2-6	NOTE	Harmonized as EN 60068-2-6
IEC 60068-2-52	NOTE	Harmonized as EN IEC 60068-2-52
IEC 60068-2-68	NOTE	Harmonized as EN 60068-2-68
IEC 60068-2-78	NOTE	Harmonized as EN 60068-2-78
IEC 60076-1	NOTE	Harmonized as EN 60076-1

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IEC 60146 (series)	NOTE	Harmonized as EN 60146 (series)
IEC 60204-1	NOTE	Harmonized as EN 60204-1
IEC 60364 (series)	NOTE	Harmonized as HD 60364 (series)
IEC 60529	NOTE	Harmonized as EN 60529
IEC 60664-1	NOTE	Harmonized as EN IEC 60664-1
IEC 60721 (series)	NOTE	Harmonized as EN 60721 (series)
IEC 60721-2-6	NOTE	Harmonized as HD 478.2.6 S1
IEC 61131-2	NOTE	Harmonized as EN 61131-2
IEC 61158 (series)	NOTE	Harmonized as EN 61158 (series)
IEC 61378 (series)	NOTE	Harmonized as EN 61378 (series)
IEC 61378-1	NOTE	Harmonized as EN 61378-1
IEC 61439-1	NOTE	Harmonized as EN 61439-1
IEC 61800-1	NOTE	Harmonized as EN IEC 61800-1
IEC 61800-4:2002	NOTE	Harmonized as EN 61800-4:2003 (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.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60034	series	Rotating electrical machines	EN IEC 60034	series
IEC 60038	-	IEC standard voltages	EN 60038	-
IEC 60050-112	-	International Electrotechnical Vocabulary - Part 112: Quantities and units	-	-
IEC 60050-113	2011	International Electrotechnical Vocabulary - Part 113: Physics for electrotechnology	-	-
IEC 60050-114	-	International Electrotechnical Vocabulary - Part 114: Electrochemistry	-	-
IEC 60050-151	-	International Electrotechnical Vocabulary - Part 151: Electrical and magnetic devices	-	-
IEC 60050-161	-	International Electrotechnical Vocabulary. Chapter 161: Electromagnetic compatibility	-	-
IEC 60050-192	-	International electrotechnical vocabulary - Part 192: Dependability	-	-
IEC 60050-441	-	International Electrotechnical Vocabulary. Switchgear, controlgear and fuses	-	-
IEC 60050-442	-	International Electrotechnical Vocabulary - Part 442: Electrical accessories	-	-
IEC 60050-551	-	International Electrotechnical Vocabulary - Part 551: Power electronics	-	-

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Publication	Year	Title	EN/HD	Year
IEC 60050-601	-	International Electrotechnical Vocabulary. Chapter 601: Generation, transmission and distribution of electricity - General	-	-
IEC 60068	series	Environmental testing	EN 60068	series
IEC 60068-2-27	2008	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock	EN 60068-2-27	2009
IEC 60076	series	Power transformers	EN 60076	series
IEC 60076-11	-	Power transformers - Part 11: Dry-type transformers	EN IEC 60076-11	-
IEC 60079	series	Explosive atmospheres	-	-
IEC 60146-1-1	-	Semiconductor converters - General requirements and line commutated converters - Part 1-1: Specification of basic requirements	EN 60146-1-1	-
IEC/TR 60146-1-2	-	Semiconductor convertors - General requirements and line commutated convertors - Part 1-2: Application guide	-	-
IEC 60721-3-0	-	Classification of environmental conditions - Part 3-0: Classification of groups of environmental parameters and their severities - Introduction	EN IEC 60721-3-0	-
IEC 60721-3-1	1997	Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 1: Storage	EN 60721-3-1	1997
IEC 60721-3-2	1997	Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 2: Transportation	EN 60721-3-2	1997
IEC 60721-3-3	1994	Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 3: Stationary use at weatherprotected locations	EN 60721-3-3	1995
+ A1	1995		-	-
+ A2	1996		+ A2	1997

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Publication	Year	Title	EN/HD	Year
IEC 60721-3-4	1995	Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 4: Stationary use at non-weatherprotected locations	EN 60721-3-4	1995
+ A1	1996		+ A1	1997
IEC 61800-3	-	Adjustable speed electrical power drive systems - Part 3: EMC requirements and specific test methods	EN IEC 61800-3	-
IEC 61800-5-1	-	Adjustable speed electrical power drive systems - Part 5-1: Safety requirements - Electrical, thermal and energy	EN 61800-5-1	-
IEC 61800-5-2	2016	Adjustable speed electrical power drive systems - Part 5-2: Safety requirements - Functional	EN 61800-5-2	2017
IEC/TR 61800-6	-	Adjustable speed electrical power drive systems - Part 6: Guide for determination of types of load duty and corresponding current ratings	CLC/TR 61800-6	-
IEC 61800-7	series	Adjustable speed electrical power drive systems - Part 7: Generic interface and use of profiles for power drive systems	EN 61800-7	series
IEC 61800-7-1	-	Adjustable speed electrical power drive systems - Part 7-1: Generic interface and use of profiles for power drive systems - Interface definition	EN 61800-7-1	-
IEC/TS 61800-8	-	Adjustable speed electrical power drive systems - Part 8: Specification of voltage on the power interface	-	-
IEC 61800-9-1	-	Adjustable speed electrical power drive systems - Part 9-1: Ecodesign for power drive systems, motor starters, power electronics and their driven applications - General requirements for setting energy efficiency standards for power driven equipment using the extended product approach (EPA) and semi analytic model (SAM)	EN 61800-9-1	-
IEC 61800-9-2	-	Adjustable speed electrical power drive systems - Part 9-2: Ecodesign for power drive systems, motor starters, power electronics and their driven applications - Energy efficiency indicators for power drive systems and motor starters	EN 61800-9-2	-

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Publication	Year	Title	EN/HD	Year
IEC/TS 62578	2015	Power electronics systems and equipment - Operation conditions and characteristics of active infeed converter (AIC) applications including design recommendations for their emission values below 150 kHz	-	-

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