

Accionamientos eléctricos de potencia de velocidad variable. Parte 1: Especificaciones de dimensionamiento para sistemas de accionamiento de potencia en corriente continua y baja tensión. (Ratificada por la Asociación Española de Normalización en abril de 2021.)

UNE-EN IEC 61800-1:2021

Accionamientos eléctricos de potencia de velocidad variable. Parte 1: Especificaciones de dimensionamiento para sistemas de accionamiento de potencia en corriente continua y baja tensión. (Ratificada por la Asociación Española de Normalización en abril de 2021.)

Adjustable speed electrical power drive systems - Part 1: General requirements - Rating specifications for low voltage adjustable speed DC power drive systems (Endorsed by Asociación Española de Normalización in April of 2021.)

Entraînements électriques de puissance à vitesse variable - Partie 1: Exigences générales - Spécifications de dimensionnement pour systèmes d'entraînement de puissance à vitesse variable en courant continu et basse tension (Entérinée par l'Asociación Española de Normalización en avril 2021.)

En cumplimiento del punto 11.2.5.4 de las Reglas Internas de CEN/CENELEC Parte 2, se ha otorgado el rango de documento normativo español UNE al documento normativo europeo EN IEC 61800-1:2021 (Fecha de disponibilidad 2021-02-26)

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EUROPEAN STANDARD

EN IEC 61800-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2021

ICS 29.200

Supersedes EN 61800-1:1998 and all of its amendments
and corrigenda (if any)

English Version

**Adjustable speed electrical power drive systems - Part 1:
General requirements - Rating specifications for low voltage
adjustable speed DC power drive systems
(IEC 61800-1:2021)**

Entraînements électriques de puissance à vitesse variable -
Partie 1: Exigences générales - Spécifications de
dimensionnement pour systèmes d'entraînement de
puissance à vitesse variable en courant continu et basse
tension
(IEC 61800-1:2021)

Drehzahlveränderbare elektrische Antriebe - Teil 1:
Allgemeine Anforderungen - Festlegungen für die
Bemessung von Niederspannungs-Gleichstrom-
Antriebssystemen
(IEC 61800-1:2021)

This European Standard was approved by CENELEC on 2021-02-23. 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.

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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/430(F)/FDIS, future edition 2 of IEC 61800-1, 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 61800-1:2021.

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) 2021-11-23
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-02-23

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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 60034-6	NOTE Harmonized as EN 60034-6
IEC 60204-1	NOTE Harmonized as EN 60204-1
IEC 60364-1	NOTE Harmonized as HD 60364-1
IEC 61131-2	NOTE Harmonized as EN 61131-2
IEC 61439-1	NOTE Harmonized as EN 61439-1
IEC 61800-9 series	NOTE Harmonized as EN 61800-9 series
IEC 61800-9-1	NOTE Harmonized as EN 61800-9-1
IEC 61800-9-2	NOTE Harmonized as EN 61800-9-2

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	2017	Rotating electrical machines - Part 1:- Rating and performance		-
IEC 60034	series	Rotating electrical machines	-	-
IEC 60034-9	-	Rotating electrical machines - Part 9: Noise limits	EN 60034-9	-
IEC/TS 60034-25	-	Rotating electrical machines – Part 25: AC-electrical machines used in power drive systems – Application guide		-
IEC 60038	-	IEC standard voltages	EN 60038	-
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 60076-1	-	Power transformers - Part 1: General	EN 60076-1	-
IEC 60076-6	-	Power transformers - Part 6: Reactors	EN 60076-6	-
IEC 60076	series	Power transformers	EN 60076	series
IEC 60079	series	Explosive atmospheres	EN 60079	series
IEC/TS 60079-42	-	Explosive atmospheres - Part 42: Electrical-safety devices for the control of potential ignition sources for Ex-Equipment		-
IEC 60146-1-1	2009	Semiconductor converters - General requirements and line commutated converters - Part 1-1: Specification of basic requirements	EN 60146-1-1	2010
IEC 60364	series	Low-voltage electrical installations	HD 60364	series
IEC 60664-1	-	Insulation coordination for equipment within low-voltage supply systems - Part 1: Principles, requirements and tests	EN IEC 60664-1	-
IEC 60721-2-6	-	Classification of environmental conditions. Part 2: Environmental conditions appearing in nature. Earthquake vibration and shock	HD 478.2.6 S1	-
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 -EN 60721-3-3	1995
		Part 3: Classification of groups of environmental parameters and their severities - Section 3: Stationary use at weatherprotected locations	
+ A1	1995	-	-
+ A2	1996	+ A2	1997
IEC 60721-3-4	1995	Classification of environmental conditions -EN 60721-3-4	1995
		Part 3: Classification of groups of environmental parameters and their severities - Section 4: Stationary use at non-weatherprotected locations	
+ A1	1996	+ A1	1997
IEC 61158	series	Industrial communication networks -EN IEC 61158	series
		Fieldbus specifications	
IEC 61378	series	Converter transformers	EN 61378
IEC 61800-2	-	Adjustable speed electrical power driveEN 61800-2	series
		systems - Part 2: General requirements - Rating specifications for low voltage adjustable speed a.c. power drive systems	-
IEC 61800-3	-	Adjustable speed electrical power driveEN IEC 61800-3	-
		systems - Part 3: EMC requirements and specific test methods	
IEC 61800-5-1	-	Adjustable speed electrical power driveEN 61800-5-1	-
		systems - Part 5-1: Safety requirements - Electrical, thermal and energy	
IEC 61800-5-2	-	Adjustable speed electrical power driveEN 61800-5-2	-
		systems – Part 5-2: Safety requirements – Functional	
IEC/TR 61800-6	-	Adjustable speed electrical power driveCLC/TR 61800-6	-
		systems - Part 6: Guide for determination of types of load duty and corresponding current ratings	
IEC 61800-7	series	Adjustable speed electrical power driveEN 61800-7	series
		systems - Part 7-1: Generic interface and use of profiles for power drive systems - Interface definition	
IEC/TS 61800-8	-	Adjustable speed electrical power drive-	-
		systems – Part 8: Specification of voltage on the power interface	
IEC/TS 62578	-	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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