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Wind turbines -- Part 24: Lightning protection (IEC 61400-24:2010 (EQV))

I.S. EN 61400-24:2010

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S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

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Part 24: Lightning protection
(IEC 61400-24:2010)**

Eoliennes -
Partie 24: Protection contre la foudre
(CEI 61400-24:2010)

Windenergieanlagen -
Teil 24: Blitzschutz
(IEC 61400-24:2010)

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CENELEC

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

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Foreword

The text of document 88/366/FDIS, future edition 1 of IEC 61400-24, prepared by IEC TC 88, Wind turbines, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61400-24 on 2010-07-01.

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The following dates were fixed:

- latest date by which the EN has to be implemented
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Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61400-24:2010 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
-	-	Power installations exceeding 1 kV a.c.	HD 637 S1 + corr. June	1999 2005
-	-	Lightning Protection Components (LPC) - Part 1: Requirements for connection components	EN 50164-1	-
IEC 60060-1	1989	High-voltage test techniques - Part 1: General definitions and test requirements	HD 588.1 S1	1991
IEC 60068	Series	Environmental testing	EN 60068	Series
IEC 60071	Series	Insulation co-ordination	EN 60071	Series
IEC 60071-2	1996	Insulation co-ordination - Part 2: Application guide	EN 60071-2	1997
IEC 60099-4	-	Surge arresters - Part 4: Metal-oxide surge arresters without gaps for a.c. systems	EN 60099-4	-
IEC 60099-5	-	Surge arresters - Part 5: Selection and application recommendations	EN 60099-5	-
IEC 60204-1	-	Safety of machinery - Electrical equipment of machines - Part 1: General requirements	EN 60204-1	-
IEC 60204-11	-	Safety of machinery - Electrical equipment of machines - Part 11: Requirements for HV equipment for voltages above 1 000 V a.c. or 1 500 V d.c. and not exceeding 36 kV	EN 60204-11	-
IEC 60243-1	-	Electrical strength of insulating materials - Test methods - Part 1: Tests at power frequencies	EN 60243-1	-
IEC 60243-3	-	Electrical strength of insulating materials - Test methods - Part 3: Additional requirements for 1,2/50 μ s impulse tests	EN 60243-3	-
IEC 60364-4-44	-	Low voltage electrical installations - Part 4-44: Protection for safety - Protection against voltage disturbances and electromagnetic disturbances	HD 60364-4-444	-

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60364-5-53 + A1 (mod)	2001 2002	Electrical installations of buildings - Part 5-53: Selection and erection of electrical equipment - Isolation, switching and control	-	-
IEC 60464-2	-	Varnishes used for electrical insulation - Part 2: Methods of test	EN 60464-2	-
IEC/TS 60479-1	-	Effects of current on human beings and livestock - Part 1: General aspects	-	-
IEC/TR 60479-4	-	Effects of current on human beings and livestock - Part 4: Effects of lightning strokes on human beings and livestock	-	-
IEC 60587	-	Electrical insulating materials used under severe ambient conditions - Test methods for evaluating resistance to tracking and erosion	EN 60587	-
IEC 60664-1	-	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN 60664-1	-
IEC 61000-4-5	-	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	-
IEC/TR 61000-5-2	-	Electromagnetic compatibility (EMC) - Part 5: Installation and mitigation guidelines - Section 2: Earthing and cabling	-	-
IEC/TS 61400-23	-	Wind turbine generator systems - Part 23: Full-scale structural testing of rotor blades	-	-
IEC 61643-1	-	Low-voltage surge protective devices - Part 1: Surge protective devices connected to low-voltage power distribution systems - Requirements and tests	-	-
IEC 61643-12	-	Low-voltage surge protective devices - Part 12: Surge protective devices connected to low-voltage power distribution systems - Selection and application principles	CLC/TS 61643-12	-
IEC 61643-21	-	Low voltage surge protective devices - Part 21: Surge protective devices connected to telecommunications and signalling networks - Performance requirements and testing methods	EN 61643-21	-
IEC 61643-22	-	Low-voltage surge protective devices - Part 22: Surge protective devices connected to telecommunications and signalling networks - Selection and application principles	CLC/TS 61643-22	-
IEC 62153-4-3	-	Metallic communication cable test methods - Part 4-3: Electromagnetic Compatibility (EMC) - Surface transfer impedance - Triaxial method	-	-
IEC 62305-1	2006	Protection against lightning - Part 1: General principles	EN 62305-1 + corr. November	2006 2006
IEC 62305-2	2006	Protection against lightning - Part 2: Risk management	EN 62305-2 + corr. November	2006 2006

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62305-3 (mod)	2006	Protection against lightning -	EN 62305-3	2006
-	-	Part 3: Physical damage to structures and life hazard	+ corr. September + corr. November + A11	2008 2006 2009
IEC 62305-4	2006	Protection against lightning -	EN 62305-4	2006
		Part 4: Electrical and electronic systems within structures	+ corr. November	2006
ITU-T Recommendation K.20	-	Resistibility of telecommunication equipment installed in a telecommunications centre to overvoltages and overcurrents	-	-
ITU-T Recommendation K.21	-	Resistibility of telecommunication equipment installed in customer premises to overvoltages and overcurrents	-	-
ITU-T Recommendation K46	-	Protection of telecommunication lines using metallic symmetric conductors against lightning-induced surges	-	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

WIND TURBINES –

Part 24: Lightning protection

FOREWORD

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FDIS	Report on voting
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Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 61400 series, under the general title: *Wind turbines*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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