

SLOVENSKI STANDARD

SIST EN 61858:2008

01-december-2008

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Electrical insulation systems - Thermal evaluation of modifications to an established wire-wound EIS (IEC 61858:2008)

Elektrische Isoliersysteme - Thermische Bewertung von Veränderungen an einem erprobten, drahtgewickelten EIS (IEC 61858:2008)

Systèmes d'isolation électrique - Evaluation thermique des modifications apportées à un système d'isolation électrique éprouvé à enroulements à fil (CEI 61858:2008)

Ta slovenski standard je istoveten z: EN 61858:2008

ICS:

29.080.30 Izolacijski sistemi Insulation systems

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61858

October 2008

ICS 29.080.30

Supersedes EN 61858:2005

English version

**Electrical insulation systems -
Thermal evaluation of modifications to an established wire-wound EIS
(IEC 61858:2008)**

Systèmes d'isolation électriques -
Evaluation thermique des modifications
apportées à un système d'isolation
électrique éprouvé à enroulements à fil
(CEI 61858:2008)

Elektrische Isoliersysteme -
Thermische Bewertung
von Veränderungen an einem erprobten,
drahtgewickelten EIS
(IEC 61858:2008)

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This European Standard was approved by CENELEC on 2008-09-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 112/90/CDV, future edition 3 of IEC 61858, prepared by IEC TC 112, Evaluation and qualification of electrical insulating materials and systems, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61858 on 2008-09-01.

This European Standard supersedes EN 61858:2005.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2009-06-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2011-09-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61858:2008 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60317-24 NOTE Harmonized as EN 60317-24:1995 (not modified).

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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>
IEC 60085	2007	Electrical insulation - Thermal evaluation and designation	EN 60085	2008
IEC 60172	- ¹⁾	Test procedure for the determination of the temperature index of enamelled winding wires	EN 60172	1994 ²⁾
IEC 60216-5	- ¹⁾	Electrical insulating materials - Thermal endurance properties - Part 5: Determination of relative thermal endurance index (RTE) of an insulating material	EN 60216-5	2008 ²⁾
IEC 60317-3	- ¹⁾	Specifications for particular types of winding wires - Part 3: Polyester enamelled round copper wire, class 155	-	-
IEC 60317-4	- ¹⁾	Specifications for particular types of winding wires - Part 4: Solderable polyurethane enamelled round copper wire, class 130	EN 60317-4	1994 ²⁾
IEC 60317-7	- ¹⁾	Specifications for particular types of winding wires - Part 7: Polyimide enamelled round copper wire, class 220	HD 555.7 S2	1992 ²⁾
IEC 60317-8	- ¹⁾	Specifications for particular types of winding wires - Part 8: Polyesterimide enamelled round copper wire, class 180	EN 60317-8	1994 ²⁾
IEC 60317-13	- ¹⁾	Specifications for particular types of winding wires - Part 13: Polyester or polyesterimide overcoated with polyamide-imide enamelled round copper wire, class 200	EN 60317-13	1994 ²⁾
IEC 60317-15	- ¹⁾	Specifications for particular types of winding wires - Part 15: Polyesterimide enamelled round aluminium wire, class 180	EN 60317-15	2004 ²⁾
IEC 60317-16	- ¹⁾	Specifications for particular types of winding wires - Part 16: Polyester enamelled rectangular copper wire, class 155	HD 555.16 S2	1992 ²⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60317-19	- ¹⁾	Specifications for particular types of winding wires - Part 19: Solderable polyurethane enamelled round copper wire overcoated with polyamide, class 130	EN 60317-19	1995 ²⁾
IEC 60317-20	- ¹⁾	Specifications for particular types of winding wires - Part 20: Solderable polyurethane enamelled round copper wire, class 155	EN 60317-20	1995 ²⁾
IEC 60317-21	- ¹⁾	Specifications for particular types of winding wires - Part 21: Solderable polyurethane enamelled round copper wire overcoated with polyamide, class 155	EN 60317-21	1995 ²⁾
IEC 60317-22	- ¹⁾	Specifications for particular types of winding wires - Part 22 : Polyester or polyesterimide enamelled round copper wire overcoated with polyamide, class 180	EN 60317-22	2004 ²⁾
IEC 60317-23	- ¹⁾	Specifications for particular types of winding wires - Part 23: Solderable polyesterimide enamelled round copper wire, class 180	EN 60317-23	1995 ²⁾
IEC 60317-25	- ¹⁾	Specifications for particular types of winding wires - Part 25: Polyester or polyesterimide overcoated with polyamide-imide enamelled round aluminium wire, class 200	EN 60317-25	1996 ²⁾
IEC 60317-29	- ¹⁾	Specifications for particular types of winding wires - Part 29: Polyester or polyesterimide overcoated with polyamide-imide enamelled rectangular copper wire, class 200	EN 60317-29	1996 ²⁾
IEC 60317-30	- ¹⁾	Specifications for particular types of winding wires - Part 30: Polyimide enamelled rectangular copper wire, class 220	EN 60317-30	1996 ²⁾
IEC 60317-34	- ¹⁾	Specifications for particular types of winding wires - Part 34: Polyester enamelled round copper wire, class 130 L	-	-
IEC 60317-42	- ¹⁾	Specifications for particular types of winding wires - Part 42: Polyester-amide-imide enamelled round copper wire, class 200	EN 60317-42	1997 ²⁾
IEC 60317-46	- ¹⁾	Specifications for particular types of winding wires - Part 46: Aromatic polyimide enamelled round copper wire, class 240	EN 60317-46	1997 ²⁾
IEC 60317-47	- ¹⁾	Specifications for particular types of winding wires - Part 47: Aromatic polyimide enamelled rectangular copper wire, class 240	EN 60317-47	1997 ²⁾

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60317-51	- ¹⁾	Specifications for particular types of winding wires - Part 51: Solderable polyurethane enamelled round copper wire, class 180	EN 60317-51	2001 ²⁾
IEC 60505	- ¹⁾	Evaluation and qualification of electrical insulation systems	EN 60505	2004 ²⁾
IEC 61033	- ¹⁾	Test methods for the determination of bond strength of impregnating agents to an enamelled wire substrate	EN 61033	2006 ²⁾
IEC 61857	Series	Electrical insulation systems - Procedures for thermal evaluation	EN 61857	Series
IEC 61857-1	- ¹⁾	Electrical insulation systems - Procedures for thermal evaluation - Part 1: General requirements - Low-voltage	EN 61857-1	2005 ²⁾

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Electrical insulation systems – Thermal evaluation of modifications to an established wire-wound EIS

Systèmes d'isolation électriques – Evaluation thermique des modifications apportées à un système d'isolation électrique éprouvé à enroulements à fil

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICAL INSULATION SYSTEMS – THERMAL EVALUATION OF MODIFICATIONS TO AN ESTABLISHED WIRE-WOUND EIS

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61858 has been prepared by IEC technical committee 112: Evaluation and qualification of electrical insulating materials and systems.

This third edition cancels and replaces the second edition, published in 2004 by IEC TC 98: Electrical insulation systems (EIS). It constitutes an editorial revision.

The text of this standard is based on the following documents:

CDV	Report on voting
112/90/CDV	112/98/RVC

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.