SVENSK STANDARD

SS-EN IEC 61442+A11, utg 2:2025

2025-02-05

REDLINE VERSION

Kraftkablar – Provning av skarvar och avslutningar för kablar med märkspänning från 6 kV (U_m = 7,2 kV) till 30 kV (U_m = 36 kV)

Test methods for accessories for power cables with rated voltages from 6 kV (U_m = 7,2 kV) up to 30 kV (U_m = 36 kV)

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IEC 61442

Edition 3.0 2023-10
REDLINE VERSION

INTERNATIONAL STANDARD

colour inside

Test methods for accessories for power cables with rated voltages from 6 kV (U_m = 7,2 kV) up to 30 kV (U_m = 36 kV)

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 19.080, 29.060.20

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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TEST METHODS FOR ACCESSORIES FOR POWER CABLES WITH RATED VOLTAGES FROM 6 kV (U_m = 7,2 kV) UP TO 30 kV (U_m = 36 kV)

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This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 61442:2005. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

IEC 61442 has been prepared by IEC technical committee 20: Electric cables. It is an International Standard.

This third edition cancels and replaces the second edition published in 2005. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

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The text of this International Standard is based on the following documents:

Draft	Report on voting
20/2108/FDIS	20/2132/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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TEST METHODS FOR ACCESSORIES FOR POWER CABLES WITH RATED VOLTAGES FROM 6 kV (U_m = 7,2 kV) UP TO 30 kV (U_m = 36 kV)

1 Scope

This document specifies the test methods applicable for type testing accessories for power cables with rated voltages from 3,6/6 (7,2) kV up to 18/30 (36) kV. The test methods specified in this document apply to accessories for extruded and paper insulated cables according to IEC 60502-2 and IEC 60055-1 respectively.

2 Normative references

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.

~~IEC 60055-1: *Paper-insulated metal-sheathed cables for rated voltages up to 18/30 kV (with copper or aluminium conductors and excluding gas-pressure and oil-filled cables) – Part 1: Tests on cables and their accessories*~~

IEC 60060-1:~~1989~~2010, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60230:~~1966~~2018, *Impulse tests on cables and their accessories*
IEC 60230:2018/AMD1:2021

IEC 60270:2000, *High-voltage test techniques – Partial discharge measurements*
IEC 60270:2000/AMD1:2015

~~IEC 60502-2:2005, *Power cables with extruded insulation and their accessories for rated voltages from 1 kV (U_m = 1,2 kV) up to 30 kV (U_m = 36 kV) – Part 2: Cables for rated voltages from 6 kV (U_m = 7,2 kV) up to 30 kV (U_m = 36 kV)*~~

~~IEC 60811-1-2:1985, *Common test methods for insulating and sheathing materials of electric and optical cables – Part 1: Methods for general application – Section Two: Thermal ageing methods*~~

IEC 60811-401:2012, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 401: Miscellaneous tests – Thermal ageing methods – Ageing in an air oven*
IEC 60811-401:2012/AMD1:2017

IEC 60885-2:1987[1], *Electrical test methods for electric cables – Part 2: partial discharge tests*

~~IEC 60885-3:1988, *Electrical test methods for electric cables – Part 3: Test methods for partial discharge measurements on lengths of extruded power cables*~~

~~IEC 60986:2000, *Short-circuit temperature limits of electric cables with rated voltages from 6 kV (U_m = 7,2 kV) up to 30 kV (U_m = 36 kV)*~~

[1] Withdrawn.

~~IEC 61238-1:2003, *Compression and mechanical connectors for power cables for rated voltages up to 30 kV (U_m = 36 kV) – Part 1: Test methods and requirements*~~

IEC 61238-1-3:2018, *Compression and mechanical connectors for power cables – Part 1-3: Test methods and requirements for compression and mechanical connectors for power cables for rated voltages above 1 kV (U_m = 1,2 kV) up to 30 kV (U_m = 36 kV) tested on non-insulated conductors*

IEC 60949:1988, *Calculation of thermally permissible short-circuit currents, taking into account non-adiabatic heating effects*
IEC 60949:1988/AMD1:2008

SVENSK STANDARD

SS-EN IEC 61442+A11, utg 2:2025

Fastställd	Sida	Ansvarig kommitté
2025-02-05	1 (40)	SEK TK 20

Kraftkablar – Provning av skarvar och avslutningar för kablar med märkspänning från 6 kV (U_m = 7,2 kV) till 30 kV (U_m = 36 kV)

Test methods for accessories for power cables with rated voltages from 6 kV (U_m = 7,2 kV) up to 30 kV (U_m = 36 kV)

Som svensk standard gäller europastandarden EN IEC 61442:2024. Den svenska standarden innehåller de officiella engelska språkversionerna av EN IEC 61442:2024 och EN IEC 61442:2024/A11:2024.

Nationellt förord

Europastandarden EN IEC 61442:2024

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 61442, Third edition, 2023 - Test methods for accessories for power cables with rated voltages from 6 kV (U_m = 7,2 kV) up to 30 kV (U_m = 36 kV)**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 61442, utg 1:2006 med eventuella tillägg, ändringar och rättelser gäller ej fr o m 2027-12-31.

ICS 19.080.00; 29.060.20

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61442

December 2024

ICS 19.080; 29.060.20

Supersedes EN 61442:2005

English Version

Test methods for accessories for power cables with rated voltages from 6 kV (Um = 7,2 kV) up to 36 kV (Um = 42 kV) (IEC 61442:2023)

Méthodes d'essais des accessoires de câbles d'énergie de tensions assignées de 6 kV (Um = 7,2 kV) à 36 kV (Um = 42 kV)
(IEC 61442:2023)

Prüfverfahren für Starkstromkabelgarnituren mit einer Nennspannung von 6 kV (Um = 7,2 kV) bis 30 kV (Um = 36 kV)
(IEC 61442:2023)

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

Ref. No. EN IEC 61442:2024 E

SEK Svensk Elstandard

SS-EN IEC 61442+A11, utg 2:2025

European foreword

The text of document 20/2108/FDIS, future edition 3 of IEC 61442, prepared by TC 20 "Electric cables" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61442:2024.

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)	2025-12-31
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2027-12-31

This document supersedes EN 61442:2005 and all of its amendments and corrigenda (if any).

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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 61442:2023 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 60228	NOTE	Approved as EN IEC 60228
IEC 60507:2013	NOTE	Approved as EN 60507:2014 (not modified)
IEC 62475:2010	NOTE	Approved as EN 62475:2010 (not modified)

IEC 61442

Edition 3.0 2023-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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