ICS 19.080, 29.060.20 SLOVENSKÁ TECHNICKÁ NORMA Apríl 2025

STN	**Skúšobné metódy pre káblové súbory na menovité napätie od 6 kV (U_m = 7,2 kV) do 36 kV (U_m = 42 kV) vrátane**	**STN EN IEC 61442** 34 7005

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

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/25

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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

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2027-12-31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

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INTERNATIONAL STANDARD

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Test methods for accessories for power cables with rated voltages from 6 kV (U_m = 7,2 kV) up to 36 kV (U_m = 42 kV)

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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)

FOREWORD

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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:

a) 4.6 – the option to start tests immediately has been included;
b) 4.11 – methods for testing on belted cables have been included;
c) 5.3.2 and 10.3 – details of insulation resistance testing has been added;
d) 8.2 – pre-stress with slightly increased test voltage before applying the partial discharge test has been included;
e) 11.2 – testing of accessories with external earthing devices has been included;
f) 11.2 – short-circuit duration and maximum kA levels have been added;

g) 11.2 – temperature measurement is not required if the time between short-circuits > 1 h.

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.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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

IEC 60230:2018, *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 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 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

[1] Withdrawn.