

STN	Distribučné káble s vytlačanou izoláciou pre menovité napätia od 3,6/6 (7,2) kV do 20,8/36 (42) kV vrátane	STN 34 7405 34 7405
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Distribution cables with extruded insulation for rated voltages from 3,6/6 (7,2) kV up to and including 20,8/36 (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. 05/23

Obsahuje: HD 620 S3:2023

Oznámením tejto normy sa od 13.03.2026 ruší
STN 34 7405 z júna 2010

136912

HARMONIZATION DOCUMENT

HD 620 S3

DOCUMENT D'HARMONISATION

HARMONISIERUNGSDOKUMENT

March 2023

ICS 29.060.20

Supersedes HD 620 S2:2010

English Version

**Distribution cables with extruded insulation for rated voltages
from 3,6/6 (7,2) kV up to and including 20,8/36 (42) kV**

Câbles de distribution, à isolation extrudée, pour des tensions assignées de 3,6/6 (7,2) kV à 20,8/36 (42) kV inclus

Energieverteilungskabel mit extrudierter Isolierung für Nennspannungen von 3,6/6 (7,2) kV bis einschließlich 20,8/36 (42) kV

This Harmonization Document was approved by CENELEC on 2023-03-13. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for implementation of this Harmonization Document at national level.

Up-to-date lists and bibliographical references concerning such national implementations may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This Harmonization Document exists in three official versions (English, French, German).

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



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

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Part 0

Foreword

This document (HD 620 S3:2023) has been prepared by WG 9 of CLC/TC 20, "Electric cables".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2024-03-13
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2026-03-13

This document supersedes HD 620 S2:2010 and all of its amendments and corrigenda (if any).

HD 620 S3:2023 includes the following significant technical changes with respect to HD 620 S2:2010:

- a new Part 12 has been added to include thermoplastic insulations operating at 90°C.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

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.

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- 10-I1 Triplexed medium voltage cables, aluminium conductor with XLPE insulation of reduced thickness, aluminium tape screen and PE outer sheath for direct burying
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- 10-O XLPE insulated cables: 11 kV and 33 kV copper wire screened with PE or polyolefine sheath, and 33 kV lead sheathed with PE oversheath
- 10-P Cables with PVC sheath laid up around an earth conductor (Type 10P-1 and Type 10P-2), cables with PVC sheath laid around a messenger (Type 10P-3)
- 10-R Cables with XLPE insulation, PE or PVC sheath

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- 11-N EPR insulated cables with PE sheath (Type 11N)
- 11-O EPR insulated cables: 11 kV and 33 kV copper wire screened with PE or polyolefine sheath

PART 12 PP-TPE insulated single core, single core reassembled, and three core cables

- 12-I Triplexed medium voltage cables, aluminium conductor with PP-TPE insulation of reduced thickness, aluminium tape screen and PE outer sheath for direct burying
- 12-J Single core and three core cables with PE sheath (Type 12J-1) or PVC sheath (Type 12J-2) or PVC-flame retardant sheath (Type 12J-3)
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HD 620 S3:2023

**DISTRIBUTION CABLES WITH EXTRUDED INSULATION FOR RATED VOLTAGES
FROM 3,6/6 (7,2) kV UP TO AND INCLUDING 20,8/36 (42) kV**

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GENERAL REQUIREMENTS**

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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.

EN 60228	Conductors of insulated cables (IEC 60228)
EN 60229	Electric cables – Tests on extruded oversheaths with a special protective function (IEC 60229)
EN 60332-1-2	Tests on electric and optical fibre cables under fire conditions – Part 1-2: Test for vertical flame propagation for a single insulated wire or cable – Procedure for 1 kW pre-mixed flame (IEC 60332-1-2)
EN 60811 series	Insulating and sheathing materials of electric and optical cables – Common test methods (IEC 60811 series)
EN 60885-3	Electrical test methods for electric cables – Part 3: Test methods for partial discharge measurements on lengths of extruded power cables (IEC 60885-3)
HD 605	Electric cables – Additional test methods
HD 632	Power cables with extruded insulation and their accessories for rated voltages above 36 kV ($U_m = 42$ kV) up to 150 kV ($U_m = 170$ kV)
IEC 60183	Guide to the selection of high-voltage cables
IEC 60287 series	Electric cables – Calculation of the current rating

1 General

1.1 Scope

HD 620 applies to cables with extruded insulation and for rated voltages $U_0/U(U_m)$ from 3,6/6 (7,2) kV up to 20,8/36(42) kV used in power distribution systems of voltages not exceeding the maximum r.m.s. value of the system voltage U_m .

This Part (Part 1) specifies the general requirements applicable to these cables, unless otherwise specified in the particular sections of this HD.

The particular types of cables are specified in Parts 9 to 12.

NOTE Parts 3, 4, 5, 6, 7 and 8 were withdrawn in HD 620 S2.

1.2 Object

The objects of this Harmonisation Document are:

- to standardise cables that are safe and reliable when properly used, in relation to the technical requirements of the system of which they form a part;
- to state the characteristics and manufacturing requirements which have a direct or indirect bearing on safety;
- and to specify methods for checking conformity with those requirements.

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