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**Vodniki za nadzemne vode - Z vlakni ojačeno kompozitno jedro, ki se uporablja kot nosilni element - 1.del: Kompozitna jedra s polimerno matriko (IEC/TS 62818-1:2024)**

Conductors for overhead lines - Fiber reinforced composite core used as supporting member material - Part 1: Polymeric matrix composite cores (IEC/TS 62818-1:2024)

Leiter für Freileitungen - Kern aus faserverstärktem Verbundwerkstoff als tragendes Material - Teil 1: Kerne aus Polymermatrix-Verbundwerkstoff (IEC/TS 62818-1:2024)

Conducteurs pour lignes aériennes - Noyau composite renforcé par fibres, utilisé en tant que matériau de support - Partie 1: Noyaux composites à matrice polymère (IEC/TS 62818-1:2024)

**Ta slovenski standard je istoveten z: CLC IEC/TS 62818-1:2026**

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**ICS:**

29.240.20      Daljnovodi      Power transmission and distribution lines

**SIST-TS CLC IEC/TS 62818-1:2026      en,fr,de**

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TECHNICAL SPECIFICATION  
SPÉCIFICATION TECHNIQUE  
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**CLC IEC/TS 62818-1**

February 2026

ICS 29.240.20

English Version

**Conductors for overhead lines - Fiber reinforced composite core  
used as supporting member material - Part 1: Polymeric matrix  
composite cores  
(IEC/TS 62818-1:2024)**

Conducteurs pour lignes aériennes - Âme composite  
renforcé par fibres, utilisé en tant que matériau de support -  
Partie 1: Âmes composites à matrice polymère  
(IEC/TS 62818-1:2024)

Leiter für Freileitungen - Kern aus faserverstärktem  
Verbundwerkstoff als tragendes Material - Teil 1: Kerne aus  
Polymermatrix-Verbundwerkstoff  
(IEC/TS 62818-1:2024)

This Technical Specification was approved by CENELEC on 2026-02-09.

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Ref. No. CLC IEC/TS 62818-1:2026 E

## CLC IEC/TS 62818-1:2026 (E)

### European foreword

This document (CLC IEC/TS 62818-1:2026) consists of the text of document IEC/TS 62818-1:2024, prepared by IEC/TC 7 "Overhead electrical conductors".

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.

### Endorsement notice

The text of the International Technical Specification IEC/TS 62818-1:2024 was approved by CENELEC as a European Technical Specification without any modification.

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

ISO 6721-1:2019 NOTE Approved as EN ISO 6721-1:2019 (not modified)

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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cencenelec.eu](http://www.cencenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-11	2021	Environmental testing - Part 2-11: Tests - Test Ka: Salt mist	EN IEC 60068-2-11	2021
IEC 60216-1	2013	Electrical insulating materials - Thermal endurance properties - Part 1: Ageing procedures and evaluation of test results	EN 60216-1	2013
IEC 60468	1974	Method of measurement of resistivity of metallic materials	-	-
ISO 527-5	2021	Plastics - Determination of tensile properties - Part 5: Test conditions for unidirectional fibre-reinforced plastic composites	EN ISO 527-5	2021
ISO 4892-2	2013	Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps	EN ISO 4892-2	2013
ISO 11358-1	2022	Plastics - Thermogravimetry (TG) of polymers - Part 1: General principles	EN ISO 11358-1	2022

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# TECHNICAL SPECIFICATION



**Conductors for overhead lines – Fiber reinforced composite core used as supporting member material –  
Part 1: Polymeric matrix composite cores**

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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONDUCTORS FOR OVERHEAD LINES – FIBER REINFORCED  
COMPOSITE CORE USED AS SUPPORTING MEMBER MATERIAL –****Part 1: Polymeric matrix composite cores**

## FOREWORD

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IEC TS 62818-1 has been prepared by IEC technical committee 7: OVERHEAD ELECTRICAL CONDUCTORS. It is a Technical Specification.

The text of this Technical Specification is based on the following documents:

Draft	Report on voting
7/752/DTS	7/754/RVDTS

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 Technical Specification is English.

A list of all parts in the IEC 62818 series, published under the general title *Conductors for overhead lines – Fiber reinforced composite core used as supporting member material*, can be found on the IEC website.

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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

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## INTRODUCTION

The first conductors using a composite core were installed in the early 2000s. Since then, they have been increasingly used by utilities worldwide. As a result, there is a need for an IEC publication to agree on tests methods to qualify these cores.

Because of the variety of products used for this purpose, this document does not set minima or maxima (usually provided by the manufacturer), but rather standardizes testing methods to ascertain the numerical values of the basic properties needed by the purchaser to choose the right supporting member material according to the properties of the overhead lines conductors. Future discussion items for review may include performance level and acceptance criteria, other ageing tests and criteria or other relevant tests.

In a future document, tests on the complete conductor which include the composite core will be covered in detail (for example salt fog, corrosion test, mechanical tests, thermal tests, flexural under tension, etc.).

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