

This is a preview of "BS EN 2854-003:2021". [Click here to purchase the full version from the ANSI store.](#)



BSI Standards Publication

**Aerospace series — Cables, electrical for
general purpose — Operating temperatures
between -55 °C and 260 °C**

Part 003: Product standard

This is a preview of "BS EN 2854-003:2021". [Click here to purchase the full version from the ANSI store.](#)

National foreword

This British Standard is the UK implementation of EN 2854-003:2021. It supersedes BS EN 2854-003:2009, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ACE/6, Aerospace avionic electrical and fibre optic technology.

A list of organizations represented on this committee can be obtained on request to its committee manager.

Contractual and legal considerations

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

© The British Standards Institution 2021
Published by BSI Standards Limited 2021

ISBN 978 0 539 12065 3

ICS 49.060

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 June 2021.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

EUROPÄISCHE NORM

June 2021

ICS 49.060

Supersedes EN 2854-003:2009

English Version

Aerospace series - Cables, electrical for general purpose - Operating temperatures between -55 °C and 260 °C - Part 003: Product standard

Série aérospatiale - Câbles électriques d'usage
général - Températures de fonctionnement comprises
entre -55 °C et 260 °C - Partie 003 : Norme de produit

Luft- und Raumfahrt - Elektrische Leitungen für
allgemeine Verwendung - Betriebstemperaturen
zwischen -55 °C und 260 °C - Teil 003: Produktnorm

This European Standard was approved by CEN on 17 February 2020.

CEN 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 CEN-CENELEC Management Centre or to any CEN 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 CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

This is a preview of "BS EN 2854-003:2021". [Click here to purchase the full version from the ANSI store.](#)

Contents		Page
European foreword		iii
1	Scope	4
2	Normative references	4
3	Terms and definitions	4
4	Materials and construction	4
4.1	Materials	4
4.2	Construction	5
4.3	Number of cores	5
4.4	Colour coding of cores	5
5	Required characteristics	5
6	Quality assurance	7
7	Designation	7
7.1	Identification	7
7.2	Type code (for short designation)	8
8	Identification and marking	8
9	Packaging, labelling and delivery lengths	8
10	Technical specification	8
Bibliography		9

This is a preview of "BS EN 2854-003:2021". [Click here to purchase the full version from the ANSI store.](#)

European foreword

This document (EN 2854-003:2021) has been prepared by the Aerospace and Defence Industries Association of Europe — Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2021, and conflicting national standards shall be withdrawn at the latest by December 2021.

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

This document supersedes EN 2854-003:2009.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this document: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

This is a preview of "BS EN 2854-003:2021". Click here to purchase the full version from the ANSI store.

1 Scope

This document specifies the characteristics of electrical cables for use in the on-board electrical systems of aircraft at operating temperatures between -55 °C and 260 °C for cross sections equal to and greater than 5 mm^2 .

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.

EN 2083, *Aerospace series - Copper and copper alloys conductors for electrical cables - Product standard*

EN 2084, *Aerospace series - Cables, electrical, general purpose, with conductors in copper or copper alloy - Technical specification*

EN 2235, *Aerospace series - Single and multicore electrical cables, screened and jacketed - Technical specification*, ¹⁾

EN 2854-002, *Aerospace series - Cables, electrical for general purpose - Operating temperatures between -55 °C and 260 °C - Part 002: General*

EN 3475, ²⁾ *Aerospace series — Cables, electrical, aircraft use — Test methods*

EN 4434, *Aerospace series - Copper or copper alloy lightweight conductors for electrical cables - Product standard (Normal and tight tolerances)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 3475-100 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Materials and construction

4.1 Materials

Conductor

See EN 2854-002.

Insulation

For all conductor size codes:

Taped layers of polyimide/PTFE/glass fibre impregnated with PTFE/PTFE.

1)) Published as ASD-STAN Standard at the date of publication of this standard by AeroSpace and Defence industries Association of Europe — Standardization (ASD-STAN), <https://www.asd-stan.org/>.

2) All parts quoted in this document.