SLOVENSKI STANDARD
SIST EN 2854-002:2009

01-oktober-2009

Aeronavtika - Elektriļ ni kabli za sploģno uporabo - Prerez, enak ali veļ ji od 9 mm2 - Delovne temperature med -55 ĆC in 260 ĆC - 002. del: Sploģno

Aerospace series - Cables, electrical for general purpose - Cross sections equal to and greater than 9 mm² - Operating temperatures between - 55 °C and 260 °C - Part 002: General

Luft- und Raumfahrt - Elektrische Leitungen für allgemeine Verwendung - Querschnitte 9 mm² und größer - Betriebstemperaturen zwischen – 55 °C und 260 °C - Teil 002: Allgemeines

Série aérospatiale - Câbles électriques d'usage général - Sections supérieures ou égales à 9 mm² - Températures de fonctionnement comprises entre - 55 °C et 260 °C - Partie 002: Généralités

Ta slovenski standard je istoveten z: **EN 2854-002:2009**

ICS:

49.060	Letalska in vesoljska elektriļ na oprema in sistemi	Aerospace electric equipment and systems

SIST EN 2854-002:2009 **en,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 2854-002

July 2009

ICS 49.060

English Version

Aerospace series - Cables, electrical for general purpose - Cross sections equal to and greater than 9 mm² - Operating temperatures between - 55 °C and 260 °C - Part 002: General

Série aérospatiale - Câbles électriques d'usage général - Sections supérieures ou égales à 9 mm² - Températures de fonctionnement comprises entre - 55 °C et 260 °C - Partie 002: Généralités

Luft- und Raumfahrt - Elektrische Leitungen für allgemeine Verwendung - Querschnitte 9 mm² und größer - Betriebstemperaturen zwischen - 55 °C und 260 °C - Teil 002: Allgemeines

This European Standard was approved by CEN on 4 July 2008.

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 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 Management Centre has the same status as the official versions.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 2854-002:2009) 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 Standard 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 European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2010, and conflicting national standards shall be withdrawn at the latest by January 2010.

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

1 Scope

This standard specifies the list of product standards and common characteristics of electrical cables for use in the on-board electrical systems of aircraft at operating temperatures between – 55 °C and 260 °C (except otherwise specified in product standards) for cross sections equal to and greater than 9 mm^2.

2 Normative references

The following referenced documents are indispensable for the application 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 or copper alloys conductors for electrical cables — Product standard*

EN 2084, *Aerospace series — Cables, electric, single-core, general purpose, with conductors in copper or copper alloy — Technical specification*

EN 2854-003, *Aerospace series — Cables, electrical for general purpose — Cross sections equal to and greater than 9 mm^2 — Operating temperatures between – 55 °C and 260 °C — Part 003: Product standard*

EN 3475-100, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 100: General*

EN 3838, *Aerospace series — Requirements and tests on user-applied markings on aircraft electrical cables* [1)]

TR 6058, *Aerospace series — Cable code identification list* [2)]

3 Terms and definitions

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

4 List of product standards

EN 2854-003, *Aerospace series — Cables, electrical for general purpose — Cross sections equal to and greater than 9 mm^2 — Operating temperatures between – 55 °C and 260 °C — Part 003: Product standard.*

5 Materials and construction

5.1 Materials

These cable conductors shall be made of nickel-plated copper according to EN 2083 code D (except otherwise specified in product standards).

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1) Published as ASD Prestandard at the date of publication of this standard.

2) Published as ASD Technical Report at the date of publication of this standard.

5.2 Construction

5.2.1 Number of cores

See Table 1.

Table 1

Number of cores	1	2	3	4	5	6	7	8	9	10
Code	A	B	C	D	E	F	G	H	J	K
Factor for overall dimensions	–	2,00	2,15	2,40	2,70	3,00	3,00	3,30	3,60	4,00

For two cores or more:

— factor for mass: 1,03;

— factor for ohmic resistance: 1,03.

5.2.2 Colour coding of single core cables

See Table 2.

Table 2

Code	Colour [a]
A	Red (2)
B	Blue (6)
C	Yellow (4)
D	Green (5)
E	White (9)
F	Black (0)
G	Brown (1)
H	Orange (3)
J	Purple (7)
K	Grey (8)
L	Not yet allocated
M	
N	
P	
Q	
R	
S	
T	
U	
V	
W	

[a] For information: international colour code

Preferred colour: white

5.2.3 Colour coding of unscreened, unjacketed multicore cables

See Tables 3 and 4.

Table 3 — Code P

Number of cores in cables	Colours									
2	Red	Blue								
3	Red	Blue	Yellow							
4	Red	Blue	Yellow	Green						
5	Red	Blue	Yellow	Green	White					
6	Red	Blue	Yellow	Green	White	Black				
7	Red	Blue	Yellow	Green	White	Black	Brown			
8	Red	Blue	Yellow	Green	White	Black	Brown	Orange		
9	Red	Blue	Yellow	Green	White	Black	Brown	Orange	Purple	
10	Red	Blue	Yellow	Green	White	Black	Brown	Orange	Purple	Grey

Table 4 — Code R

Number of cores in cables	Colours			
2	White	Blue		
3	White	Blue	Yellow	
4	White	Blue	Yellow	Green

6 Identification and marking

The identification and marking of cables by the manufacturer shall be in accordance with EN 2084.

As the designation, required for orders, is generally too long, for use in electrical drawings a shorter cross designation (without colour information) is given in TR 6058 plus the corresponding AWG.

EXAMPLE Designation: EN 2854-003A090A
Cross reference: DG 8