INTERNATIONAL STANDARD

ISO 8843

Second edition 2005-07-01

Aircraft — Crimp-removable contacts for electrical connectors — Identification system

Aéronefs — Contacts à sertir amovibles pour connecteurs électriques — Système d'identification

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 8843 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 1, *Aerospace electrical requirements*.

This second edition cancels and replaces the first edition (ISO 8843:1991), which has been technically revised. (standards.iteh.ai)

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Aircraft — Crimp-removable contacts for electrical connectors — Identification system

1 Scope

This International Standard establishes a system for identifying crimp-removable contacts for electrical connectors. The system specified in this International Standard consists of two colour bands around the external diameter of the crimp barrel and, for thermocouple or high-temperature contacts, of additional letters or of a colour point; the system, however, does not preclude further means being used to identify additional parameters, such as cable size and material.

This contact identification system applies, when specified, to ISO standard contacts. The use of the system is recommended for contacts of both the preferred and non-preferred types. In contacts of the preferred type, the contact active portion and the wire gauge accepted by the contact barrel have the same size. In contacts of the non-preferred type, the size of the active portion of the contact differs from the wire gauge accepted by the crimp barrel.

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2 Normative references (standards.iteh.ai)

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 appl

ISO 2635, Aircraft — Conductors for general purpose aircraft electrical cables and aerospace applications — Dimensions and characteristics

IEC 60062, Marking codes for resistors and capacitors

3 Identification system

3.1 Contacts shall be identified by two colour bands having a nominal width of one millimetre, as shown in Figure 1 and Table 1. The two colour bands identify the following characteristics:

- band No. 1 defines the size of the active portion of the contact and indicates the contact insertion and extraction tools to be used together with the crimping tool locator to be selected;
- band No. 2 defines the conductor sections accommodated by the crimp barrel.

As an alternative, the contacts of the preferred type may be identified by a single band having a minimum width of one millimetre.

The colours used shall be in accordance with the requirements of IEC 60062.

3.2 In addition, thermocouple contacts shall be identified by marking, forward of the retention device, according to either

- a) the following letter code:
 - **CR**: nickel/chromium,
 - **AL**: nickel/aluminium,
 - FE: iron,
 - **CN**: copper/nickel; or
- b) a colour point, the colour and position of which are given in Figure 1 and Table 1.

3.3 In addition, high temperature contacts shall be identified by a colour point, the colour and position of which are given in Figure 1 and Table 1.

The contacts shall also be marked to identify the manufacturer in a non active area at a place chosen by the manufacturer.



Key

- 3df8f7c9a0b7/iso-8843-2005
- 1 band No. 1: colour showing contact mating size
- 2 point for thermocouple or high-temperature contacts
- 3 band No. 2: colour showing admissible range of conductor sections

Figure 1

Contact size	24	23	22	20	16		12	10	8	4	0
Band No. 1 ^a	Black	Violet	Green	Red	Blue	Y	'ellow	White	Red	Blue	Yellow
Electrical conductors Cross-sectional area ^b mm ²					AWG °				Band No. 2 ^a		
max.			min.								
0,15		0,05			26	28	30			White	
0,24		0,09			24	26	28		Grey		
0,4		0,13			22	24	26		Green		
0,4			0,09		22	24	26	28		Black	
0,61	0,61		0,21		20	22	24			Red	
0,93			0,33		18	20	22			Violet	
0,93			0,21		18	20	22	24	Brown		1
1,34	1,34		0,59			18	20		Blue		
1,94	1,94		0,93			16	18		Orange		
1,94		0,59			14	16	18	20	White		
3,18		Teh ST&NDAR			T¹² PR¹EVIEW				Yellow		
5,3	5,3		2,88			10 12			Brown		
9		(4,65		08	10	IJ				
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Thermocouple contacts		Nickel/chromium Nic		Nicke	ckel/aluminium		Iron	Copper/nickel		Сорр	er/tellurium
Point		Yellow			Black		Blue	Red			Green
High tempera contacts	iture	260 °(C class								
Point		White									
 It is possible to The dimensions 	-							w 0,15 mm	² (AWG :	26).	

Table 1

с AWG = American Wire Gauge (ref.)

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