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AMENDMENT 4
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Identification cards — Test methods —

Part 6: Proximity cards

AMENDMENT 4: Additional test methods for PCD RF interface and PICC alternating field exposure

Cartes d'identification — Méthodes d'essai —

Partie 6: Cartes de proximité

*AMENDEMENT 4: Méthodes d'essai additionnelles pour l'interface RF
des PCD et l'exposition des PICC au champ alternatif*

Reference number
ISO/IEC 10373-6:2001/Amd.4:2006(E)



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Foreword

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

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Amendment 4 to ISO/IEC 10373-6:2001 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and personal identification*.

Identification cards — Test methods —

Part 6: Proximity cards

AMENDMENT 4: Additional test methods for PCD RF interface and PICC alternating field exposure

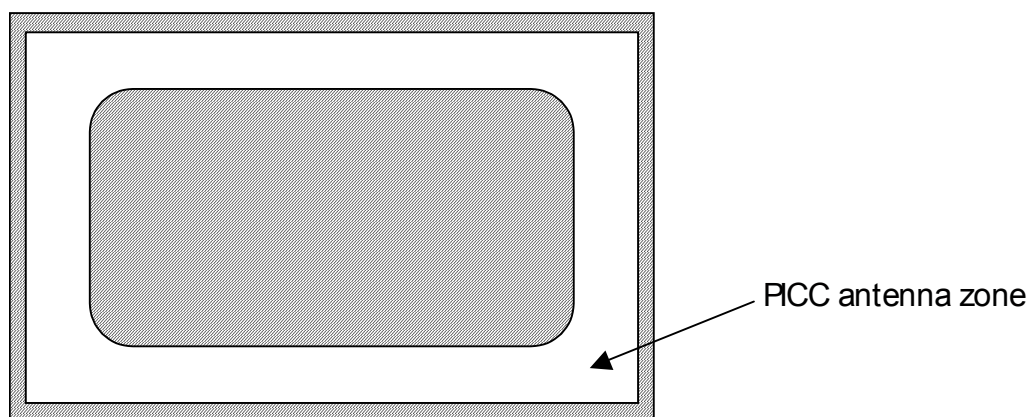
Page 2, 3.1.2

Replace the term, definition and associated footnote with the following:

"Class 1 PICC

PICC whose antenna is located within a zone defined by two rectangles:

- external rectangle: 81 mm × 49 mm;
- internal rectangle: 64 mm × 34 mm, centred in the external rectangle, with 3 mm radius, except for its connection endings.



WARNING — The "Class 1" PICC shall also pass the "Class 1" PICC maximum loading effect test defined in 7.4."

ISO/IEC 10373-6:2001/Amd.4:2006(E)

Pages 3 and 4, Clause 5

Replace Clause 5 and subclauses 5.1, 5.2 and 5.3 with the following:

5 Physical characteristics tests**5.1 Alternating magnetic field test**

The purpose of this test is to check the behaviour of the PICC in relation to alternating magnetic field exposure. Alternating magnetic field shall be tested only at 13,56 MHz. No test is required at other frequencies.

5.1.1 Apparatus

The test PCD assembly shall be used to produce the alternating magnetic field.

5.1.2 Test procedure

The procedure is as follows.

- a) Adjust the RF power delivered by the signal generator to the test PCD antenna to a field strength of 10 A/m rms as measured by the calibration coil.
- b) Place the PICC under test in the DUT position and readjust immediately the RF drive into the test PCD antenna to the required field strength if necessary.
- c) After 5 min, remove the PICC from the DUT position for at least 5 s.
- d) Adjust the RF power delivered by the signal generator to the test PCD antenna to a field strength of 12 A/m rms as measured by the calibration coil.
- e) Place the PICC under test in the DUT position and readjust immediately the RF drive into the test PCD antenna to the required field strength if necessary.
- f) Apply for 5 min an ASK 100 % modulation to this field with the following duty cycle:
 - 5 s at 0 A/m rms;
 - 25 s at 12 A/m rms.
- g) Check that the PICC operates as intended.

5.1.3 Test report

The test report shall state whether or not the PICC operates as intended.

5.2 Alternating electric field test

No test is required.

5.3 Static electricity test

The purpose of this test is to check the behaviour of the card IC in relation to electrostatic discharge (ESD) exposure in the test sample. The PICC under test is exposed to a simulated electrostatic discharge (ESD, human body model) and its basic operation checked following the exposure.