

Magnetic materials - Part 11: Method of test for the determination of surface insulation resistance of magnetic sheet and strip (IEC 60404-11:1991 + A1:1998 + A2:2012)

EESTI STANDARDI EESSÕNA

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English version

Magnetic materials -
Part 11: Method of test for the determination of surface insulation
resistance of magnetic sheet and strip
(IEC 60404-11:1991 + A1:1998 + A2:2012)

Matériaux magnétiques -
Partie 11: Méthode d'essai pour la
détermination de la résistance d'isolement
superficiel des tôles et feuillards
magnétiques
(CEI 60404-11:1991 + A1:1998 +
A2:2012)

Magnetische Werkstoffe -
Teil 11: Messverfahren für die
Bestimmung des
Oberflächenisolationswiderstandes von
Elektroblech und -band
(IEC 60404-11:1991 + A1:1998 +
A2:2012)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

This document (EN 60404-11:2013) consists of the text of IEC 60404-11:1991 + A1:1998 + A2:2012 prepared by IEC TC 68 "Magnetic alloys and steels".

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MAGNETIC MATERIALS –

Part 11: Method of test for the determination of surface insulation resistance of magnetic sheet and strip

1 Scope and field of application

This International Standard is intended to define a measurement method for the determination of the characteristics of surface insulation resistance of magnetic sheet and strip.

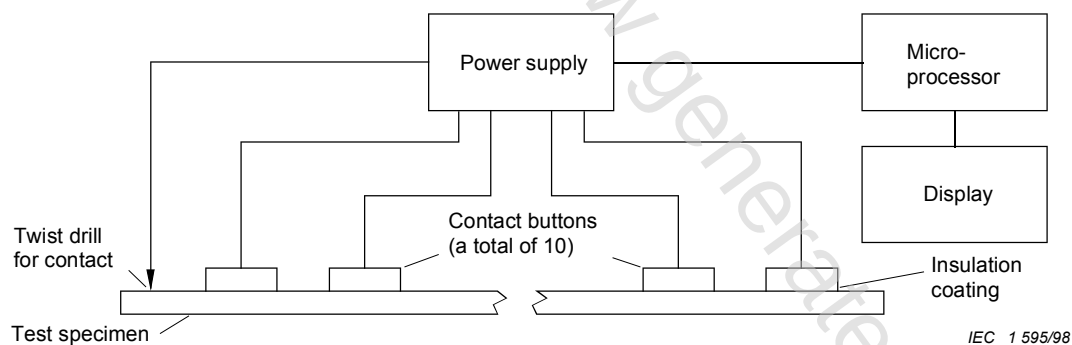
This method is applicable to magnetic sheet and strip insulated on one or both surfaces and is suitable for manufacturing control in the application of insulation coatings.

2 Principle of measurement

The principle of the measurement is based on, and includes, the method originally described by Franklin* which characterizes only one coated surface at a time.

The arrangement of the apparatus is shown in figure 1. Ten metallic contacts of fixed area are applied to one coated surface of the sheet, under specified conditions of voltage and pressure.

The effectiveness of the surface insulation is assessed by the measurement of the currents through the 10 contacts.



**Figure 1 – Arrangement of apparatus for the measurement of
surface insulation resistance**

* Franklin, R.F., "Measurement and control of interlaminar resistance of laminated magnetic cores", *ASTM Bulletin*, no. 144, January 1947, p. 57.