

Edition 2.1 2012-01

## INTERNATIONAL STANDARD

# NORME INTERNATIONALE



Insulating materials – Industrial rigid laminated sheets based on thermosetting resins for electrical purposes –

Part 3-3: Specifications for individual materials – Requirements for rigid laminated sheets based on melamine resins

Matériaux isolants – Stratifiés industriels rigides en planches à base de résines thermodurcissables à usages électriques –

Partie 3-3: Spécifications pour matériaux particuliers – Prescriptions pour stratifiés rigides en planches à base de résine mélamine





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INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

# INSULATING MATERIALS – INDUSTRIAL RIGID LAMINATED SHEETS BASED ON THERMOSETTING RESINS FOR ELECTRICAL PURPOSES –

Part 3-3: Specifications for individual materials – Requirements for rigid laminated sheets based on melamine resins

#### **FOREWORD**

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This consolidated version of IEC 60893-3-3 consists of the second edition (2003) [documents 15C/1523/FDIS and 15C/1537/RVD] and its amendment 1 (2011) [documents 15/489/CDV and 15/616/RVC]. It bears the edition number 2.1.

The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience. A vertical line in the margin shows where the base publication has been modified by amendment 1. Additions and deletions are displayed in red, with deletions being struck through.

International Standard IEC 60893-3-3 has been prepared by subcommittee 15C: Specifications, of IEC technical committee 15: Insulating materials.

In this revision of the IEC 60893 series of specifications, new material types have been included, changes have been made to the property requirements of some existing types, a new method for testing permittivity and dissipation factor has been added, and all non-specification data for each type has been moved to a new Part 4 document – IEC 60893-4 – Typical values.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- · reconfirmed.
- withdrawn,
- · replaced by a revised edition, or
- amended.

IMPORTANT – The "colour inside" logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this publication using a colour printer.

#### INTRODUCTION

This part of IEC 60893 is one of a series, which deals with industrial rigid laminated sheets based on thermosetting resins for electrical purposes.

This series consists of four parts:

Part 1: Definitions, designations and general requirements (IEC 60893-1)

Part 2: Methods of test (IEC 60893-2)

Part 3: Specifications for individual materials (IEC 60893-3)

Part 4: Typical values (IEC 60893-4)

IEC 60893-3-3 contains one of the specification sheets comprising Part 3, as follows:

Sheet 3: Requirements for rigid laminated sheets based on melamine resins

# INTRODUCTION (to amendment 1)

This amendment introduces revised limits for CHARPY and IZOD impact strengths for the she in testin requirements of all types of rigid laminated sheets based on melamine resins. These revised limits are based on the results of round-robin testing.

# INSULATING MATERIALS – INDUSTRIAL RIGID LAMINATED SHEETS BASED ON THERMOSETTING RESINS FOR ELECTRICAL PURPOSES –

### Part 3-3: Specifications for individual materials – Requirements for rigid laminated sheets based on melamine resins

#### 1 Scope

This part of IEC 60693 gives the requirements for industrial rigid laminated sheets for electrical purposes based on melamine resins and different reinforcements.

Applications and distinguishing properties are given in Table 1.

Materials which conform to this specification meet established levels of performance. However, the selection of a material by a user for a specific application should be based on the actual requirements necessary for adequate performance in that application and not based on this specification alone.

#### 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.

IEC 60893-1:—, Insulating materials – Industrial rigid laminated sheets based on thermosetting resins for electrical purposes – Part 1: Definitions, designations and general requirements <sup>1</sup>

IEC 60893-2:2003, Industrial rigid laminated sheets based on thermosetting resins for electrical purposes – Part 2: Methods of test

#### 3 Designation

The sheets covered by this Specification are classified into types, which differ in reinforcement employed and in their distinguishing properties. The sheets are designated by

- the IEC standard number,
- a two-letter abbreviation denoting the resin,
- a second two-letter abbreviation, denoting the reinforcement,
- a serial number,
- nominal thickness x width x length in millimetres.

<sup>1</sup> To be published