

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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**Flexible insulating sleeving –  
Part 3: Specifications for individual types of sleeving –  
Sheet 283: Heat-shrinkable, polyolefin sleeving for bus-bar insulation**

**Gaines isolantes souples –  
Partie 3: Spécifications pour types particuliers de gaines –  
Feuille 283: Gaines thermorétractables en polyoléfine pour isolation de barres  
omnibus**



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IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FLEXIBLE INSULATING SLEEVING –****Part 3: Specifications for individual types of sleeving –  
Sheet 283: Heat-shrinkable, polyolefin sleeving for bus-bar insulation**

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60684-3-283 has been prepared by IEC technical committee 15: Solid electrical insulating materials.

This second edition cancels and replaces the first edition published in 2010 and Amendment 1:2013. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) change of moulded plaque thickness for resistance to tracking and weathering tests to  $(6 \pm 0,5)$  mm.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
15/892/FDIS	15/901/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

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

A list of all parts in the IEC 60684 series, published under the general title *Flexible insulating sleeving*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

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

## INTRODUCTION

This document is one of a series of standards which deals with flexible insulating sleeving for electrical purposes.

The series consists of three parts:

Part 1: Definitions and general requirements (IEC 60684-1)

Part 2: Methods of test (IEC 60684-2)

Part 3: Specifications for individual types of sleeving (IEC 60684-3)

This document comprises one of the sheets of Part 3 as follows:

Sheet 283: Heat-shrinkable, polyolefin sleeving for bus-bar insulation.

## FLEXIBLE INSULATING SLEEVING –

### Part 3: Specifications for individual types of sleeving – Sheet 283: Heat-shrinkable, polyolefin sleeving for bus-bar insulation

#### 1 Scope

This part of IEC 60684 gives the requirements for two types of heat-shrinkable, polyolefin sleeving for bus-bar insulation, with a nominal shrink ratio of 2,5:1.

This sleeving has been found suitable up to temperatures of 100 °C.

- Type A: Medium wall – internal diameter up to 170,0 mm typically
- Type B: Thick wall – internal diameter up to 165,0 mm typically

These sleeveings are normally supplied in colour, red or brown.

Since these types of sleeving cover a significantly large range of sizes and wall thicknesses, Annex A (Tables A.1 and A.2) provides guidance to the range of sizes available. The actual size and wall thickness will be agreed between the user and supplier depending on the electric strength of the installed tubing offered and the requirements of the user.

Materials which conform to this specification meet established levels of performance. However, the selection of a material by a user for a specific application will 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 documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60296:2012, *Fluids for electrotechnical applications – Unused mineral insulating oils for transformers and switchgear*

IEC 60684-1:2003, *Flexible insulating sleeving – Part 1: Definitions and general requirements*

IEC 60684-2:2011, *Flexible insulating sleeving – Part 2: Methods of test*

IEC 60757:1983, *Code for designation of colours*

ISO 846:2019, *Plastics – Evaluation of the action of microorganisms*

ISO 4892-3:2016, *Plastics – Methods of exposure to laboratory light sources – Part 3: Fluorescent UV lamps*