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TECHNICAL REPORT

Electrical insulation systems – Thermal evaluation of modifications to an established electrical insulation system (EIS)
Part 3: Clarification of electrical insulating materials (EIMs) and auxiliary materials

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Part 3: Clarification of electrical insulating materials (EIMs) and auxiliary materials

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IEC TR 61858-3 has been prepared by IEC technical committee 112: Evaluation and qualification of electrical insulating materials and systems. It is a Technical Report.

The text of this Technical Report is based on the following documents:

Draft	Report on voting
112/465/DTR	112/500A/RVDTR

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Technical Report is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts in the IEC 61858 series, published under the general title *Electrical insulation systems – Thermal evaluation of modifications to an established electrical insulation system (EIS)*, 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- withdrawn,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 part of IEC 61858 describes procedures for the evaluation of changes to an established electrical insulation system (EIS) and the effect of these changes on the thermal classification of the established EIS.

Part 1 of IEC 61858 covers wire-wound winding EISs. Part 2 of IEC 61858 addresses modifications of form-wound winding EISs.

This Part 3 provides guidance for the selection of appropriate procedures (as defined in Part 1 and Part 2) for the evaluation of changes of individual materials, which have functions of different importance in the EIS, also known as "major" electrical insulating materials (EIMs) and "minor" (auxiliary) materials.

General principles for the evaluation and qualification of EISs can be found in IEC 60505. Unless the procedures of this document indicate otherwise, the principles of IEC 60505 should be followed.

The thermal classification of an EIS is established either by known service life, in accordance with IEC 60505, or evaluated in accordance with IEC 61857 (all parts).

ELECTRICAL INSULATION SYSTEMS – THERMAL EVALUATION OF MODIFICATIONS TO AN ESTABLISHED ELECTRICAL INSULATION SYSTEM (EIS)

Part 3: Clarification of electrical insulating materials (EIMs) and auxiliary materials

1 Scope

This part of IEC 61858 provides information on the identification of electrical insulating materials and auxiliary components for the assessment of modifications to an established insulation system and gives guidance on the selection of feasible test procedures.

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 61857 (all parts), *Electrical insulation systems – Procedures for thermal evaluation*