

IEC TS 63576

Edition 1.0 2025-04

TECHNICAL SPECIFICATION

Evaluation methods for protection against risk of fire in electric tumble dryers

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 13.120; 97.060

ISBN 978-2-8327-0357-1

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

EVALUATION METHODS FOR PROTECTION AGAINST RISK OF FIRE IN ELECTRIC TUMBLE DRYERS

FOREWORD

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IEC TS 63576 has been prepared by IEC Technical Committee 61: Safety of household and similar electrical appliances. It is a Technical Specification.

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

| Draft | Report on voting |
|-------------|------------------|
| 61/7385/DTS | 61/7426/RVDTS |

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 Specification 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/publications.

The following print types are used:

- requirements: in roman type;
- test specifications: in italic type;
- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

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

- reconfirmed,
- withdrawn, or
- revised.

INTRODUCTION

Electric tumble dryers are prone to the accumulation of lint within the electrical enclosure of the appliance. Since a tumble dryer is normally not airtight, fabric fibres can pass through small air gaps during operation. These fibres that escape the air flow path end up as accumulated lint in the bottom sections of the enclosure. Although tumble dryers are generally designed to minimize this, it is difficult to eliminate it completely.

The accumulated lint within the enclosure provides an additional fuel source that can increase the severity of hazards caused by electric component faults as well as abnormal overheating conditions. TC 61 has expressed the need to develop this Technical Specification to provide additional evaluation methods to determine the safety of electric tumble dryers with respect to the accumulation of lint within the enclosure.

EVALUATION METHODS FOR PROTECTION AGAINST RISK OF FIRE IN ELECTRIC TUMBLE DRYERS

1 Scope

This document provides guidance on test methods to mitigate the risks of fire that are particular to electric **tumble dryers**.

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 60335-1:2020, Household and similar electrical appliances – Safety – Part 1: General requirements

IEC 60335-2-11:2024, Household and similar electrical appliances – Safety – Part 2-11: Particular requirements for tumble dryers

ISO 817, Refrigerants – Designation and safety classification