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Fire detection and alarm systems — Part 22: Smoke-detection equipment for ducts

Systèmes de détection et d'alarme d'incendie —

Partie 22: Équipement de détection des fumées dans les conduits



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 21, *Equipment for fire protection and fire fighting*, Subcommittee SC 3, *Fire detection and alarm systems*.

This second edition cancels and replaces the first edition (ISO 7240-22:2007), which has been technically revised.

The main changes compared to the previous edition are as follows:

- in [5.16](#) (electromagnetic compatibility immunity tests), EN 50130-4 has been replaced by IEC 62599-2;
- marking has been moved to a new [Clause 7](#);
- data and software requirements have been moved to [Clause 8](#).

A list of all parts in the ISO 7240 series can be found in the ISO website.

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Introduction

Smoke-detection equipment for ducts (SDED) is used as part of a fire detection system to sample the environment within air ducts of a building. Detection of smoke releases a signal to the connected control and indicating equipment and can be used as a signal to an air-handling system to prevent the spread of smoke within the building.

SDED is required to function satisfactorily not only in the event of a fire, but also during and after exposure to conditions likely to be met in practice such as corrosion, vibration, direct impact, indirect shock and electromagnetic interference. Some tests specified are intended to assess the performance of the SDED under such conditions.

The performance of SDED is assessed from results obtained in specific tests. This document is not intended to place any other restrictions on the design and construction of such equipment.