INTERNATIONAL STANDARD

ISO 7240-27

Second edition
2018-05

Fire detection and alarm systems —

Part 27: Point type fire detectors using a smoke sensor in combination with a carbon monoxide sensor and, optionally, one or more heat sensors

Systèmes de détection et d'alarme d'incendie —

Partie 27: Détecteurs ponctuels d'incendie utilisant un capteur de fumée en combinaison avec un capteur de monoxyde de carbone (CO) et, optionnellement, un ou plusieurs capteurs de chaleur

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Contents

Page

Foreword

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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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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

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 7240-27:2009), which has been technically revised.

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

— other carbon monoxide sensing technologies are now permitted by introducing additional environmental tests;

— a damp heat, steady-state (operational) test like that used in the European standard EN 54-31 has been incorporated;

— for tests in the gas chamber, the allowable background of carbon monoxide has been increased from 1 µl/l to 1,5 µl/l;

— in the test for exposure to chemical agents at environmental concentrations, the concentration of heptane and ethanol have been increased to 500 µl/l and 1000 µl/l, respectively and the exposure times to NO_2 and SO_2 have been reduced to 1 h and 24 h, respectively;

— the test for exposure to chemical agents associated with a fire has been deleted as being too complex and not relevant due to CO sensors having already responded when high concentrations of NO_2, SO_2 and CO have been reached;

— a Bibliography has been added which list standards and documents not used as normative references.

A list of all parts in the ISO 7247-series can be found on the ISO website.