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Fire detection and alarm systems —

Part 13: Compatibility assessment of system components

Systèmes de détection et d'alarme d'incendie —

Partie 13: Estimation de la compatibilité des composants d'un système

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 7240-13 was prepared by Technical Committee ISO/TC 21, *Equipment for fire protection and fire fighting*, Subcommittee SC 3, *Fire detection and alarm systems*.

ISO 7240 consists of the following parts, under the general title *Fire detection and alarm systems*:

— *Part 1: General and definitions*

— *Part 2: Control and indicating equipment*

— *Part 4: Power supply equipment*

— *Part 5: Point-type heat detectors*

— *Part 6: Carbon monoxide fire detectors using electro-chemical cells*

— *Part 7: Point-type smoke detectors using scattered light, transmitted light or ionization*

— *Part 11: Manual call points*

— *Part 12: Line type smoke detectors using a transmitting light beam*

— *Part 13: Compatibility assessment of system components*

— *Part 14: Guidelines for drafting codes of practice for design, installation and use of fire detection and fire alarm systems in and around buildings* [Technical report]

— *Part 15: Multisensor fire detectors*

— *Part 21: Routing equipment*

— *Part 22: Duct sampling equipment*

The following part is under preparation:

— *Part 9: Test fire for fire detectors* [Technical report]

Introduction

The fire detection function is to detect at the earliest practicable moment, and to give signals and indications so that appropriate action can be taken.

The fire alarm function is at least to give audible and/or visible signals to the occupants of a building who may be at risk from fire.

A fire detection and alarm system combines the functions of detection and alarm in a single system and typically consists of a number of inter-linked components including automatic fire detectors, manual call points and alarm sounders. These components are connected to control and indicating equipment by means of one or more transmission paths. All system components, including the control and indicating equipment, are also directly or indirectly connected to a power supply.

ISO 7240-1 provides additional information about the components performing those functions that are listed in Annex A of this part of ISO 7240.

A fire protection and/or building management systems or remote fault and fire alarm monitoring stations that are linked to a fire detection and alarm system, are not considered part of the fire detection and alarm system.

All the components constituting the fire detection and alarm system need to be compatible or connectable and requirements relating to the performance of the overall system need to be fulfilled.

Differentiation is made between components classified as components type 1 and other components classified as components type 2.

This part of ISO 7240 recognizes that it is not practical to assess the compatibility or connectability of components in all possible configurations. Methods of assessment are specified to reach an acceptable degree of confidence within pre-determined operational and environmental conditions.

National application guidelines (also known as codes of practice) also contain system requirements. Suppliers of components shall ensure that they

— meet the requirements of this part of ISO 7240;

— meet the requirements of the relevant part of ISO 7240; and

— meet the requirements of the application guidelines of the countries where the components are intended to be placed on the market.

System requirements are also included for those fire detection and alarm systems which are linked to fire protection and/or other systems (for example: building management systems).