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**Alarmni sistemi - 1. del: Okoljske preskusne metode (IEC 62599-1:2010)**

Alarm systems - Part 1: Environmental test methods

Systèmes d'alarme - Partie 1: Méthodes d'essais d'environnement

**Ta slovenski standard je istoveten z: IEC 62599-1:2010**

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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

**Alarm systems –  
Part 1: Environmental test methods**

**Systemes d'alarme –  
Partie 1: Méthodes d'essais d'environnement**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ALARM SYSTEMS –****Part 1: Environmental test methods**

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62599-1 has been prepared by IEC technical committee 79: Alarm and electronic security systems.

This standard is based on EN 50130-5 (1995) and its amendments 1 (1998) and 2 (2003).

The text of this standard is based on the following documents:

FDIS	Report on voting
79/276/FDIS	79/292/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62599 series, under the general title *Alarm systems*, can be found on the IEC website.

The IEC 62599 series currently comprises this Part 1, covering environmental test methods, and Part 2, which deals with EMC immunity requirements.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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## INTRODUCTION

The purpose of environmental testing is to demonstrate that the equipment can operate correctly in its service environment and that it will continue to do so for a reasonable time. Alarm system equipment is, however, installed in many very different environments and it would be impractical to test every aspect of the most extreme conceivable environmental conditions.

The tests and severities listed in this part of IEC 62599 are, therefore, intended to provide a practical series of tests to determine the ability of the equipment to withstand the failure mechanisms most likely to be produced by the environment, in which that type of equipment can be expected to be installed (i.e. the normal service environment). This part includes only service environments, which relate to equipment installed in general industrial/commercial premises. Hence it should be noted that, additional precautions may be necessary, in particular installations, where some aspects of the environment can be identified as being unusually severe. A special additional severity has been added to the cold test, to cater for the especially cold conditions found in the very north of Europe.

The tests are intended to demonstrate failures due to realistic service environments. However, some significant failure mechanisms are brought about by changes which occur slowly under these realistic service conditions. In order to make tests in a practical and economic time, it is sometimes necessary to accelerate these changes by intensifying the conditions (e.g. by increasing the level of an environmental parameter or by increasing the time or frequency of its application).

The tests in this standard are therefore divided into two types:

### Operational tests

In these tests, the specimen is subjected to test conditions, which correspond to the service environment. The object of these tests is to demonstrate the ability of the equipment to withstand and operate correctly in the normal service environment and/or to demonstrate the equipment's immunity to certain aspects of that environment. The specimen is therefore operational, its condition is monitored and it may be functionally tested during the conditioning for these tests.

### Endurance tests

In these tests, the specimen may be subjected to conditions more severe than the normal service environment in order to accelerate the effects of the normal service environment. The object of these tests is to demonstrate the equipment's ability to withstand the long-term effects of the service environment. Since the test is intended to study the residual rather than the immediate effects of test conditioning, the specimen is not normally supplied with power or monitored during the conditioning period.

This standard is intended to act as a source document for environmental tests, which can be referred to in product-specific standards for components of alarm systems which fall within its scope. In order to obtain consistency between these standards, the working groups drafting the product-specific standards should select the tests and severities recommended for the appropriate equipment and environmental classes, unless there are good technical reasons to do otherwise.