PD CLC/TS 50131-2-10:2014

BSI Standards Publication

Alarm systems — Intrusion and hold-up systems

Part 2-10: Intrusion detectors — Lock state contacts (magnetic)

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National foreword

This Published Document is the UK implementation of CLC/TS 50131-2-10:2014.

The UK participation in its preparation was entrusted by Technical Committee GW/1, Electronic security systems, to Subcommittee GW/1/1, Alarm components.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Alarmanlagen - Einbruch- und Überfallmeldeanlagen - Teil 2-10: Einbruchmelder - Verschlussüberwachungskontakte (magnetisch)

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

This document (CLC/TS 50131-2-10:2014) has been prepared by CLC/TC 79 "Alarm systems".

EN 50131-2 is currently composed of the following parts:

- EN 50131-2-2, *Alarm systems — Intrusion and hold-up systems — Part 2-2: Intrusion detectors — Passive infrared detectors*;
- EN 50131-2-3, *Alarm systems — Intrusion and hold-up systems — Part 2-3: Requirements for microwave detectors*;
- EN 50131-2-4, *Alarm systems — Intrusion and hold-up systems — Part 2-4: Requirements for combined passive infrared and microwave detectors*;
- EN 50131-2-5, *Alarm systems — Intrusion and hold-up systems — Part 2-5: Requirements for combined passive infrared and ultrasonic detectors*;
- EN 50131-2-6, *Alarm systems — Intrusion and hold-up systems — Part 2-6: Opening contacts (magnetic)*;
- CLC/TS 50131-2-8, *Alarm systems — Intrusion and hold-up systems — Part 2-8: Intrusion detectors — Shock detectors*;
- CLC/FprTS 50131-2-9, *Alarm systems — Intrusion and hold-up systems — Part 2-9: Intrusion detectors — Active infrared beam detectors*;
- CLC/TS 50131-2-10, *Alarm systems — Intrusion and hold-up systems — Part 2-10: Intrusion detectors — Lock state contacts (magnetic)* [the present document];
- EN 50131-2-7-1, *Alarm systems — Intrusion and hold-up systems — Part 2-7-1: Intrusion detectors — Glass break detectors (acoustic)*;
- EN 50131-2-7-2, *Alarm systems — Intrusion and hold-up systems — Part 2-7-2: Intrusion detectors — Glass break detectors (passive)*;
- EN 50131-2-7-3, *Alarm systems — Intrusion and hold-up systems — Part 2-7-3: Intrusion detectors — Glass break detectors (active)*.

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Introduction

This Technical Specification applies to lock state contacts (magnetic) used as part of intrusion and hold-up alarm systems (I&HAS) installed in buildings. It includes four security grades and four environmental classes.

Lock state contacts are installed in windows or doors and windows or doorframes to allow to monitor the lock/unlock status only or the lock/unlock status combined with the open/close status of a window/door simultaneously and are as such located in supervised premises.

The scope for lock state contacts (magnetic) and the number and types of generated signals or messages will be more comprehensive for systems that are specified at the higher grades.

This Technical Specification is only concerned with the requirements and tests for lock state contacts (magnetic). Other types of detectors are covered by other documents identified in the EN 50131 series and in the EN 50131-2 series.

1 Scope

This Technical Specification provides for security grades 1 to 4, (see EN 50131-1) specific or non-specific wired or wire-free lock state contacts, and includes the requirements for four environmental classes covering applications in internal and outdoor locations as specified in EN 50130-5.

The purpose of a lock state contact (magnetic) is to detect the lock/unlock state only or the lock/unlock state combined with the opening status/displacement from the defined closed position of a window or door simultaneously. The lock state contact comprises two separate contact-less units, the active connection between these units is at least one magnetic or electromagnetic based field. Separating the two units disturbs the connection and produces an intruder signal or message.

A detector will fulfil all the requirements of the specified grade.

Functions additional to the mandatory functions specified in this Technical Specification may be included in the detector, providing they do not influence the correct operation of the mandatory functions.

The combination of the two separate units of the lock state contact is referred to in the body of this Technical Specification as the detector.

This Technical Specification does not apply to system interconnections.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 10130, *Cold rolled low carbon steel flat products for cold forming — Technical delivery conditions*

EN 50130-4, *Alarm systems — Part 4: Electromagnetic compatibility — Product family standard: Immunity requirements for components of fire, intruder, hold up, CCTV, access control and social alarm systems*

EN 50130-5, *Alarm systems — Part 5: Environmental test methods*

EN 50131-1:2006,[1)] *Alarm systems — Intrusion and hold-up systems — Part 1: System requirements*

EN 50131-6, *Alarm systems — Intrusion and hold-up systems — Part 6: Power supplies*

EN 60068-1:1994, *Environmental testing — Part 1: General and guidance (IEC 60068-1:1988 + A1:1992 + corrigendum Oct. 1988)*

EN 60068-2-52, *Environmental testing — Part 2: Tests — Test Kb: Salt mist, cyclic (sodium chloride solution) (IEC 60068-2-52)*

EN 60404-5, *Magnetic materials — Part 5: Permanent magnet (magnetically hard) materials — Methods of measurement of magnetic properties (IEC 60404-5)*

EN 60404-14, *Magnetic materials — Part 14: Methods of measurement of the magnetic dipole moment of a ferromagnetic material specimen by the withdrawal or rotation method (IEC 60404-14)*

1) This document is currently impacted by EN 50131-1:2006/A1:2009.