



BSI Standards Publication

Lifts (elevators), escalators and moving walks — Programmable electronic systems in safety related applications

Part 3: Life cycle guideline for
programmable electronic systems related to
PESSRAL and PESSRAE

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National foreword

This Published Document is the UK implementation of ISO/TR 22201-3:2013.

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TECHNICAL REPORT

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Lifts (elevators), escalators and moving walks — Programmable electronic systems in safety related applications —

Part 3:

Life cycle guideline for programmable electronic systems related to PESSRAL and PESSRAE

*Ascenseurs, escaliers mécaniques et trottoirs roulants — Conception
et mise au point des systèmes électroniques programmables dans les
applications liées à la sécurité —*

*Partie 3: Lignes directrices pour le cycle de vie des systèmes
électroniques programmables liés à PESSRAL et PESSRAE*



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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. www.iso.org/directives

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The committee responsible for this document is ISO/TC 178, *Lifts, escalators and moving walks*.

ISO 22201 consists of the following parts, under the general title *Lifts (elevators), escalators and moving walks — Programmable electronic systems in safety-related applications*:

- *Part 2: Escalators and moving walks (PESSRAE)*
- *Part 3: Life cycle guideline for programmable electronic systems related to PESSRAL and PESSRAE* [Technical Report]

When revised, ISO 22201:2009, *Lifts (elevators) — Design and development of programmable electronic systems in safety-related applications for lifts (PESSRAL)*, will become Part 1.

Introduction

This Technical Report addresses phases in the life cycle planning and actions for post-installation activities (e.g. maintenance, repair, and replacement and modification of interface) of PESSRAL and PESSRAE to help ensure the safety integrity level (SIL) over the life cycle of the system.

Lifts (elevators), escalators and moving walks — Programmable electronic systems in safety related applications —

Part 3:

Life cycle guideline for programmable electronic systems related to PESSRAL and PESSRAE

1 Scope

This Technical Report provides additional information and process for the development of the instruction manual required by ISO 22201:2009 (PESSRAL) and ISO 22201-2 (PESSRAE) for programmable electronic systems (PES).

2 Normative references

ISO 22201:2009, *Lifts (elevators) — Design and development of programmable electronic systems in safety-related applications for lifts (PESSRAL)*

ISO 22201-2, *Lifts (elevators), escalators and moving walks — Programmable electronic systems in safety related applications — Part 2: Escalators and moving walks (PESSRAE)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 22201:2009, ISO 22201-2 and the following apply:

2.1

competent maintenance person

designated person, suitably trained, qualified by knowledge and practical experience, provided with necessary instructions and supported within their maintenance organization to enable the required maintenance operations to be safely carried out

Note 1 to entry: The competence of the maintenance person within the maintenance organization will be continuously updated

2.2

design equivalent

original equipment manufacturer, or third party certified product, which fulfils same SIL rated component/subsystem design specifications but has different specifications for the non-SIL rated portion of the PES

2.3

functional equivalent

product which fulfils same functional requirements with different SIL rated component/subsystem design specifications from that of the original certified product

2.4

maintenance organization

company or part of a company where competent maintenance person(s) carry out maintenance operations on behalf of the owner of the installation