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Safety of machinery - Requirements for cableless
control systems of machinery

EESTI STANDARDI EESSÕNA

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English Version

**Safety of machinery - Requirements for cableless control
systems of machinery
(IEC 62745:2017)**

Sécurité des machines - Exigences générales pour les
systèmes de commande sans fil des machines
(IEC 62745:2017)

Sicherheit von Maschinen - Anforderungen für kabellose
Steuerungen an Maschinen
(IEC 62745:2017)

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European foreword

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IEC 60068-2-1	NOTE	Harmonized as EN 60068-2-1.
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IEC 60068-2-6	NOTE	Harmonized as EN 60068-2-6.
IEC 60068-2-27	NOTE	Harmonized as EN 60068-2-27.
IEC 60068-2-30	NOTE	Harmonized as EN 60068-2-30.
IEC 60068-2-64	NOTE	Harmonized as EN 60068-2-64.
IEC 60204 (Series)	NOTE	Harmonized as EN 60204 (Series).
IEC 60870-5-1	NOTE	Harmonized as EN 60870-5-1.
IEC 60947-5-8	NOTE	Harmonized as EN 60947-5-8.
IEC 61508 (Series)	NOTE	Harmonized as EN 61508 (Series).
IEC 61784-1	NOTE	Harmonized as EN 61784-1.
IEC 61784-3:2016	NOTE	Harmonized as EN 61784-3:2016.
ISO 12100	NOTE	Harmonized as EN ISO 12100.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-31	2008	Environmental testing -- Part 2-31: Tests - Test Ec: Rough handling shocks, primarily for equipment-type specimens	EN 60068-2-31	2008
IEC 60204-1 (mod)	2005	Safety of machinery - Electrical equipment of machines -- Part 1: General requirements	EN 60204-1	2006
-	-		+ corrigendum Feb. 2010	
IEC 60947-5-1	2016	Low-voltage switchgear and controlgear - Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices	EN 60947-5-1	2016
IEC 60947-5-5	-	Low-voltage switchgear and controlgear -- Part 5-5: Control circuit devices and switching elements - Electrical emergency stop device with mechanical latching function	EN 60947-5-5	-
IEC 62061	-	Safety of machinery - Functional safety of safety-related electrical, electronic and programmable electronic control systems	EN 62061	-
ISO 13849-1	-	Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design	EN ISO 13849-1	-
ISO 13849-2	-	Safety of machinery - Safety-related parts of control systems - Part 2: Validation	EN ISO 13849-2	-
ISO 13850	-	Safety of machinery - Emergency stop function - Principles for design	EN ISO 13850	-

INTERNATIONAL STANDARD



Safety of machinery – Requirements for cableless control systems of machinery



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IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

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INTERNATIONAL STANDARD



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CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references	7
3 Terms, definitions and abbreviations	8
4 Functional requirements	11
4.1 General.....	11
4.2 Operational preventions	12
4.2.1 Prevention of inadvertent actuation.....	12
4.2.2 Prevention of unauthorised operation	12
4.2.3 Prevention of unintended commands	12
4.3 Serial data transfer	13
4.4 Removal of remote station transmission.....	13
4.5 Establishment and indication of transmission and communication	14
4.6 Safety-related functions of the CCS	14
4.7 Stop functions of the CCS.....	14
4.7.1 General	14
4.7.2 Safety-related stop functions of a CCS	14
4.7.3 Classification of stop functions	15
4.8 Reset.....	17
4.9 Cessation of transmission from the remote station	17
4.10 Latching control functions	17
4.11 Behaviour on loss of supply	18
4.12 Multiple remote stations	18
4.13 Multiple base stations	18
4.14 Suspension of CCS control	18
4.15 Configurability protection	19
5 Verification	19
5.1 General.....	19
5.2 Labelling and markings	19
5.3 Documentation.....	19
5.4 Functional verifications	19
6 Information for use	22
6.1 General.....	22
6.2 Information to be provided	22
7 Labelling and markings.....	24
Annex A (informative) Logic of stop functions	25
Bibliography.....	27
Figure 1 – Block diagram example of a cableless control system and its interaction with the machine control system	12
Figure A.1 – Logic for stop functions.....	25
Table 1 – Alphabetical list of definitions	8
Table 2 – Abbreviations	8

Table 3 – Overview of stop functions of the CCS	15
Table 4 – Verification of functional requirements.....	21
Table 5 – List of possible verifications to be required to the system integrator	24

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY OF MACHINERY – REQUIREMENTS FOR CABLELESS CONTROL SYSTEMS OF MACHINERY

FOREWORD

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FDIS	Report on voting
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Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

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INTRODUCTION

Cableless control systems (CCS) are increasingly being used to provide an operator interface on a wide range of machinery. The functionality of a CCS and the way in which it interfaces with the overall machine control system can therefore affect the safety of the machinery.

IEC 62745 specifies requirements for the functionality of a CCS that is interfaced with or is part of a machine control system for use as an operator control station on a machine.

The extent to which the functionality of a CCS is relied upon to minimise risk on a machine is a key selection criterion. It is therefore important to select a CCS that provides suitable control functions with an appropriate safety integrity in accordance with the risk assessment at the machine.

In some particular applications, the requirements for a CCS can exceed those specified in this document.