ELEKTROMAGNETILINE ÜHILDUVUS. TOOTESEERIA STANDARD LIFTIDELE, ESKALAATORITELE JA LIIKURKÕNNITEEDELE. EMISSIOON

Electromagnetic compatibility - Product family standard for lifts, escalators and moving walks - Emission



### EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

	This Estonian standard EVS-EN 12015:2020 consists of the English text of the European standard EN 12015:2020.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 17.06.2020.	Date of Availability of the European standard is 17.06.2020.
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### **EUROPEAN STANDARD**

### EN 12015

## NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

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ICS 33.100.10; 91.140.90

Supersedes EN 12015:2014

### **English Version**

# Electromagnetic compatibility - Product family standard for lifts, escalators and moving walks - Emission

Compatibilité électromagnétique - Norme famille de produits pour ascenseurs, escaliers mécaniques et trottoirs roulants - Émission Elektromagnetische Verträglichkeit-Produktfamilien-Norm für Aufzüge, Fahrtreppen und Fahrsteige -Störaussendung

This European Standard was approved by CEN on 13 April 2020.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

On		
	oean foreword	0
-		
tro	duction	
	Scope	
	Normative references	5
	Terms, definitions and abbreviated terms	6
	Test set-up procedure	
l	General	
2	Radiated and conducted radio frequency emissions	
	Voltage fluctuation and flicker	10
	Mains supply harmonics	10
	Applicability of tests	
	Requirements	11
	Requirements for radiated emission	
	Requirements for conducted emission	
3	Voltage fluctuations	13
ŀ	Mains supply current harmonics	13
	Dogumentation for the installer of the appropriate /accomply of apparatus	17
	Documentation for the installer of the apparatus/assembly of apparatusx ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered	tial 18
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OI L96] aimed to be covered	tial 18
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OI L96] aimed to be covered	tial 18
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OI L96] aimed to be covered	tial 18
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OI L96] aimed to be covered	tial 18
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered ography	tial 18 20
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered ography	tial 18 20
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered ography	tial 18 20
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered ography	tial 18 20
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered ography	tial 18 20
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered ography	tial 18 20
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered ography	tial 18 20
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered ography	tial 18 20
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered ography	tial 18 20
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered ography	tial 18
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered ography	tial 18 20
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered ography	tial 18 20
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered ography	tial 18 20
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered ography	tial 18 20
	x ZA (informative) Relationship between this European Standard and the essen requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered ography	tial 18 20

### **European foreword**

This document (EN 12015:2020) has been prepared by Technical Committee CEN/TC 10 "Lifts, escalators and moving walks", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2020, and conflicting national standards shall be withdrawn at the latest by December 2020.

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

This document supersedes EN 12015:2014.

This document has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

The limits given in this European Standard recognize the fact that the product family covers a total range of lifts, escalators and moving walks used in residential buildings, offices, hospitals, hotels, industrial plants, etc. and that lifts, escalators and moving walks are deemed to have their own dedicated power supply and be connected with the consent of the electrical supplier to a low impedance source.

The related EMC product family standard for immunity is:

EN 12016, Electromagnetic compatibility — Product family standard for lifts, escalators and moving walks — Immunity

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Introduction

This document is a Type C standard as stated in EN ISO 12100.

This document has been prepared to provide one means of complying with the requirements of the Electromagnetic Compatibility (EMC) Directive. The requirements of this document have been specified so as to ensure a level of electromagnetic emission which will cause minimal disturbance to other equipment. The levels, however, do not cover the following cases:

- a) where the probability of an occurrence likely to produce emissions in excess of those which would normally be experienced is extremely low, e.g. the emergency stopping of a lift, escalator or moving walk under a fault condition;
- b) where highly susceptible apparatus will be used in the close proximity of the equipment covered by this document, in which case further measures may have to be taken to:
  - 1) reduce the level of electromagnetic emission to below that specified in this document; or
  - 2) increase the immunity of the affected apparatus.

The given emission limits, on the basis that equipment of the product family range may be installed both indoor and outdoor in all types of building, involves the switching of heavy currents and high inductive loads and, generally, is connected to a low voltage system.

Values for the harmonic emission limits are taken from the harmonized standard EN 61000-3-12:2011. Taking into account the characteristics and environment of lifts, escalators and moving walks, these harmonic values are applicable for all input currents without current limitation stated by EN 61000-3-12:2011.

Due to the size of an installed lift, it becomes impracticable to test the total assembly either in a test laboratory or in situ where the uncontrolled environment may also influence the test procedures and results. This applies also to measurements within the car. Similar considerations regarding dimensions apply equally to the testing of escalators and moving walks.

### 1 Scope

This document specifies the emission limits in relation to electromagnetic disturbances and test conditions for lifts, escalators and moving walks, which are intended to be permanently installed in buildings. These limits however, may not provide full protection against disturbances caused to radio and TV reception when such equipment is used within distances given in Table 1.

This document is not applicable for apparatus which are manufactured before the date of its publication as EN.

#### Normative references 2

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 55011:2016<sup>1</sup>), Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement (CISPR 11:2015)

EN 55014-1:2017, Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission (CISPR 14-1:2016/COR1:2016)

EN 55032:2015<sup>2</sup>), Electromagnetic compatibility of multimedia equipment - Emission Requirements (CISPR 32:2015)

EN IEC 61000-3-2:2019, Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current  $\leq 16$  A per phase) (IEC 61000-3-2:2018)

EN 61000-3-12:2011, Electromagnetic compatibility (EMC) - Part 3-12: Limits - Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current > 16 A and  $\leq$  75 A per phase (IEC 61000-3-12:2011)

EN 61000-6-3:2007<sup>3</sup>), Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments (IEC 61000-6-3:2006)

EN 61000-6-4:2007<sup>4</sup>), Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments (IEC 61000-6-4:2006)

IEC 61000-3-11:2017, Electromagnetic compatibility (EMC) - Part 3-11: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems - Equipment with rated *current* <= 75 *A and subject to conditional connection* 5

<sup>1)</sup> This document is impacted by the amendment EN 55011:2016/A1:2017.

<sup>2)</sup> This document is impacted by the corrigendum EN 55032:2015/AC:2016-07.

<sup>3)</sup> This document is impacted by the amendment EN 61000-6-3:2007/A1:2011 and the corrigendum EN 61000-6-3:2007/A1:2011/AC:2012.

<sup>4)</sup> This document is impacted by the amendment EN 61000-6-4:2007/A1:2011.