STN	Železnice Kabína rušňovodiča Časť 1: Antropometrické údaje a viditeľnosť	STN EN 16186-1+A1
		28 7223

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 05/19

Obsahuje: EN 16186-1:2014+A1:2018

Oznámením tejto normy sa ruší STN EN 16186-1 (28 7223) z júna 2015 STN EN 16186-1+A1: 2019

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 16186-1:2014+A1

December 2018

ICS 45.060.10

Supersedes EN 16186-1:2014

English Version

Railway applications - Driver's cab - Part 1: Anthropometric data and visibility

Applications ferroviaires - Cabines de conduite - Partie 1: Données anthropométriques et visibilité Bahnanwendungen - Führerraum - Teil 1: Anthropometrische Daten und Sichtbedingungen

This European Standard was approved by CEN on 18 October 2014 and includes Amendment 1 approved by CEN on 26 August 2018.

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

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

EN 16186-1:2014+A1:2018 (E)

Con	Contents	
Euro	pean foreword	3
1	Scope	4
2	Normative references	4
3 3.1 3.2	Terms, definitions and abbreviations Terms and definitions Abbreviations	4
4 4.1 4.2	Driver's anthropometric data General Data	5
5 5.1 5.2 5.3	Forward visibility General Forward visibility requirements Windscreen requirements	7 8
6	Lateral visibility	10
7	Rear visibility	10
Anne	ex A (normative) Forward visibility reference surfaces	11
Anne	ex B (normative) Forward visibility reference eye points	13
B.1	Method 1 - Fixed foot rest and adjustable seat	13
B.2	Method 2 - Adjustable foot rest and fixed seat	14
B.3	Method 3 - Adjustable foot rest and adjustable seat	15
Anne	ex C (informative) Forward visibility reference surfaces for UK and Ireland	16
C.1	General	16
C.2	Reference Cube	16
C.3	Cases	17
Anne	ex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2008/57/EC	18
Bibli	ography	

European foreword

This document (EN 16186-1:2014+A1:2018) has been prepared by Technical Committee CEN/TC 256 "Railway applications", the secretariat of which is held by DIN.

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 June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

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 includes Amendment 1 approved by CEN on 2018-08-26.

This document supersedes EN 16186-1:2014.

The start and finish of text introduced or altered by amendment is indicated in the text by tags (A).

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2008/57/EC [1].

For relationship with EU Directive 2008/57/EC, see informative Annex ZA, which is an integral part of this document.

EN 16186, "Railway applications — Driver's cab" is written as an EN series on all the aspects to be considered when designing a driver's cab, from anthropometric data and visibility, over the integration of displays, controls and indicators as well as the design of displays to cab layout and access facilities. The background information on the anthropometric data used is provided in CEN/TR 16823.

EN 16186, *Railway applications* — *Driver's cab* consists of the following parts:

- Part 1: Anthropometric data and visibility;
- Part 2: Integration of displays, controls and indicators;
- Part 3: Design of displays;
- A₁⟩ Part 4: Layout and access (A₁

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

EN 16186-1:2014+A1:2018 (E)

1 Scope

This part of EN 16186 applies to driver's cabs of Electrical Multiple Unit (EMU), Diesel Multiple Unit (DMU), railcars, locomotives and driving trailers.

NOTE 1 This standard applies to rolling stock in the scope of the Directive 2008/57/EC. [A]

This part of EN 16186 applies to driver's desks installed on the left, on the right, or in a central position in the driver's cab.

For OTMs, see EN 14033-1 A deleted text (4) and EN 15746-1 A deleted text (4).

This part of EN 16186 defines:

- anthropometric data;
- visibility conditions from the driver's cab, including forward visibility and the reference positions of line-side signals to be considered;
- assessment methods.
- NOTE 2Due to railway systems constraints the level of visibility provided to the persons outside the defined anthropometric range may vary. It is up to the operator's safety management system to address the potential restriction of front visibility, if the driver uses extreme seat positions combined with extreme body heights.
- The actual seating and positioning habits of drivers regarding visibility, whether drivers are in or outside the range of anthropometric data of this standard is outside the scope of this document.
- This standard is not intended to be applicable for tramways, metros and light rail vehicles. (4)

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 15152, Railway applications — Front windscreens for train cabs



EN 15663, Railway applications — Definition of vehicle reference masses

EN 50125-1, Railway applications — Environmental conditions for equipment — Part 1: Rolling stock and on-board equipment \bigcirc 1

koniec náhľadu – text ďalej pokračuje v platenej verzii STN