SLOVENSKI STANDARD
SIST EN 15327-1:2008

01-december-2008

Železniške naprave - Podsistem za alarmiranje na potniških vagonih - 1. del: Splošne zahteve in ročaj za sprožitev zaviranja v sili

Railway applications - Passenger alarm subsystem - Part 1: General requirements and passenger interface for the passenger emergency brake system

Bahnanwendungen - Fahrgastnotrufsystem - Teil 1: Allgemeine Anforderungen und Schnittstellen für das Fahrgastnotbremssystem

Applications ferroviaires - Sous-système du signal d'alarme - Partie 1: Exigences générales et interface voyageurs relatifs au dispositif de signal d'alarme a l'usage des voyageurs

Ta slovenski standard je istoveten z: **EN 15327-1:2008**

ICS:

13.320	Alarmni in opozorilni sistemi	Alarm and warning systems
45.060.20	Železniški vagoni	Trailing stock

SIST EN 15327-1:2008 **en,fr**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 15327-1

October 2008

ICS 13.320; 45.060.01

English Version

Railway applications - Passenger alarm subsystem - Part 1: General requirements and passenger interface for the passenger emergency brake system

Applications ferroviaires - Sous-système d'alarme pour passagers - Partie 1: Exigences générales et interface voyageurs relatifs au dispositif de signal d'alarme à l'usage des voyageurs

Bahnanwendungen - Fahrgastnotrufsystem - Teil 1: Allgemeine Anforderungen und Schnittstellen für das Fahrgastnotbremssystem

This European Standard was approved by CEN on 24 August 2008.

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 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 Management Centre has the same status as the official versions.

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

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

Page

Figures

Table

Foreword

This document (EN 15327-1:2008) 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 April 2009, and conflicting national standards shall be withdrawn at the latest by April 2009.

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

This document has been prepared under a mandate given to CEN/CENELEC/ETSI by the European Commission and the European Free Trade Association, and supports essential requirements of EC Directive 96/48/EC as amended by Directive 2004/50/EC.

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

This series of European Standards *Railway applications — Passenger alarm subsystem* consists of:

— *Part 1: General requirements and passenger interface for the passenger emergency brake system*

— *Part 2: Pneumatic system*

— *Part 3: Electro-pneumatic system*

— *Part 4: Emergency brake override system*

— *Part 5: Emergency brake override system for interconnection of different vehicles.*

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This European Standard specifies the general requirements for the installation of the passenger alarm subsystem.

The passenger alarm subsystem is fitted to passenger trains used on national networks including trans-European high-speed and conventional interoperable rail systems.

The passenger alarm subsystem includes the passenger emergency brake system.

NOTE The passenger emergency brake is sometimes shortened to emergency brake (esp. German: Notbremse) or passenger alarm (esp. English: alarm, French: alarme).

The passenger emergency brake can be operated in case of emergency brake demand by passengers or personnel in the train in order to stop the train.

2 Normative references

The following referenced documents are indispensable for the application 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 14198, *Railway applications — Braking — Requirements for the brake system of trains hauled by a locomotive*

EN 14478:2005, *Railway applications — Braking — Generic vocabulary*

EN 15179, *Railway applications — Braking — Requirements for the brake system of coaches*

prEN 15734-1, *Railway applications — Braking system of high speed trains — Part 1: Requirements and definitions*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14478:2005 and the following apply.

3.1
passenger emergency brake handle
handle interface to brake control system through which the requirement for a defined passenger emergency brake demand is indicated or initiated by passengers or operating staff

NOTE The passenger emergency brake handle is sometimes called emergency handle or alarm handle. These short terms should only be used where misunderstanding is not possible or in descriptions prepared for passengers.

3.2
passenger emergency brake application
brake application in order to stop the train following predefined safety objectives

3.3
RAL[1)]
colour standardisation system of the German Institute for Quality Assurance and Certification e.V.

---

1) Beuth Verlag GmbH, Burggrafenstraße 6, D-10772 Berlin.

NOTE Recognised equivalent colours from other national colour standards may be used.

4 Requirements

4.1 General requirements

The passenger emergency brake can be operated in case of emergency by passengers or staff in the train.

Operation of the handle is assumed to indicate that a passenger on the train or member of operating staff has identified an emergency situation which should be reacted upon by stopping the train.

Activation of the passenger emergency brake handle:

— shall initiate braking through passenger emergency brake application, the level of which is specified by the national or relevant railway authority in accordance with EN 14198, EN 15179, prEN 15734-1 or other applicable European Standards;

— can provide an indication to the driver that a passenger communication alarm has been activated, depending upon the national or relevant railway authority requirements.

Depending on the national or relevant railway authority requirements, the system design can provide the following:

— choice by the driver, or other systems if incorporated, of the location to stop the train;

— delay of the brake application;

— type of brake application, whether full service brake, rapid brake or other brake application;

— intervention by the driver or other systems in this brake application.

The emergency handle shall be clearly indicated by easily understandable logos and instructions enabling passengers to use it without difficulty.

4.2 Functional requirements for passenger emergency brake handle

4.2.1 When a passenger emergency brake handle is operated it shall not be possible to reset the handle in the initial position (stand-by) without the intervention of the staff of the train. The direction to reset the handle to the stand–by position is marked as indicated in Figure A.1. The location of the resetting device is shown in Figure A.2. The device shall be operated using the service key (e.g. square key indicated in Annex B). In particular for interoperability, it is strongly recommended that the square key as shown in Figure B.1 is used.

4.2.2 Subsequent activation of one or more handle shall have no further effect on the brake application whilst the staff has not reset the first handle. An additional indication about subsequent activations can be given to the driver.

4.2.3 The passenger emergency brake handle shall have a clearly visible seal prior to passenger use. Activation of the passenger emergency brake handle shall break the seal.

4.2.4 The force necessary to pull a sealed handle shall be between 140 N and 195 N.

4.3 Installation requirements

4.3.1 As a minimum, passenger emergency brake handles shall be located in each passenger area so that it is not necessary for the operator to pass through an internal door in order to access the device.

4.3.2 The handle shall be identifiable from at least 6 m distance.

4.3.3 Passenger emergency brake handles shall be located so that a maximum walking distance of 12 m shall be covered to reach the next one.

4.3.4 The passenger emergency brake handle location shall not exceed 2,05 m and shall not be less than 1,5 m in vertical direction from the floor.

4.3.5 The passenger emergency brake handle shall not be placed in a position where it can be operated involuntarily (e.g. near luggage racks). If necessary, the handle shall be protected with covers from above or at the side. In this case the ability of operating and resetting shall be totally preserved. Moreover, it shall be ensured that the emergency handles cannot be covered by pieces of luggage or clothes.

4.3.6 To avoid confusion the passenger emergency brake handle shall be sufficiently distant from other devices such as emergency door release handles.

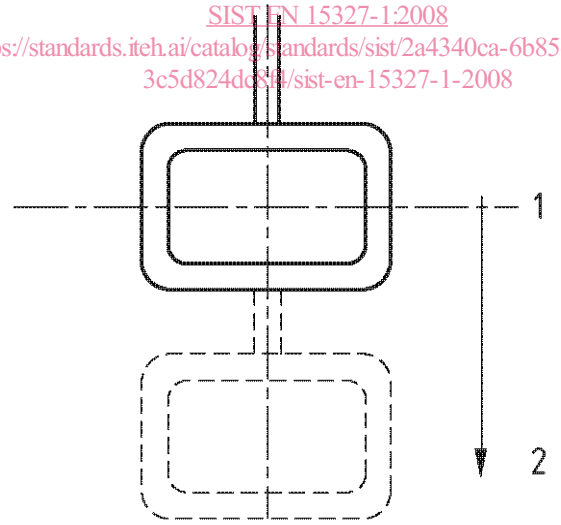
4.3.7 Passenger emergency brake handle and its background shall be clearly distinguishable with regard to their colour and shape.

It is not necessary to place passenger emergency brake handles in the vestibules or in the lavatories.

5 Passenger interface

5.1 Passenger emergency brake handle

The passenger emergency brake handle shall be operated by traction pulling downwards (see Figure 1).



Key

1 closed position stand-by

2 alarm position handle operated

Figure 1 — Passenger emergency brake handle

The overall dimension of the handle hand contact area shall not exceed the dimension shown in Annex C.

The materials used in the construction shall be appropriate to ensure sufficient resistance to avoid rupture when the handle is operated.

The colour red shall be chosen from one of the following: RAL 3020, RAL 3000, RAL 3002, RAL 3017, RAL 3018, RAL 3024, RAL 3026.

NOTE It is recommended that RAL 3020 is used.

However, colour nuances are allowed if the signal effect of the ground colour and the handles immediate recognizability are preserved.

5.2 Inscriptions

The passenger emergency brake handle installed on the passenger vehicle shall be identified by a clear inscription (see Annex D). Minimum dimensions for lettering are 7 mm for headlines and 4 mm for additional text.

Minimum dimensions for overall length are 130 mm and for the height are 80 mm.

Where a passenger emergency brake handle cannot be readily seen from within a passenger area, an additional sign shall be provided informing persons in that area of the location of the nearest handle.

The inscription in four or more languages (French, German and English are mandatory) shall be located adjacent to each emergency handle identifying it as a passenger emergency brake handle.

The inscription shall be white text on a red background.

White shall be chosen from one of the following: RAL 9001, RAL 9003, RAL 9010, RAL 9016.

NOTE It is recommended that RAL 9001 is used.