BS EN 15625:2021

BSI Standards Publication

Railway applications — Braking — Automatic variable load sensing devices

National foreword

This British Standard is the UK implementation of EN 15625:2021. It supersedes BS EN 15625:2008+A1:2010, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee RAE/4/-/1, Railway applications - Braking.

A list of organizations represented on this committee can be obtained on request to its committee manager.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Railway applications - Braking - Automatic variable load sensing devices

Applications ferroviaires - Freinage - Dispositifs de pesée variable automatiques

Bahnanwendungen - Bremse - Automatisch kontinuierlich wirkende Lasterfassungseinrichtungen

This European Standard was approved by CEN on 20 December 2020.

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Contents

Page

European foreword

This document (EN 15625:2021) 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of an identical text or by endorsement, at the latest by August 2021, and conflicting national standards shall be withdrawn at the latest by August 2021.

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 15625:2008+A1:2010.

The main changes compared to EN 15625:2008+A1:2010 are:

a) normative references have been updated;

b) terms and definitions have been revised;

c) requirements on design and manufacture have been revised;

d) requirements on materials have been removed;

e) requirements on type tests have been revised;

f) requirements on routine test and inspection have been removed;

g) requirements on type validation have been removed;

h) requirements on in-service assessment have been added;

i) requirements on documentation have been removed;

j) requirements on designation, identification and marking have been revised;

k) Annex ZA has been updated.

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 2016/797/EU.

For relationship with EU Directive 2016/797/EU, see informative Annex ZA, which is an integral part of this document.

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.

1 Scope

This document applies to automatic variable load sensing devices designed to continuously sense the load of a railway vehicle and provide a pneumatic output signal that can be used by a relay valve for the automatic variation of the air pressure used for brake applications, thereby adjusting the brake force accordingly to achieve the required brake performance.

This document specifies the requirements for the design, testing and quality assurance of automatic variable load sensing devices.

The requirements of this document are not fully applicable for tests on vehicle level (vehicle homologation tests).

2 Normative references

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 14478:2017, *Railway applications — Braking — Generic vocabulary*

EN 60721-3-5:1997, *Classification of environmental conditions — Part 3: Classification of groups of environmental parameters and their severities — Section 5: Ground vehicle installations (IEC 60721-3-5:1997)*

EN 61373:2010, *Railway applications — Rolling stock equipment — Shock and vibration tests (IEC 61373:2010)*

EN 45545-2:2020, *Railway applications — Fire protection on railway vehicles — Part 2: Requirements for fire behavior of materials and components*

EN ISO 228-1:2003, *Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation (ISO 228-1:2000)*

ISO 8573-1:2010, *Compressed air — Part 1: Contaminants and purity classes*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14478:2017 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia available at http://www.electropedia.org/

— ISO Online browsing platform available at https://www.iso.org/obp

3.1
automatic variable load sensing device
weighing valve
device connected to the vehicle, which responds to the loading of that vehicle to provide a continuous load proportional signal to the brake control device

Note 1 to entry: The load input is normally a share of the wagon's mass because of the devices position in the vehicle suspension system. The result is a pneumatic output signal pressure that can be any value between a