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**BS EN 1846-3:2013**



**BSI Standards Publication**

# **Firefighting and rescue service vehicles**

Part 3: Permanently installed equipment —  
Safety and performance

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This British Standard is the UK implementation of EN 1846-3:2013. It supersedes BS EN 1846-3:2002+A1:2008 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee FSH/17, Fire brigade equipment.

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

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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**Compliance with a British Standard cannot confer immunity from legal obligations.**

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English Version

## Firefighting and rescue service vehicles - Part 3: Permanently installed equipment - Safety and performance

Véhicules des services de secours et de lutte contre l'incendie - Partie 3: Equipements installés à demeure - Sécurité et performances

Feuerwehrfahrzeuge - Teil 3: Fest eingebaute Ausrüstung - Sicherheits- und Leistungsanforderungen

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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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## Foreword

This document (EN 1846-3:2013) has been prepared by Technical Committee CEN/TC 192 "Fire and Rescue Service Equipment", the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by January 2014, and conflicting national standards shall be withdrawn at the latest by January 2014.

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 supersedes EN 1846-3:2002+A1:2008.

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(s).

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

EN 1846, *Firefighting and rescue service vehicles*, is composed of three parts:

- *Part 1: Nomenclature and designation*;
- *Part 2: Common requirements — Safety and performance*;
- *Part 3: Permanently installed equipment — Safety and performance* (the present document).

### Significant changes:

The significant changes with respect to the previous edition EN 1846-3:2002+A1:2008 are listed below:

- a) demountable systems using a hydraulic hook arm are integrated in the standard;
- b) Clause 2: updated;
- c) Clause 3:
  - 1) 3.1.1 "specified rate(s) of the water installation,  $Q_1$ " and 3.1.2 "specified outlet pressure(s) of the water installation,  $p_{a1}$ " replaced with new 3.1.1 "classification of the water installation";
  - 2) 3.1.4 "specified height of the water installation,  $d$ " deleted;
  - 3) 3.1.10 "hosereel system": new wording;
  - 4) 3.6 "equipment gantry" replaced with "bracket assembly";
  - 5) new definitions: 3.7 "demountable" and 3.8 "hold-to-run control device";
- d) Clause 4: updated;
- e) Clause 5: verification placed directly after the requirements;
  - 1) 5.2.1: new numbered sub-entries dealing with oil hydraulic components;
  - 2) 5.2.2.3: addition of requirements regarding the installation of the final supply and delivery connection(s);

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- 3) 5.2.3.1: reference to prEN 16327:2011 added;
- 4) 5.2.6 and 5.3.6: addition of requirements for demountable systems using a hydraulic hook arm;
- 5) 5.3.2: amended to take into account all type of pumps and/or water installation;
- 6) 5.3.2.7: Figure 3 amended with new dimensions;
- 7) 5.3.4: text amended taking into account EN 15767-1;
- f) Annex A: new informative annex "Symbols and abbreviated terms";
- g) Annex B: new normative annex "Theoretical stability calculation";
- h) Annex C: new normative annex "Rated capacity of the tank".

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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## Introduction

This document is a type C standard as stated in EN ISO 12100:2010.

This document should be used with EN 1846-2 which also deals with some optional specific permanently installed equipment used by firefighters.

The equipment concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.

This document also deals with the performance requirements which apply to the equipment as defined in the scope.

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## 1 Scope

**1.1** This part of this European Standard specifies the minimum requirements for safety and performance of some optional specific permanently installed equipment on firefighting and rescue service vehicles, operated by trained persons, as designated in EN 1846-1 and specified in EN 1846-2.

NOTE Categories and mass classes of the firefighting and rescue service vehicles are given in EN 1846-1.

The permanently installed equipment covered by this Part of this European Standard is given below:

- water installation;
- liquid additive installation;
- monitor;
- equipment gantries;
- demountable systems using a hydraulic hook arm.

This part of this European Standard should be read in conjunction with any national regulations in force for vehicles using the public roads and with any EU Directives and associated EFTA regulations in force relevant to vehicles and their equipment.

For the purposes of this European Standard, the normal ambient temperature range is - 15 °C to + 35 °C.

For equipment to be used at temperature outside this temperature range, the particular temperature range should be specified by the user and the manufacturer should determine by a risk assessment any need for additional precautions.

**1.2** This European Standard does not deal with the following types of fire-fighting or rescue vehicles or equipment:

- all control systems outside of the cabin related to hook arm system;
- vehicles designed exclusively for carrying personnel;
- vehicles with a gross laden mass not exceeding 3 t;
- boats;
- aircraft;
- railway vehicles;
- ambulances (see EN 1789);
- provisions for removable equipment driven by PTO;
- airport vehicles in the scope of the recommendations of the International Civil Aviation Organisation (ICAO).

**1.3** This part of this European Standard deals with the technical requirements to minimise the hazards listed in Clause 4 which can arise during operational use, routine checking and maintenance of firefighting and rescue service vehicles.

It does not cover the hazards generated by: