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NSAI Standards

Irish Standard
I.S. EN 1789:2020

Medical vehicles and their equipment - Road ambulances

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I.S. EN 1789:2020

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National Foreword

I.S. EN 1789:2020 is the adopted Irish version of the European Document EN 1789:2020, Medical vehicles and their equipment - Road ambulances

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1789

September 2020

ICS 11.160; 43.160

Supersedes EN 1789:2007+A2:2014

English Version

Medical vehicles and their equipment - Road ambulances

Véhicules de transport sanitaire et leurs équipements - Ambulances routières

Rettungsdienstfahrzeuge und deren Ausrüstung - Krankenkraftwagen

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

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Contents

Page

European foreword 4
Introduction 5
1 Scope 6
2 Normative references 6
3 Terms and definitions 9
4 Requirements 10
4.1 General requirements 10
4.2 Electrical requirements 10
4.2.1 General 10
4.2.2 Electromagnetic compatibility (EMC) 11
4.2.3 Battery and alternator 11
4.2.4 Electrical installation 12
4.2.5 Visual warning system and audible warning system (siren) 13
4.2.6 Reversing systems 13
4.2.7 Exterior illumination lights 13
4.3 Vehicle body 14
4.3.1 Fire safety 14
4.3.2 Driver's seat configuration 14
4.3.3 Minimum passenger capacity 14
4.3.4 Bulkhead 15
4.3.5 Openings (doors, windows, emergency exits) 15
4.3.6 Loading area 16
4.4 Patient’s compartment 18
4.4.1 General 18
4.4.2 Safety 18
4.4.3 Hygiene 18
4.4.4 Patient’s compartment dimensions 19
4.4.5 Patient and crew seating 24
4.4.6 Ventilation and anaesthetic gas scavenging systems 25
4.4.7 Temperature control system 25
4.4.8 Interior lighting 26
4.4.9 Interior noise level 26
4.4.10 Holding system for infusion 26
4.4.11 Retention, fixation and restraint systems 27
4.4.12 Mass reserve 27
5 Testing 27
5.1 General 27
5.2 Testing of the interior noise level 27
5.2.1 Specific measurement conditions 27
5.2.2 Measurements 28
5.3 Testing of retention systems and fixation of the equipment in the patient’s compartment 28
5.3.1 General 28
5.3.2 Testing of the stretcher fixation on the vehicle floor 30
5.3.3 Testing of the medical devices fixation 30
5.3.4 Testing of furniture 30

This is a free page sample. Access the full version online.

5.3.5 Test procedure ... 31
5.4 Testing of rounded edges and radius inside the patient's compartment ... 32
5.4.1 Testing of rounded edges ... 32
5.4.2 Testing of radius inside the patient's compartment ... 33
5.5 Procedure to verify the patient's compartment specifications ... 33
5.6 Procedure to verify the loading area specifications ... 33
5.6.1 General ... 33
5.6.2 Procedure to verify the loading angle of 16° ... 33
5.7 Procedure to verify the dimensions of the patient's compartment ... 35
5.7.1 Type A and B road ambulances ... 35
5.7.2 Type C road ambulances ... 35
5.8 Procedure to verify the seats dimensions of the patient's compartment ... 36
5.9 Testing of the ventilation system ... 36
5.10 Testing of the heating system ... 37
5.11 Testing of the cooling system ... 37
5.11.1 Test procedure ... 37
5.11.2 Testing of independent air conditioning system ... 38
5.12 Testing of interior lighting ... 38
5.13 Testing of infusion holding system ... 38

6 Equipment and medical devices ... 39
6.1 Provision of medical devices ... 39
6.2 Medical devices storage ... 39
6.3 Requirements for medical devices ... 39
6.3.1 General ... 39
6.3.2 Temperature ... 39
6.3.3 Humidity and ingress of liquids ... 39
6.3.4 Mechanical strength ... 39
6.3.5 Fixation of devices ... 40
6.3.6 Electrical safety ... 40
6.3.7 User interface ... 40
6.3.8 Gas installation ... 40
6.3.9 Marking and instructions ... 42
6.3.10 Maintenance ... 42
6.4 List of equipment ... 42

Annex A (informative) Test summary ... 52

Annex B (informative) Recognition ... 53

B.1 Recognition and visibility of ambulances ... 53

B.2 Recognition of crew ... 53

Annex C (informative) Hygiene ... 54

Annex D (informative) A–deviations ... 55

D.1 Deviation in Spain ... 55

Annex ZA (informative) Relationship between this European Standard and the essential requirements of Directive 93/42/EEC [OJ L 169] aimed to be covered ... 56

Bibliography ... 57

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European foreword

This document (EN 1789:2020) has been prepared by Technical Committee CEN/TC 239 "Rescue systems", 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 February 2021, and conflicting national standards shall be withdrawn at the latest by March 2022.

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 1789:2007+A2:2014.

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.

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.

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Introduction

Road ambulances are subject to a higher risk in use. The exact circumstances of operation cannot always be planned or anticipated in detail.

Vehicles are designed so as to be safe. Design requirements can be derived from European and national occupational safety and health legislation.

Under EU law, employers are responsible for carrying out a risk assessment (89/391/EEC, OSH framework directive) and for provision of safe work equipment (89/655/EEC, use of work equipment directive) that allows employees to work without their health being at risk.

The document was first developed in the late 1990s to define a common approach to requirements to enhance patient and crew safety. The document has evolved and matured through several amendments and revisions.

This latest revision work of EN 1789 has had two key objectives:

— The first objective was to revise the technical side of the document with more manageable verification in mind, while maintaining the high quality and strict nature of the requirements.

— The second objective was to check all the references and regulations, paying special attention to EU regulations and updated standardization rules.

Testing of special purpose vehicle, such as an ambulance, is complex. Multiple functions (e.g. fixations, maintain systems, noise, illumination, heating, cooling etc.) may require numerous tests, which can be destructive. In this edition, carefully planned tests according to worst-case scenario strategies have reduced the number of destructive tests without sacrificing test qualities.

The previous edition of this standard (EN 1789:2007+A2:2014) contained a number of direct references to EU regulations. According to CEN Internal Regulations Part 3:2017 and to avoid duplication as well as outdated references and to enable use of this standard independently of the ECE rules, EU regulations and directives, these references have now been removed from the normative section of the standard.

This document is a reference document which can be used in support of regulations.

For the purpose of verification of an ambulance according to EU vehicle approval process, a section of EN 1789:2007+A1:2010+A2:2014 (i.e. patient's compartment) has been referenced directly in Regulation (EU) 2018/858.

CEN/TC 239 has agreed to a transition period of a maximum of 18 months in order to accommodate the different organisational structures that are necessary for the transport of patients are responsible for providing sufficient time for the technical implementation. At the date of publication of EN 1789, the presumption of conformity of the superseded standard has not yet been established in the Official Journal of the European Union. Users of the standard are invited to check the date in the Official Journal of the European Union against the transition period established by CEN/TC 239.

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1 Scope

This document specifies requirements for the design, testing, performance and equipping of road ambulances used for the transport, monitoring, treatment and care of patients. It contains requirements for the patient's compartment in terms of the working environment, ergonomic design and the safety of the crew and patients. This document does not cover the training of the crew, which is the responsibility of the authority/authorities in the country where the ambulance is to be registered.

This document is applicable to road ambulances capable of transporting at least one patient on a stretcher and excludes the transportation of hospital beds.

This document also specifies requirements for ambulances intended to carry transport incubator systems.

This document covers the specific requirements of each type of road ambulance, which are designated according to the patient condition.

This document gives general requirements for medical devices carried in road ambulances and used therein and outside hospitals and clinics in situations where the ambient conditions can differ from normal indoor conditions.

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.

CEN/TS 16165:2016, *Determination of slip resistance of pedestrian surfaces - Methods of evaluation*

DIN 51130:2014, *Testing of floor coverings - Determination of the anti-slip property - Workrooms and fields of activities with slip danger - Walking method - Ramp test*

EN 3-7:2004+A1:2007, *Portable fire extinguishers - Part 7: Characteristics, performance requirements and test methods*

EN 443:2008, *Helmets for fire fighting in buildings and other structures*

EN 455-1:2020, *Medical gloves for single use - Part 1: Requirements and testing for freedom from holes*

EN 455-2:2015, *Medical gloves for single use - Part 2: Requirements and testing for physical properties*

EN 794-3:1998+A2:2009, *Lung ventilators - Part 3: Particular requirements for emergency and transport ventilators*

EN 1041:2008+A1:2013, *Information supplied by the manufacturer of medical devices*

EN 1865-1:2010+A1:2015, *Patient handling equipment used in road ambulances - Part 1: General stretcher systems and patient handling equipment*

EN 1865-2:2010+A1:2015, *Patient handling equipment used in road ambulances - Part 2: Power assisted stretcher*

EN 1865-4:2012, *Patient handling equipment used in road ambulances - Part 4: Foldable patient transfer chair*

EN 1865-5:2012, *Patient handling equipment used in road ambulances - Part 5: Stretcher support*

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