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Interested committees:

Title: Draft BS EN 12312-20 BS Aircraft ground support equipment - Specific requirements. Part 20: Electrical ground power units.

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- iii) requires additional national guidance or information

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

April 2025

ICS

Will supersede EN 12312-20:2005+A1:2009

English Version

Aircraft ground support equipment - Specific requirements - Part 20: Electrical ground power units

Matériel au sol pour aéronefs - Exigences particulières
- Partie 20: Matériel d'alimentation électrique au sol

Luftfahrt-Bodengeräte - Besondere Anforderungen -
Teil 20: Ausrüstung zur Bodenstromversorgung

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 274.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

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

Contents

European foreword..... 3

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 7

4 List of hazards 7

5 Safety requirements and/or measures 8

5.1 General requirements 8

5.2 Power sources 8

5.3 Cables and connectors..... 8

5.4 Equipment fixed to passenger boarding bridges..... 9

5.5 Controls..... 9

6 Verification of requirements 9

7 Information for use 10

7.1 Marking..... 10

7.2 Safety marking 10

7.3 Instructions 10

Annex A (informative) List of significant hazards..... 12

Annex ZA (informative) Relationship between this European Standard and the essential requirements of Regulation (EU) 2023/1230 aimed to be covered 17

Bibliography..... 23

European foreword

This document (prEN 12312-20:2025) has been prepared by Technical Committee CEN/TC 274 “Aircraft ground support equipment”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 12312-20:2005+A1:2009.

This document includes the following significant technical changes with respect to EN 12312-20:2005+A1:2009:

- the Introduction was updated;
- the Scope was updated;
- Clause 2, *Normative references*, was updated;
- Clause 4, *List of hazards*, was updated;
- 5.1.9 was updated;
- 5.3.7 was updated
- 5.3.8 and 5.3.9 were added;
- 5.4 was updated;
- The order of Clause 6, *Information for use*, and Clause 7, *Verification of requirements*, was swapped;
- Annex A, *List of significant hazards*, was updated;
- Annex ZA was updated;
- the Bibliography was updated.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

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

EN 12312, Aircraft ground support equipment – Specific requirements, consists of the following parts:

- *Part 1: Passenger stairs;*
- *Part 2: Catering vehicles;*
- *Part 3: Conveyor belt vehicles;*
- *Part 4: Passenger boarding bridges;*
- *Part 5: Aircraft fuelling equipment;*
- *Part 6: Deicers and deicing/antiicing equipment;*
- *Part 7: Aircraft movement equipment;*

- *Part 8: Maintenance or service stairs and platforms;*
- *Part 9: Container/Pallet loaders;*
- *Part 10: Container/Pallet transfer transporters;*
- *Part 11: Container/Pallet dollies and loose load trailers;*
- *Part 12: Potable water service equipment;*
- *Part 13: Lavatory service equipment;*
- *Part 14: Disabled/incapacitated passenger boarding vehicles;*
- *Part 15: Baggage and equipment tractors;*
- *Part 16: Air start equipment;*
- *Part 17: Air conditioning equipment;*
- *Part 18: Nitrogen or Oxygen units;*
- *Part 19: Aircraft jacks, axle jacks and hydraulic tail stanchions;*
- *Part 20: Electrical ground power units.*

Introduction

This document specifies health and safety requirements, as well as some functional and performance requirements for ground power equipment intended for the electrical supply for aircraft to be used on all aircraft types commonly in service in civil air transport.

The minimum essential criteria are considered to be of primary importance in providing safe, serviceable, economical, and practical ground power equipment. Deviations from the recommended criteria should occur only after careful consideration, extensive testing, risk assessment and thorough service evaluation have shown alternative methods or conditions to be satisfactory. Such deviations are outside the scope of this document and a manufacturer should be able to demonstrate an equivalent level of protection.

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

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

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

1 Scope

This document specifies the technical requirements to minimize the hazards listed in Clause 4 which can arise during the commissioning, operation and maintenance of ground power equipment, when carried out in accordance with the specifications given by the manufacturer or his authorized representative. It also takes into account some performance requirements recognized as essential by authorities, aircraft and ground support equipment (GSE) manufacturers as well as airlines and service companies.

This document applies to:

- ground power units either self-propelled or towable;
- ground power equipment when mounted on other GSE;
- ground power accessories intended for ground power equipment (including accessories for fixed equipment).

This document does not apply to:

- the electrical characteristics of the supply, the type of power supply system and related measures against contact;
- any electrical supply system not intended for aircraft use;
- the on-board electrical system of the aircraft.

This document does not establish requirements for noise and vibration.

Noise and vibration are dealt with respectively in EN 1915-4:2004+A1:2009 and EN 1915-3:2004+A1:2009.

This document does not deal with hazards in respect to a standard automotive chassis and from other vehicles on the apron.

This part of EN 12312 is not applicable to ground power equipment which is manufactured before the date of publication of this document by CEN.

This part of EN 12312 is intended to be used in conjunction with EN 1915-1:2023, EN 1915-2:2001+A1:2009, EN 1915-3:2004+A1:2009 (for vehicles) and EN 1915-4:2004+A1:2009.

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 1175:2020, *Safety of industrial trucks - Electrical/electronic requirements*

EN 1915-1:2023, *Aircraft ground support equipment - General requirements - Part 1: Basic safety requirements*

EN 1915-2:2001+A1:2009, *Aircraft ground support equipment - General requirements - Part 2: Stability and strength requirements, calculations and test methods*

EN 1915-3:2004+A1:2009, *Aircraft ground support equipment - General requirements - Part 3: Vibration measurement methods and reduction*

EN 1915-4:2004+A1:2009, *Aircraft ground support equipment - General requirements - Part 4: Noise measurement methods and reduction*

EN ISO 8528-13:2016, *Reciprocating internal combustion engine driven alternating current generating sets - Part 13: Safety (ISO 8528-13:2016, Corrected version 2016-10-15)*