



BSI Standards Publication

Reciprocating internal combustion engine driven alternating current generating sets

Part 7: Technical declarations for specification and design

National foreword

This British Standard is the UK implementation of ISO 8528-7:2017. It supersedes BS 7698-7:1996, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MCE/14, RIC engines.

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

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**Reciprocating internal combustion
engine driven alternating current
generating sets —**

**Part 7:
Technical declarations for
specification and design**

*Groupes électrogènes à courant alternatif entraînés par moteurs
alternatifs à combustion interne —*

*Partie 7: Déclarations techniques pour la spécification et la
conception*





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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by ISO/TC 70, *Internal combustion engines*.

This second edition cancels and replaces the first edition (ISO 8528-7:1994), which has been technically revised.

A list of all parts in the ISO 8528 series can be found on the ISO website

Reciprocating internal combustion engine driven alternating current generating sets —

Part 7: Technical declarations for specification and design

1 Scope

This document specifies the requirements and parameters for the specification and design of a reciprocating internal combustion (RIC) engine driven generating set, with reference to the definitions given in ISO 8528-1 to ISO 8528-6.

It applies to alternating current (a.c.) generating sets driven by RIC engines for land and marine use, excluding generating sets used on aircraft or to propel land vehicles and locomotives.

For some specific applications (for example, essential hospital supplies, high-rise buildings, etc.) supplementary requirements may be necessary. The provisions of this document are intended to be regarded as a basis.

For other reciprocating-type prime movers (e.g. sewage gas engines, steam engines), the provisions of this document are intended to be used as a basis.

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.

ISO 8178-3, *Reciprocating internal combustion engines — Exhaust emission measurement — Part 3: Definitions and methods of measurement of exhaust gas smoke under steady-state conditions*

ISO 8528-1:2005, *Reciprocating internal combustion engine driven alternating current generating sets — Part 1: Application, ratings and performance*

ISO 8528-2:2005, *Reciprocating internal combustion engine driven alternating current generating sets — Part 2: Engines*

ISO 8528-3:2005, *Reciprocating internal combustion engine driven alternating current generating sets — Part 3: Alternating current generators for generating sets*

ISO 8528-4:2005, *Reciprocating internal combustion engine driven alternating current generating sets — Part 4: Controlgear and switchgear*

ISO 8528-5:2013, *Reciprocating internal combustion engine driven alternating current generating sets — Part 5: Generating sets*

ISO 8528-6:2005, *Reciprocating internal combustion engine driven alternating current generating sets — Part 6: Test methods*

IEC 60034-2-1, *Rotating electrical machines — Part 2-1: Standard methods for determining losses and efficiency from tests (excluding machines for traction vehicles)*

IEC 60034-5, *Rotating electrical machines — Part 5: Degrees of protection provided by the integral design of rotating electrical machines (IP code) — Classification*