

Reciprocating internal combustion engine driven alternating current generating sets —

Part 1: Specification for application, ratings and performance

UDC 621.313.12.025 – 843

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

BSI
Documents

AVA

Document Sharing Hub

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Machinery and Components Standards Policy Committee (MCE/-) to Technical Committee MCE/14, upon which the following bodies were represented:

- Association of Consulting Engineers
- British Railways Board
- Ministry of Defence
- Society of Motor Manufacturers and Traders Ltd.

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

- Agricultural Engineers Association
- Association of Manufacturers of Power Generating Systems and Association of British Generating Set Manufacturers
- British Industrial Truck Association
- Department of Transport
- Health and Safety Executive
- Marine Engine and Equipment Manufacturers' Association

This British Standard, having been prepared under the direction of the Machinery and Components Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 15 October 1993

© BSI 03-1999

The following BSI references relate to the work on this standard:
Committee reference MCE/14
Draft for comment 89/73534 DC

ISBN 0 580 22565 8

Amendments issued since publication

Amd. No.	Date	Comments

Contents

	Page
Committees responsible	Inside front cover
National foreword	ii
1 Scope	1
2 Normative references	1
3 Symbols and abbreviations	1
4 Other regulations and additional requirements	1
5 General description	2
6 Application criteria	2
7 Performance classes	4
8 Installation features	4
9 Emissions	5
10 Standard reference conditions	5
11 Site conditions	5
12 Power adjustment for ambient conditions	6
13 Power rating definitions	6
14 Operating performance	9
Figure 1 — Illustration of continuous power	8
Figure 2 — Illustration of prime power (not to scale)	8
Figure 3 — Illustration of limited-time running power	8
List of references	Inside back cover

National foreword

This Part of BS 7698 has been prepared under the direction of the Machinery and Components Standards Policy Committee. It is identical with ISO 8528-1:1993 *Reciprocating internal combustion engine driven alternating current generating sets — Part 1: Application, ratings and performance*, published by the International Organization for Standardization (ISO).

BS 7698 consists of the following Parts, which are identical with the corresponding Parts of ISO 8528:

- *Part 1: Specification for application, ratings and performance;*
- *Part 2: Specification for engines;*
- *Part 3: Specification for alternating current generators for generating sets;*
- *Part 4: Specification for controlgear and switchgear;*
- *Part 5: Specification for generating sets;*
- *Part 6: Test methods;*
- *Part 7: Technical declarations for specification and design¹⁾.*

Further Parts of ISO 8528 are in preparation. It is envisaged that when these Parts of ISO 8528 are published they will be implemented as dual-numbered Parts of BS 7698.

Cross-references

International standard	Corresponding British Standard
ISO 3046-1:1986	BS 5514 <i>Reciprocating internal combustion engines: performance</i> Part 1:1987 <i>Specification for standard reference conditions and declarations of power, fuel consumption and lubricating oil consumption</i> (Identical) BS 7698 <i>Reciprocating internal combustion engine driven alternating current generating sets</i>
ISO 8528-2:1993	Part 2:1993 <i>Specification for engines</i> (Identical)
ISO 8528-3:1993	Part 3:1993 <i>Specification for alternating current generators for generating sets</i> (Identical)
ISO 8528-4:1993	Part 4:1993 <i>Specification for controlgear and switchgear</i> (Identical)
ISO 8528-5:1993	Part 5:1993 <i>Specification for generating sets</i> (Identical)
IEC 439-2:1987	BS 5486 <i>Low-voltage switchgear and controlgear assemblies</i> Part 2:1988 <i>Particular requirements for busbar trunking systems (busways)</i> (Identical)

¹⁾ In preparation.

The Technical Committee has reviewed the provisions of IEC 34-1:1983, IEC 298:1990 and IEC 439-1:1985, to which normative reference is made in the text, and has decided that they are acceptable for use in conjunction with this standard.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

