

This is a preview of "ISO 8528-5:2018". [Click here to purchase the full version from the ANSI store.](#)

Fourth edition
2018-10

Reciprocating internal combustion engine driven alternating current generating sets —

Part 5: Generating sets

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

Partie 5: Groupes électrogènes



Reference number
ISO 8528-5:2018(E)

© ISO 2018

This is a preview of "ISO 8528-5:2018". Click here to purchase the full version from the ANSI store.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

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

Published in Switzerland

This is a preview of "ISO 8528-5:2018". Click here to purchase the full version from the ANSI store.

Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Other regulations and additional requirements	17
5 Frequency characteristics	17
5.1 General.....	17
5.2 Safety frequency.....	18
6 Voltage characteristics	18
7 Sustained short-circuit current	18
8 Factors affecting generating set performance	18
8.1 General.....	18
8.2 Power.....	18
8.3 Frequency and voltage.....	18
8.4 Load acceptance.....	19
9 Cyclic irregularity	21
10 Starting characteristics	22
11 Stop time characteristics	24
12 Parallel operation	24
12.1 Generating sets coupled with each other without grid.....	24
12.1.1 Active power sharing.....	24
12.1.2 Reactive power sharing.....	27
12.2 Generating sets connected to the grid.....	29
12.2.1 General.....	29
12.2.2 Influence on operating behaviour.....	29
12.2.3 Design features.....	30
13 Rating plates	33
14 Additional factors influencing generating set performance	34
14.1 Starting methods.....	34
14.2 Shutdown methods.....	35
14.3 Fuel and lubrication oil supply.....	35
14.4 Combustion air.....	35
14.5 Exhaust system.....	35
14.6 Cooling and room ventilation.....	35
14.7 Monitoring.....	36
14.8 Noise emission.....	36
14.9 Coupling.....	36
14.10 Vibration.....	37
14.10.1 General.....	37
14.10.2 Torsional vibration.....	37
14.10.3 Linear vibration.....	37
14.11 Foundations.....	37
15 Performance class operating limit values	38
15.1 General.....	38
15.2 Recommendation for gas engine operating limit values.....	38
Annex A (informative) Low voltage ride through capability	41
Bibliography	42

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of 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 www.iso.org/iso/foreword.html.

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

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This fourth edition cancels and replaces the third edition (ISO 8528-5:2013), which has been technically revised. The main changes compared to the previous edition are as follows:

- [Clause 3](#) has been updated to take into account the minimum and maximum safety frequency;
- new [Subclause 14.2](#) has been added;
- new [Annex A](#) has been created.

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