

Australian Standard[®]

**High-voltage switchgear and
controlgear**

**Part 203: Gas-insulated metal-enclosed
switchgear for rated voltages above
52 kV**



This Australian Standard® was prepared by Committee EL-007, Power Switchgear. It was approved on behalf of the Council of Standards Australia on 10 August 2012. This Standard was published on 27 August 2012.

The following are represented on Committee EL-007:

- Australian British Chamber of Commerce
 - Australian Industry Group
 - Energy Australia
 - Energy Networks Association
 - Engineers Australia
 - University of New South Wales
-

This Standard was issued in draft form for comment as DR AS IEC 62271.203.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting www.standards.org.au

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard[®]

High-voltage switchgear and controlgear

Part 203: Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV

Originated as AS 2263—1979.
Previous edition AS 62271.203—2005.
Second edition 2012.

COPYRIGHT

© Standards Australia Limited

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968.

Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 1 74342 215 1

PREFACE

This Standard was prepared by the Standards Australia Committee EL-007, Power Switchgear to supersede AS 62271.203—2005, *High-voltage switchgear and controlgear*, Part 203: *Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV* (IEC 62271-203, Ed.1.0 (2003) MOD).

The objective of this Standard is to specify requirements for gas-insulated metal-enclosed switchgear in which the insulation is obtained, at least partly, by an insulating gas other than air at atmospheric pressure, for alternating current of rated voltages above 52 kV, for indoor and outdoor installation, and for service frequencies up to and including 60 Hz.

This Standard should be read in conjunction with IEC 62271-1:2007 (adopted as AS 62271.1—2012), to which it refers and which is applicable unless otherwise specified. In order to simplify the indication of corresponding requirements, the same numbering of clauses and subclauses is used as in IEC 62271-1 (AS 62271.1). Amendments to these clauses and subclauses are given under the same numbering, whilst additional subclauses, are numbered from 101.

This Standard is identical with, and has been reproduced from IEC 62271-203, Ed.2.0 (2011), *High-voltage switchgear and controlgear—Part 203: Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV*.

Common numbering of Standards falling under the responsibility of EL-007

In accordance with the decision taken by EL-007, a common numbering system will be established in order to align the numbering of Australian Standards falling under the responsibility of EL-007 with the IEC Standards. All high-voltage switchgear and controlgear Standards will, at their next revision (or as equivalent Standards become available in IEC), become parts of the AS 62271 (*High-voltage switchgear and controlgear*) series. The table below gives the relationship between AS 62271 numbering and original Standard numbers. Standards current at the time of publication of this Standard are marked with an asterisk (*).

| AS 62271 series part number | High-voltage switchgear and controlgear | Previous AS number |
|-----------------------------|--|--------------------|
| 100* | High-voltage alternating-current circuit-breakers | AS 2006 |
| 102* | Alternating current disconnectors and earthing switches | AS 1306 |
| 103 | Switches for rated voltages above 1 kV and less than 52 kV | *AS/NZS 60265.1 |
| 104 | Switches for rated voltages of 52 kV and above | *AS 60265.2 |
| 105 | Alternating current switch-fuse combinations | *AS 2024 |
| 106 | Alternating current contractors and contractor-based motor-starters | *AS 60470 |
| 110* | Inductive load switching | AS 4372 |
| 200* | AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV | AS 2264 |
| 201* | AC insulation-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV | AS 2264 |
| 202* | High-voltage/low-voltage prefabricated substations | AS 61330 |
| 203* | Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV | AS 2263 |
| 301* | Dimensional standardization of terminals | AS 2395 |
| 303 | Use and handling of sulphur hexafluoride (SF ₆) in high-voltage switchgear and controlgear | *AS 2791 |
| 304 | Additional requirements for enclosed switchgear and controlgear from 1 kV to 72.5 kV to be used in severe climactic conditions | *AS 4243 |
| 308* | Guide for asymmetrical short-circuit breaking test duty T100a | — |

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number appears on the cover and title page while the International Standard number appears only on the cover.
- (b) In the source text ‘this part of IEC 62271’ should read ‘this part of AS 62271’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

Only normative references in the source document that have been adopted as Australia or Australia/New Zealand Standards have been listed as follows:

| <i>Reference to International Standard</i> | | <i>Australian or Australian/New Zealand Standard</i> | |
|--|--|--|--|
| IEC | | AS | |
| 60044 | Instrument transformers | 60044 | Instrument transformers |
| 60044-1 | Part 1: Current transformers | 60044.1 | Part 1: Current transformers |
| 60044-2 | Part 2: Inductive voltage transformers | 60044.2 | Part 2: Inductive voltage transformers |
| 60068 | Basic environmental testing procedures | 60068 | Environmental testing |
| 60068-2-11 | Part 2.11: Tests—Test Ka: Salt mist | 60068.2.11 | Part 2.11: Tests—Test Ka: Salt mist |
| 60270 | High-voltage test techniques—Partial discharge measurements | 60270 | High-voltage test techniques—Partial discharge measurements |
| | | AS/NZS | |
| 60137 | Insulated bushings for alternating voltages above 1000 V | 60137 | Insulated bushings for alternating voltages above 1000 V |
| 60840 | Power cables with extruded insulation and their accessories for rated voltages above 30 kV ($U_m = 36$ kV) up to 150 kV ($U_m = 170$ kV)—Test methods and requirements | 60840 | Power cables with extruded insulation and their accessories for rated voltages above 30 kV ($U_m = 36$ kV) up to 150 kV ($U_m = 170$ kV)—Test methods and requirements |

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-