

Australian Standard[®]

Cast resin partitions for metal-enclosed gas-filled high-voltage switchgear and controlgear

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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
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**Cast resin partitions for metal-enclosed
gas-filled high-voltage switchgear and
controlgear**

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PREFACE

This Standard was prepared by the Standards Australia Committee EL-007, Power Switchgear.

This Standard incorporates Amendment No. 1 (September 2013). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to provide the strength requirements for the mechanical aspects of design, manufacture, testing, inspection, certification and marking of cast resin partitions which are pressurized for use specifically in metal-enclosed gas-filled high-voltage switchgear and associated equipment.

This Standard is identical with and has been reproduced from EN 50089:1992, *Cast resin partitions for metal enclosed gas-filled high voltage switchgear and control gear*, and its Amendment (1994) which is added at the end of the source text.

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

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The references to European and International Standards should be replaced by references to the following Australian or Australian/New Zealand Standards:

<i>Reference to International or European Standard</i>	<i>Australian or Australian/New Zealand Standard</i>
HD	AS
358 S3 Gas-insulated metal-enclosed (IEC 517) switchgear for rated voltage of 72.5 kV and above	62271 High-voltage switchgear and controlgear 62271.203 Part 203: Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV
EN	AS/NZS ISO
29000 Quality management and quality assurance (series)	9000 Quality management systems—Fundamentals and vocabulary (series)

Only European and international references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

FOREWORD

This European Standard has been prepared by CENELEC Technical Committee TC17C: High-voltage enclosed switchgear and controlgear. It was approved by CENELEC on 24th March 1992.

The following dates are applicable:

- latest date of publication of an identical national standard (dop) 1993-03-01
- latest date of withdrawal of conflicting national standards (dow) 1993-03-01

The document forms a supplement to

- EN 50052:1986, Cast aluminium alloy enclosures for gas-filled high-voltage switchgear and controlgear,
- EN 50064:1989, Wrought aluminium and aluminium alloy enclosures for gas-filled high-voltage switchgear and controlgear,
- EN 50068:1990, Wrought steel enclosures for gas-filled high-voltage switchgear and controlgear and
- EN 50069:1990, Welded composite enclosures of cast and wrought aluminium alloys for gas-filled high-voltage switchgear and controlgear.

The specifications are appropriate for pressurized switchgear enclosures allowing an economic production without sacrificing aspects of safety. For unusual shapes dictated by electrical conditions they permit the verification of sound design by proof tests instead of calculations.

The present EN has been established as an international specification for the design, construction, testing, inspection and certification of pressurized enclosures used in high-voltage switchgear and controlgear. This standard follows to that extent also Article 2 of the Directive 76/767/EEC.

List of standards referred to in this standard:

- HD 358 S3:1992 (IEC 517:1990) Gas-insulated metal-enclosed switchgear for rated voltage of 72.5 kV and above.
- EN 29000:1988 Quality management and quality assurance.

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AUSTRALIAN STANDARD

Cast resin partitions for metal-enclosed gas-filled high-voltage switchgear and controlgear**1 Introduction**

This standard covers the strength requirements for the mechanical aspects of design, manufacture, testing, inspection, certification and marking of cast resin partitions which are pressurized for use specifically in metal enclosed gas filled High Voltage Switchgear and associated equipment.

Electrical performance requirements have no bearing on mechanical strength and are therefore not considered in this standard.

Special consideration shall be given to these partitions for the following reasons:

1.1 For electrical reasons the partitions must be manufactured in insulating material. This standard deals only with cast resin.

1.2 The enclosures usually form the containment of electrical equipment, thus their shape and therefore the shape of the partitions is determined by electrical as well as mechanical considerations.

1.3 The enclosures in which the partitions are integrated are installed in restricted access areas and the equipment is operated by skilled and instructed persons only.