

Australian/New Zealand Standard™

**Low-voltage switchgear and controlgear  
assemblies**

**Part 4: Particular requirements for  
assemblies for construction sites (ACS)**



#### **AS/NZS 3439.4:2009**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-006, Industrial Switchgear and Controlgear. It was approved on behalf of the Council of Standards Australia on 11 September 2009 and on behalf of the Council of Standards New Zealand on 16 October 2009.  
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Australian Chamber of Commerce and Industry  
Australian Electrical and Electronic Manufacturers Association  
Bureau of Steel Manufacturers of Australia  
Engineers Australia  
National Electrical Switchboard Manufacturers Association  
Testing Interests (Australia)

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*This Standard was issued in draft form for comment as DR 07162.*

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**Low-voltage switchgear and controlgear assemblies**

**Part 4: Particular requirements for assemblies for construction sites (ACS)**

Originated as AS 3439.4—1995.  
Revised and redesignated as AS/NZS 3439.4:2009.

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-006, Industrial Switchgear and Controlgear, to supersede AS 3439.4—1995 on publication.

The objective of this Standard is to specify requirements for type-tested assemblies for construction sites.

This Standard is identical with, and has been reproduced from IEC 60439-4, Ed. 2.0 (2004), *Low-voltage switchgear and controlgear assemblies – Part 4: Particular requirements for assemblies for construction sites (ACS)*.

This Standard is Part 4 of the following series:

AS/NZS 3439	Low-voltage switchgear and controlgear assemblies
AS/NZS 3439.1	Part 1: Type-tested and partially type-tested assemblies
AS 3439.2	Part 2: Particular requirements for busbar trunking systems (busways)
AS 3439.3	Part 3: Particular requirements for low-voltage switchgear and controlgear assemblies intended to be installed in places where unskilled persons have access for their use—Distribution boards
AS/NZS 3439.4	Part 4: Particular requirements for assemblies for construction sites (ACS) (this Standard)
AS/NZS 3439.5	Part 5: Particular requirements for assemblies for power distribution in public networks

The terms ‘normative’ and ‘informative’ are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

The following major changes with respect to Edition 1 of IEC 60439-4 (including amendments 1 and 2) have been incorporated:

- introduction of the definition for ‘rated current of ACS’;
- replacement of classification based on the rated current of ACS by classification based on the function as assigned by the manufacturer;
- amended requirements for the protection of socket-outlets with reference to the more comprehensive requirements of IEC 60364-7-704;
- introduction of common requirements for all types of ACS.

In addition to the particular requirements in this Part 4, all requirements of AS/NZS 3439.1 apply to assemblies for construction sites (ACS) if not otherwise indicated hereinafter.

The clauses and subclauses of this Part 4, modify or replace the respective clauses and subclauses in AS/NZS 3439.1 which is a modified adoption of IEC 60349-1:1999.

In view of the fact that this Part 4 should be read in conjunction with AS/NZS 3439.1, the numbering of its clauses and subclauses correspond to the latter.

Where there is no corresponding clause or subclause in this Part 4, the clause or subclause of AS/NZS 3439.1 applies without modification.

Subclauses and figures which are additional to those in part 1 are numbered starting from 101.

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

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text 'IEC 60439-4' should read 'AS 3439.4' and 'IEC 60439-1' should read 'AS/NZS 3439.1'.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

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## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

**Australian/New Zealand Standard****Low-voltage switchgear and controlgear assemblies  
Part 4: Particular requirements for assemblies for construction sites  
(ACS)**

Any table, figure or text of the international standard that is struck through is not part of this standard. Any Australian table, figure or text that is added is part of this standard and is identified by shading.

**1 General****1.1 Scope and object**

*Replace the last three paragraphs by the following:*

This standard applies to type-tested ASSEMBLIES (TTA) intended for use on construction sites, i.e. temporary places of work to which the public do not generally have access and where building construction, installation, repairs, alteration or demolition of property (buildings) or civil engineering (public works) or excavation or any other similar operations are carried out. These ASSEMBLIES may be transportable (semi-fixed) or mobile.

This standard does not apply to ASSEMBLIES for use in the administrative centres of construction sites (offices, cloakrooms, ASSEMBLY rooms, canteens, restaurants, dormitories, toilets, etc.).

The nominal primary voltage and the nominal secondary voltage of transformers incorporated in ACS shall be within the limits specified in IEC 60439-1.

Requirements for electrical protection provided by equipment manufactured according to this International Standard shall comply with the requirements given in IEC 60364-7-704.

NOTE This standard may be used as a guide to partially type-tested ASSEMBLIES (PTTA) constructed according to agreement between manufacturer and user taking into account the nature of supply and/or distribution network and relevant installation requirements.

**1.2 Normative references**

*This subclause of Part 1 applies with the following additions:*

~~IEC 60068-2-27:1987, Environmental testing—Part 2: Tests—Test Ea and guidance: Shock~~

AS 60068.2.27, Environmental testing—Tests—Test Ea and guidance: Shock (identical to IEC 60068-2-27)

~~IEC 60068-2-42:2003, Environmental testing—Part 2-42: Tests—Test Kc: Sulphur dioxide test for contacts and connections (identical to IEC 60068-2-42)~~

AS 60068.2.42, Environmental testing—Tests—Test Kc: Sulphur dioxide test for contacts and connections

IEC 60309-1, Plugs, socket-outlets and couplers for industrial purposes – Part 1: General requirements