AS/NZS 3439.2:2002
IEC 60439-2:2000

Australian/New Zealand Standard™

Low-voltage switchgear and controlgear assemblies

Part 2: Particular requirements for busbar trunking systems (busways)

Standards Australia

STANDARDS NEW ZEALAND
Paerewa Aotearoa

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Electrical Contractors Association of New Zealand
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Low-voltage switchgear and controlgear assemblies

Part 2: Particular requirements for busbar trunking systems (busways)

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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 3439.2—1994.

The objective of this Standard is to provide definitions, service conditions, construction requirements, technical characteristics and tests for low-voltage switchgear and controlgear assemblies particular to busbar trunking systems (busways).

This Standard is Part 2 of a series which, when complete will consist of the following:

AS/(NZS) 3439		Low-voltage switchgear and controlgear assemblies
AS/NZS 3439.1	Part 1:	Type-tested and partially type-tested assemblies
AS/NZS 3439.2	Part 2:	Particular requirements for busbar trunking systems (busways) (This Standard)
AS/NZS 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 3439.4	Part 4:	Particular requirements for assemblies for construction sites (ACS)
AS/NZS 3439.5	Part 5:	Particular requirements for assemblies intended to be installed outdoors in public places—Cable distribution cabinets (CDCs) for power distribution in networks

This Standard is identical with and has been reproduced from IEC 60439-2:2000, *Low-voltage switchgear and controlgear assemblies—Part 2: Particular requirements for busbar trunking systems (busways)*.

This Standard covers low-voltage busbar trunking systems (BTS) and their accessories for feeding and distributing power in residential, retail, public, agricultural and industrial premises.

The provisions of AS/NZS 3439.1, *Type-tested and partially type-tested assemblies* are applicable to this Standard unless otherwise indicated.

This Standard differs from AS 3439.2—1994 in the following:

(a) Tap-off units may be partially type-tested assemblies (PTTA).

(b) There is no requirement to state resistance values for busbar trunking systems with rated current greater than 630 A.

(c) There are additional requirements for:

  (i) Nameplate and information required.

  (ii) Service conditions.

  (iii) Abnormal heat and fire conditions.

  (iv) Clearance.

  (v) Busbar trunking with several circuits.

  (vi) Protection against direct contact.

  (vii) Busbar trunking systems with trolley tap-off facilities.

(d) There are additional type tests for verification of:

  (i) Crushing resistance.

  (ii) Resistance of insulating materials to abnormal heat and flame propagation.

  (iii) Fire barrier in building penetration.

(e) Temperature rise test and test arrangements have been added.

(f) There are additional annexes dealing with:

  (i) Voltage drop of the system.

  (ii) Method of determination of the magnetic field in the vicinity of busbar trunking systems.

  (iii) Verification of maintenance circuit integrity under fire conditions.

  (iv) Test arrangement.

(g) Appendices AA, BB, CC and DD are not included.

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(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 ‘this standard’ should read ‘this Australian/New Zealand Standard’.

(c) A full point should be substituted for a comma when referring to a decimal marker.

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.