

Australian/New Zealand Standard™

**Low-voltage switchgear and
controlgear—Control device
interfaces (CDIs)**

**Part 6: Seriplex (Serial multiplexed
control bus)**

AS/NZS 62026.6:2002

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 24 September 2002 and on behalf of the Council of Standards New Zealand on 17 September 2002. It was published on 1 November 2002.

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Part 6: Seriplex (Serial multiplexed control bus)

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-006, Industrial Switchgear and Controlgear.

The objective of this Standard is to define the requirements for interface systems between single or multiple controllers and control circuit devices or switching elements and establishes requirements for the interchangeability of components of such interfaces.

This Standard is Part 6 of a series which, when complete, will consist of the following:

AS/NZS

- 62026 Low-voltage switchgear and controlgear—Controller-device interfaces (CDIs)
- 62026.1 Part 1: General rules
- 62026.2 Part 2: Actuator sensor interface (AS-i)
- 62026.3 Part 3: DeviceNet
- 62026.5 Part 5: Smart distributed system (SDS)
- 62026.6 Part 6: Seriplex (Serial Multiplexed Control Bus) (This Standard)

This Standard is identical with and has been reproduced from IEC 60206-6:2001, *Low-voltage switchgear and controlgear—Controller-device interfaces (CDIs)—Part 6: Seriplex (Serial Multiplexed Control Bus)*.

The provisions of the general rules in AS/NZS 62026.1 are applicable to this Joint Australian/New Zealand Standard, where specifically called for. General rules clauses and subclauses thus applicable, as well as tables, figures and annexes, are identified by reference to Part 1 of the IEC Standard from which this Standard is reproduced, for example subclause 7.2.4.1 of IEC 62026-1.

Seriplex (Serial Multiplexed Control Bus) is a controller-device interface which provides a deterministic means of exchanging simple data among control and sensing devices. All devices are connected together by a single shielded four or six conductor cable.

Any device which fully conforms to this part of AS/NZS 62026 will be able to perform at least elementary data exchange with other compliant devices through the Seriplex controller-device interface.

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- (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.

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Any IEC table, figure or passage of text that is struck-through is not part of this Standard. Any Australian/New Zealand table, figure or passage of text that is added (and identified by shading) is part of this Standard.

1 Scope

This part of IEC 62026 specifies an interface system between single or multiple controllers, and control circuit devices or switching elements. The interface system uses two twisted conductor pairs within one cable – one of these pairs provides a communication medium and the other pair provides power to the devices. It also establishes requirements for the interchangeability of components with such interfaces.

This standard specifies the physical and operating characteristics of the Seriplex controller-device interface, including:

- requirements for interfaces between controllers and switching elements;
- normal service conditions for devices;
- constructional and performance requirements;
- tests to verify conformance to requirements.

These particular requirements apply in addition to the general requirements of IEC 62026-1.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 62026. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 62026 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

References to International Standards that are struck through in this Clause are replaced by references to equivalent Australian or Australian/New Zealand Standards that are listed immediately thereafter and identified by shading. Any Australian or Australian/New Zealand Standard that is identical to the International Standard it replaces is appropriately identified.

IEC 60068-2-6:1995, *Environmental testing – Part 2: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60068-2-27:1987, *Basic environmental test procedures – Part 2: Tests – Test Ea and guidance: Shock*

IEC 60664-1:1992, *Insulation coordination for equipment within low voltage systems – Part 1: Principles, requirements, and tests*