

Australian/New Zealand Standard™

**Low-voltage switchgear and
controlgear—Controller-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 62026-6:2001, *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.

CONTENTS

	<i>Page</i>
1	Scope 1
2	Normative references..... 1
3	Definitions, symbols and abbreviations 2
3.1	Definitions 2
3.2	Symbols and abbreviations 8
4	Classification 8
4.1	General 8
4.2	Frame period, t_f 9
4.3	Signal update time, t_u 10
4.4	Input response time, t_{ir} 10
4.5	Output response time, t_{or} 11
4.6	System response time, t_{sr} 13
5	Characteristics..... 14
5.1	System overview 14
5.2	Frequency, cable length and node count..... 18
5.3	Data transmission..... 19
5.4	General data transmission features 21
5.5	Signal timing..... 26
5.6	Data definitions 28
5.7	Signal addressing conventions 33
5.8	Operational characteristics 34
5.9	Fault responses 39
5.10	Device programming..... 43
6	Product information 44
7	Normal service, mounting and transport conditions 44
7.1	General 44
7.2	Ambient air temperature 44
7.3	Humidity 44
7.4	Conditions during transport and storage 44
7.5	Mounting 44
7.6	Shock 44
7.7	Vibration..... 45
8	Constructional and performance requirements 45
8.1	Seriplex power supply..... 45
8.2	Power distribution..... 45
8.3	Isolation..... 46
8.4	Data line characteristics 46
8.5	Clock line characteristics 48
8.6	Seriplex cable topology..... 50
8.7	Cable specifications..... 51
8.8	Electromagnetic compatibility 53

	<i>Page</i>
9 Tests	55
9.1 Supply polarity.....	55
9.2 Power supply.....	55
9.3 Clock source.....	56
9.4 I/O device.....	66
9.5 Seriplex cable.....	76
Figure 1 – Seriplex controller-device interface system diagram.....	15
Figure 2 – Peer-to-peer timing diagram.....	16
Figure 3 – Master/slave timing diagram.....	17
Figure 4 – Example of address multiplexing.....	17
Figure 5 – Peer-to-peer transmission format.....	19
Figure 6 – Master/slave mode data transmission format.....	21
Figure 7 – Sync period diagram.....	23
Figure 8 – Data signal timing diagram.....	27
Figure 9 – Check byte formation.....	33
Figure 10 – Bus Fault Detection pulse.....	36
Figure 11 – Digital debounce.....	38
Figure 12 – Data line diagram.....	47
Figure 13 – Hysteresis.....	48
Figure 14 – Clock line diagram.....	49
Figure 15 – Preferred Seriplex topologies.....	50
Figure 16 – Other controller-device interface topologies.....	50
Figure 17 – Four-conductor Seriplex cable.....	52
Figure 18 – Six-conductor Seriplex cable.....	53
Figure 19 – Circuit for verification of clock source power consumption.....	56
Figure 20 – Connections for clock signal tests.....	57
Figure 21 – Clock signal waveform.....	57
Figure 22 – Test circuit for clock signal.....	59
Figure 23 – Waveform of clock pulse.....	60
Figure 24 – Transient current.....	60
Figure 25 – Test circuit for CDI data signal.....	61
Figure 26 – Waveform for CDI data signal.....	61
Figure 27 – Data line waveforms.....	63
Figure 28 – Connections for verification of data line requirements.....	64
Figure 29 – Waveforms for verification of data line requirements.....	64
Figure 30 – Connections for verification of I/O device requirements.....	66
Figure 31 – Connections for verification of I/O device data line capacitance.....	67
Figure 32 – Connections for measurement of I/O device data line capacitance.....	67
Figure 33 – Measurement of I/O device data line capacitance.....	68

	<i>Page</i>
Figure 34 – Connections for measurement of I/O device voltage drop	69
Figure 35 – Connections for measurement of output device lower voltage threshold	69
Figure 36 – Connections for measurement of output device upper voltage threshold.....	70
Figure 37 – Connections for measurement of input device lower voltage threshold	71
Figure 38 – Connections for measurement of input device upper voltage threshold.....	72
Table 1 – Maximum available clock frequency for valid networks (single power supply)	18
Table 2 – Maximum available clock frequency for valid networks (multiple power supplies)...	19
Table 3 – Sync period parameters	23
Table 4 – Symbols and parameters	27
Table 5 – CDR signal address assignments	30
Table 6 – Address codes	32
Table 7 – Channel codes	32
Table 8 – I/O direction codes	33
Table 9 – Seriplex power supply requirements	45
Table 10 – Data line characteristics	47
Table 11 – Clock line characteristics.....	49
Table 12 – Wire size and characteristics.....	51
Table 13 – General Seriplex cable characteristics.....	51
Table 14 – Seriplex cable specifications	52

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

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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*