AS/NZS 62026.3:2001
IEC 62026-3:2000

Australian/New Zealand Standard™

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

Part 3: DeviceNet

Standards Australia

STANDARDS NEW ZEALAND

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 21 March 2001 and on behalf of the Council of Standards New Zealand on 4 May 2001. It was published on 5 June 2001.

The following interests are represented on Committee EL-006:

Australasian Railway Association
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Bureau of Steel Manufacturers of Australia
Electrical Contractors Association of New Zealand
Electricity Supply Association of Australia
Independent Electrical Switchboard Manufacturers Association
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We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia International or Standards New Zealand at the address shown on the back cover.

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Australian/New Zealand Standard™

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Part 3: DeviceNet

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

This Standard is Part 3 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 (This Standard)

62026.5 Part 5: Smart distributed system (SDS)

62026.6 Part 6: Seriplex (Serial multiplexed control Bus)

This Standard is identical with and has been reproduced from IEC 62026-3:2000, *Low-voltage switchgear and controlgear—Controller-device interfaces (CDIs)—Part 3: DeviceNet*.

This Standard covers a DeviceNet intended for use in, but not limited to, industrial automation applications. These applications may include devices such as limit switches, proximity sensors, electro-pneumatic valves, relays, motor-starters, operator interface panels, analogue inputs, analogue outputs and controllers.

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.

A reference to an International Standard identified in the Normative References Clause by strikethrough (~~example~~) is replaced by a reference to the Australian or Australian/New Zealand Standard(s) listed immediately thereafter and identified by shading (example). Where the struck-through referenced document and the referenced Australian or Australian/New Zealand Standard are identical, this is indicated in parenthesis after the title of the latter.

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 ‘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 ‘normative’ has been used in this Standard to define the application of the annex to which it applies. A ‘normative’ annex is an integral part of a Standard.

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

This standard specifies the following particular requirements for DeviceNet:

– 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.

CISPR 11:1997, *Industrial, scientific and medical (ISM) radio-frequency equipment – Electromagnetic disturbance characteristics – Limits and methods of measurement*

~~IEC 60529:1989, *Degrees of protection provided by enclosures (IP code)*~~