

Australian/New Zealand Standard™

**Low-voltage switchgear and controlgear**

**Part 5.7: Control circuit devices and  
switching elements—Requirements for  
proximity devices with analogue output**



## **AS/NZS IEC 60947.5.7:2015**

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 27 May 2015 and on behalf of the Council of Standards New Zealand on 29 May 2015. This Standard was published on 29 June 2015.

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## PREFACE

This Standard was prepared by the Standards Australia Committee EL-006, Industrial Switchgear and Controlgear, to supersede AS 60947.5.7—2004.

The objective of this Standard is to provide requirements for proximity devices with analogue output.

This Standard is identical with, and has been reproduced from, IEC 60947-5-7, Ed. 1.0 (2003), *Low-voltage switchgear and controlgear, Part 5-7: Control circuit devices and switching elements—Requirements for proximity devices with analogue output*.

The principle difference between this and the previous edition, is that this is a joint Australian/New Zealand Standard.

This Standard should be used in conjunction with IEC 60947-5-2.

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

- (a) In the source text ‘this International Standard’ should read ‘this Australian/New Zealand Standard’.
- (b) A full point substitutes for a comma when referring to a decimal number.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian/new Zealand Standard</i>	
IEC		AS/NZS IEC	
60947	Low-voltage switchgear and controlgear	60947	Low-voltage switchgear and controlgear
60947-5-2	Part 5-2: Control circuit devices and switching elements—Proximity switches Amendment 1 (1999)	60947.5.2	Part 5.2: Control circuit devices and switching elements—Proximity switches

Only normative references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

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.

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## INTRODUCTION

This part of IEC 60947 modifies the relevant requirements of IEC 60947-5-2, dealing with the requirements for proximity switches with semiconductor switching elements, to make them applicable to proximity devices with analogue output.

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## AUSTRALIAN/NEW ZEALAND STANDARD

**Low-voltage switchgear and controlgear**

## Part 5.7:

## Control circuit devices and switching elements—Requirements for proximity devices with analogue output

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

This part of IEC 60947 states the requirements for proximity devices with analogue output. They may consist of one or more parts.

The requirements of IEC 60947-5-2 (proximity switches) apply with the additions or modifications as stated in this standard. The clause numbering in this standard follows the clause numbering of IEC 60947-5-2, modified where necessary.

**1.2 Normative references**

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendment) applies.

IEC 60947-5-2:1997, *Low-voltage switchgear and controlgear – Part 5-2: Control circuit devices and switching elements – Proximity switches*  
Amendment 1 (1999)

**2 Definitions****2.1 Basic definitions****2.1.2****proximity device with analogue output**

device producing an output signal which varies continuously depending on the distance between the sensing face of the proximity device and its target object

**2.1.3****lower distance**

minimum stated distance above which the output signal varies continuously

**2.1.4****upper distance**

maximum stated distance below which the output signal varies continuously

**2.1.5****distance range**

range of distances between and including the lower and upper distances