

Australian/New Zealand Standard™

**Approval and test specification—
Plugs, socket-outlets and couplers
for general industrial application**



S t a n d a r d s Australia



STANDARDS
NEW ZEALAND
Pāwhiri Aotearoa

AS/NZS 3123:2000

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The following interests are represented on Committee EL/4:

Australasian Railway Association
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Canterbury Manufacturers Association, New Zealand
Consumer Electronic Suppliers Association
Electricity Supply Association of Australia
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL/4, Electrical Accessories, to supersede AS/NZS 3123:1994.

This Standard is one of a series of approval and test specifications issued by Standards Australia and Standards New Zealand. These specifications are to be read in conjunction with AS/NZS 3100, *Approval and test specification—General requirements for electrical equipment*. The purpose of these specifications is to outline the conditions to be met to secure approval for the sale and use of electrical equipment. Only safety matters and related conditions are covered.

This Standard is based on the principles, but not the format, of the IEC 60309, *Plugs, socket-outlets and couplers for industrial purposes* series. In this Standard, only standardized Australian and New Zealand configurations for operation at 50 Hz are included. In this respect, the Standard differs significantly from the IEC 60309 series in that the configurations of IEC 60309-2 *Plugs, socket-outlets and couplers for industrial purposes Part 2: Dimensional interchangeability requirements for pin and contact-tube accessories* are omitted.

Where there is a published Australian/New Zealand harmonized Standard referenced in this Standard, the designation of the New Zealand Standard is given in parenthesis following the designation of the Australian Standard.

While this Standard depicts only standardized Australian and New Zealand configurations, it can be applied to configurations and contact types other than those depicted herein, providing all appropriate requirements of this Standard are complied with.

In this Standard, the requirements proper appear in 'roman' type and the test requirements appear in '*italic*' type. Explanatory matters are contained in notes to the clauses, in smaller size 'roman' type.

This Standard was revised to incorporate Amendment No. 1 to AS/NZS 3123:1994 and, in addition, to change requirements for—

- (a) permit designs complying with IEC 60309-1 (Clause 1.1);
- (b) letters and symbols to be used to identify rewirable terminals (Clause 7.5);
- (c) cables to be used for pull test (Table 6);
- (d) resistance to tracking (Clause 27.3); and
- (e) tolerances on dimensions in the Standard Sheets.

This Standard does not contain all the necessary conditions of a contract.

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1 SCOPE AND REFERENCED DOCUMENTS**1.1 Scope**

This Standard sets out the requirements for plugs and socket-outlets, cable couplers and appliance couplers for operation at 50 Hz, with a rated voltage not exceeding 660 V and a rated current not exceeding 315 A, primarily intended for general industrial use, either indoors or outdoors.

NOTES:

- 1 This Standard applies to plugs and socket-outlets, cable couplers and appliance couplers (referred to in this Standard as ‘accessories’) for use when the ambient temperature does not normally exceed 40°C.
- 2 The use of accessories (see Note 1) in building sites and in agricultural, commercial and domestic situations is not precluded.
- 3 Appliance inlets incorporated in, or fixed to, electrical equipment are within the scope of this Standard.
- 4 This Standard does not apply to accessories that comply with AS/NZS 3109.1 and AS/NZS 3112 and which are primarily intended for domestic and similar general purposes, nor to accessories that comply with AS 2380.1 and are intended for explosive atmospheres.
- 5 The configurations shown in this Standard depict standardized Australian and New Zealand industrial plugs, socket-outlets, cable couplers and appliance couplers for operation at 50 Hz.
- 6 This Standard may be applied to configurations and contact types other than those depicted herein, providing all appropriate (to that type) requirements of this Standard are complied with.
- 7 Devices that comply with IEC 60309-1 are deemed to comply with the appropriate requirements of this Standard.

1.2 Referenced documents

The following documents are referred to in this Standard:

AS 1939	Degrees of protection provided by enclosures for electrical equipment (IP Code)
2380	Electrical equipment for explosive atmospheres—Explosion-protection techniques
2380.1	Part 1: General requirements
3133 (NZS/AS 3133)	Approval and test specification—Air break switches
3147	Approval and test specification—Electric cables—Thermoplastic insulated—For working voltages up to and including 0.6/1 kV
3501	Parallel screw threads of Whitworth form (BSW and BSF) and associated gauges and gauging practice