Australian/New Zealand Standard[™]

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





AS/NZS 3123:2000

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL/4, Electrical Accessories. It was approved on behalf of the Council of Standards Australia on 14 February 2000 and on behalf of the Council of Standards New Zealand on 20 March 2000. It was published on 30 May 2000.

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 International Accreditation New Zealand Energy Safety Service, New Zealand National Electrical and Communications Association Plastics and Chemicals Industries Association Regulatory authorities (electrical), Australia Testing Interests (Australia)

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Australia web site at www.standards.com.au or Standards New Zealand web site at www.standard.co.nz and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

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.

This Standard was issued in draft form for comment as DR 98412.

AS/NZS 3123:2000

Australian/New Zealand Standard[™]

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

Originated as AS C317—1958. Previous edition AS/NZS 3123:1994. Fourth edition 2000.

COPYRIGHT

© Standards Australia/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Jointly published by Standards Australia International Ltd, PO Box 1055, Strathfield, NSW 2135 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 3302 6

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 rewireable 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.

CONTENTS

		Page
1	SCOPE AND REFERENCED DOCUMENTS	4
2	DEFINITIONS	5
3	GENERAL REQUIREMENTS	7
4	GENERAL NOTES ON TESTS	7
5	RATING	8
6	CLASSIFICATION	8
7	MARKING	9
8	DIMENSIONS	11
9	PROTECTION AGAINST ELECTRIC SHOCK	12
10	PROVISION FOR EARTHING	12
11	TERMINALS	13
12	INTERLOCKS, RETAINING DEVICES AND SWITCHES	15
13	RESISTANCE TO ULTRAVIOLET RADIATION	16
14	GENERAL CONSTRUCTION	16
15	CONSTRUCTION OF SOCKET-OUTLETS	16
16	CONSTRUCTION OF PLUGS AND CONNECTORS	19
17	CONSTRUCTION OF APPLIANCE INLETS	20
18	IP DESIGNATION	20
19	INSULATION RESISTANCE AND ELECTRIC STRENGTH	21
20	BREAKING CAPACITY	21
21	MECHANICAL ENDURANCE	22
22	TEMPERATURE RISE	23
23	FLEXIBLE CABLES AND CORDS AND THEIR CONNECTION	24
24	MECHANICAL STRENGTH	27
25	SCREWS, CURRENT-CARRYING PARTS AND CONNECTIONS	29
26	CREEPAGE DISTANCES, CLEARANCES AND DISTANCES THROUGH SEALING COMPOUND	
27	RESISTANCE TO HEAT, FIRE AND TRACKING	
28	RESISTANCE TO RUSTING	32



This is a free preview. Purchase the entire publication at the link below:

Product Page

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation