AS 61508.6—2001
IEC 61508-6:2000

Australian Standard™

Functional safety of electrical/electronic/programmable electronic safety-related systems

Part 6: Guidelines on the application of AS 61508.2 and AS 61508.3

Standards Australia

This Australian Standard was prepared by Committee IT-006, Information Technology for Industrial Automation and Integration. It was approved on behalf of the Council of Standards Australia on 18 April 2001 and published on 19 June 2001.

The following interests are represented on Committee IT-006:

Australian Electrical and Electronic Manufacturers Association

CSIRO Centre for Planning and Design

CSIRO Manufacturing Science and Technology

Industrial Instrument Industry Association of Australia

Institution of Engineers, Australia

Monash University

RMIT University

The Association of Consulting Engineers, Australia

The Royal Australian Institute of Architects

The University of Melbourne

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 Standards may also be withdrawn.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 Standards can be found by visiting the Standards Australia web site at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Australian Standard*, has a full listing of revisions and amendments published each month.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.com.au, or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 01015.

Australian Standard™

Functional safety of electrical/electronic/programmable electronic safety-related systems

Part 6: Guidelines on the application of AS 61508.2 and AS 61508.3

First published as AS 61508.6—2001.

Published by Standards Australia International Ltd
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 3897 4

PREFACE

This Standard was prepared by the Standards Australia Committee IT-006, Information Technology for Industrial Automation and Integration.

The objective of this Standard is to provide designers of safety lifecycle activities in systems comprised of electrical/electronic/programmable electronic devices with guidelines on the applications, calculations and methodologies as outlined in Part 2 and in Part 3 of this Standard.

This Standard is identical with and has been reproduced from IEC 61508-6:2000, *Functional safety of electrical/electronic/programmable elctronic safety-related systems—Part 6: Guidelines on the application of IEC 61508-2 and IEC 61508-3*.

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.

In this Standard, the following print types are used:

– requirements proper: in arial type;

– *test specifications: in italic type;*

– explanatory matter: in smaller arial type.

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 Standard’.

(c) A full point should be substituted for a comma when referring to a decimal marker.

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.

CONTENTS

Page