

AS 1029.2—1982

Australian Standard[®]

Low voltage contactors

Part 2: Semiconductor (solid state) (up to and including 1000 V a.c. and 1500 V d.c.)

[Title allocated by Defence Cataloguing Authority:
CONTACTOR, SEMICONDUCTOR (SOLID STATE)
UP TO 1000 V A.C. or 1500 D.C.]

Represented on the committee which was responsible for the preparation of this standard were the following:

Australian Electrical and Electronic Manufacturers Association
Australian-British Trade Association
Bureau of Steel Manufacturers of Australia
Confederation of Australian Industry
Department of Defence
Department of Productivity
Department of Public Works, N.S.W.
Electricity Supply Association of Australia
Institution of Engineers Australia
Metropolitan Water Sewerage and Drainage Board, N.S.W.
Railways of Australia Committee
State Rail Authority of New South Wales
Testing authorities

This Standard prepared by Committee EL/6, Industrial Switchgear and Controlgear, was approved on behalf of the Council of the Standards Association of Australia on 9 December 1981, and was published on 19 April 1982.

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This standard was issued in draft form for comment as DR 80133.

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LOW VOLTAGE CONTACTROS

Part 2: SEMICONDUCTOR (SOLID STATE) (up to and including 1000 V a.c. and 1500 V d.c.)

First published 1982

PUBLISHED BY STANDARDS AUSTRALIA
(STANDARDS ASSOCIATION OF AUSTRALIA)
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 7262 2457 X

PREFACE

This standard was prepared by a subcommittee of the Association's Committee on Industrial Switchgear and Controlgear. It is Part 2 of a two-part standard for low voltage contactors.

The Parts of the standard are as follows:

Part 1—Electromechanical (up to and including 1000 V a.c.)

Part 2—Semiconductor (Solid State) (up to and including 1000 V a.c. and 1500 V d.c.)

Part 1 covers many requirements common to all contactors and is referred to extensively herein.

This standard is based on IEC document 17B(Central Office) 115 and acknowledgment is made of the assistance received therefrom. However, it differs from the IEC document in some technical respects and to indicate these differences a rule is shown in the margin alongside the affected clause, table or part thereof.

The standard was originally based on IEC document 17B(Central Office)106. Proposals for the showering arc test for external electrical influences in IEC document 17B(Central Office) 115, not included in this standard as they are still under consideration. However, provision has been made in Clause 8.3.6.3 and Appendix F for the showering arc test.

Attention is drawn to the notes to Clause 4.3.9 concerning protection of semiconductor contactors from voltage transients and external electrical influences.

This standard may require reference to the following publications:

- AS 1023 Thermal Protection of Electric Motors
Part 1—Built-in Thermal Detectors and Associated Control Units
Part 2—Thermal Overload Protective Devices
Part 3—Inherent Overheat Protectors
- AS 1029 Low Voltage Contactors
Part 1—Electromechanical Contactors (Up to and Including 1000 V a.c.)
- AS 1136 Switchgear and Controlgear Assemblies for Voltages Up to 1000 V a.c.
- AS 1202 A.C. Motor Starters (Up to and Including 1000 V)

- Part 1—Direct-on-line (Full Voltage) Starters
- AS 1930 Circuit-breakers for Distribution Circuits (Up to and Including 1000 V a.c. and 1200 V d.c.)
- AS 1931 High Voltage Testing Techniques
Part 1—General Definitions, Test Requirements, Test Procedures and Measuring Devices
Part 2—Application Guide for Measuring Devices
- AS 1939 Classification of Degrees of Protection Provided by Enclosures for Electrical Equipment
- AS 2005 Fuses with Enclosed Fuse-links (up to and including 1000 V a.c. and 1500 V d.c.)
Part 1—General Requirements
Part 2—Fuses for Industrial Application
Part 3—Fuses for Household and Similar Applications
- AS 2184 Moulded-case Circuit-breakers (Up to and Including 600 V a.c. and 250 V d.c.) (Interrupting Rating 10 kA and More)
- AS 2279 Disturbances in Mains Supply Networks
Part 1—Limitation of Harmonics Caused by Household and Similar Electrical Appliances
Part 2—Limitation of Harmonics Caused by Industrial Equipment
- AS 3100 Approval and Test Specification for Definitions and General Requirements for Electrical Materials and Equipment
- AS 3111 Approval and Test Specification for Miniature Overcurrent Circuit-breakers
- SAA MP19 Report on Preferred Numbers and Their Use
- IEC 65 Safety Requirements for Mains Operated Electronic and Related Apparatus for Household and Similar General Use

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