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

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

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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 the earlier IEC document, have not been 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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