AS 3179—1989

Australian Standard®

Approval and test specification—Refrigerated room air-conditioners

STANDARDS AUSTRALIA

This Australian Standard was prepared by Committee EL/2, Electrical Approvals Standards. It was approved on behalf of the Council of Standards Australia on 30 June 1989 and published on 6 November 1989.

The following interests are represented on Committee EL/2:

Australian Consumers Association

Australian Electrical and Electronic Manufacturers Association

Confederation of Australian Industry

Consumer Electronics Suppliers Association

Electrical Apparatus Approvals Authorities

Electrical testing laboratories

Electricity Supply Association of Australia

Institution of Engineers, Australia

STANDARDS AUSTRALIA

Amendment No 1
to
AS 3179—1989
Approval and test specification—Refrigerated room air conditioners

REVISED TEXT

The 1989 edition of AS 3179 is amended as follows; the amendment(s) should be inserted in the appropriate place.

SUMMARY: This Amendment applies to Clause 1.1.

Published on 7 May 1990.

Page 3 Clause 1.1

Delete the reference to 12 kW in the note and *substitute* 20 kW.

This amendment forms part of the specification on publication.

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PREFACE

This Specification was prepared by the Standards Australia Committee on Electrical Approvals Standards to supersede AS 3179—1986, *Small self-contained refrigerated air conditioners*.

It is one of a series of Approval and Test Specifications issued by Standards Australia. These Specifications are accompanied by a general Specification AS 3100, containing definitions and general requirements for electrical materials and equipment. The purpose of these Specifications is to outline conditions which must be met to secure approval for the sale and use of electrical equipment in Australia. Only safety matters and related conditions are covered.

This edition was published to incorporate into the Specification Amendment No 1 to AS 3179—1986 and to effect changes to Clauses 1, 2, 10, 17, 18 and Table 1 with regard to scope, referenced Standards, definitions, interconnecting wiring for a split system, marking, heating test and maximum winding temperatures.

This Specification supersedes AS 3179—1986 from date of publication.

Standards Australia desires to call attention to the fact that this Specification does not purport to include all the necessary provisions of a contract.

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Australian Standard

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This Specification shall be read in conjunction with AS 3100.
(See also Clause 3, below.)

1 SCOPE AND REFERENCED DOCUMENTS.

1.1 Scope. This Specification applies to electrically driven refrigerated room air-conditioners, either as single unit appliances or split systems with or without heating capabilities. It provides for the range of factory built appliances of a size generally applicable to household or small office installations.

NOTE: The appliances envisaged do not normally exceed 20 kW nominal rating (as defined in AS 1861.1). SEE AMENDMENT!

1.2 Referenced documents. The following documents are referred to in this Standard:

STANDARDS

AS
1861 Air-conditioning units—Methods of assessing and rating performance
1861.1 Part 1: Refrigerated room air-conditioners
1939 Classification of degrees of protection provided by enclosures for electrical equipment
3000 SAA Wiring Rules

APPROVAL AND TEST SPECIFICATIONS

AS
3100 Definitions and general requirements for electrical materials and equipment
3109 Appliance couplers for household and similar general purposes
3109.1 Part 1: General requirements
3191 Electric flexible cords

2 DEFINITIONS. For the purpose of this Specification the definitions below apply.

2.1 Refrigerated room air-conditioner (hereinafter referred to as the 'air-conditioner')—an appliance which incorporates a mechanical refrigeration unit and a fan or fans, arranged so that the evaporator and the condenser can be used to heat, cool, or dehumidify air blown through the appliance. Other functions such as ventilating, exhausting, or air filtration may also be performed. Where the function of the outdoor or indoor coil may be switched so that a choice of heating or cooling by means of a refrigeration unit is available, the term 'heat pump' is applied.

Such an appliance may be designed as a single unit intended for installation through a wall or window, or as a console, or as a split system.

2.2 Split system—a type of air-conditioner in which the indoor side and the outdoor side are units that are physically separate, so that they may be installed some distance apart, connecting refrigerant piping being provided on site to suit the particular installation.

3 COMPLIANCE WITH SPECIFICATIONS.

3.1 General requirements of AS 3100. This Specification shall be read in conjunction with AS 3100, and the appropriate provisions of AS 3100 shall apply to the construction of the air-conditioner and the insulation and safeguarding of parts that normally carry current.

3.2 Specific requirements of this Specification. An air-conditioner shall be deemed to comply with this Specification only if it complies with all the appropriate requirements of this Specification and passes the relevant tests specified herein.

3.3 Requirements of other Specifications. Components incorporated in air-conditioners which are depended upon for safety shall comply with the appropriate requirements of any relevant Approval and Test Specification unless such requirements are varied herein.

4 MATERIALS AND COMPONENTS. The air-conditioner shall be constructed of suitable materials having strength and corrosion-resisting properties sufficient for the support and protection of the electrical components.

All electrical materials or components in the air-conditioner shall comply with any specific requirements set out in this Specification or in an individual Approval and Test Specification dealing with such material or component.

5 MEANS OF CONNECTION.

5.1 Permanent connection. An air-conditioner intended for permanent connection to fixed wiring shall be provided with terminals in accordance with Clauses 4.3 and 4.9 of AS 3100.

5.2 Connection by flexible cord. An air-conditioner intended for connection by means of a flexible cord shall be provided with one of the following means of connection to the supply:

(a) A group 2 connector and appliance inlet complying with AS 3109.1.

(b) A power supply cord which shall be assembled with the appliance by one of the following methods:

(i) Type X attachment.

(ii) Type M attachment.

(iii) Type Y attachment.

5.3 Marking of terminals. Active and neutral terminals required by Clause 5.1 shall be marked as such in accordance with Clause 7.6 of AS 3100.