

Australian Standard[®]

**Performance of household electrical
appliances—Swimming pool pump-units**

**Part 2: Energy labelling and minimum
energy performance standard
requirements**



This Australian Standard® was prepared by Committee EL-015, Quality and Performance of Household Electrical Appliances. It was approved on behalf of the Council of Standards Australia on 13 October 2009.

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- Australian Industry Group
 - Australian Retailers Association
 - Business New Zealand
 - CHOICE
 - Consumer Electronic Suppliers Association
 - Cooper Development Centre Australia
 - Department of Employment and Industrial Relations (Qld)
 - Department of the Environment, Water, Heritage and the Arts
 - Department of Water and Energy (NSW)
 - Electrical Compliance Testing Association
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 - National Appliance and Equipment Energy Efficiency Committee
 - National Association of Testing Authorities Australia
 - Office of the Technical Regulator, South Australia
 - Swimming Pool and Spa Association of NSW
 - Swimming Pool and Spa Association of Victoria
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PREFACE

This Standard was prepared by Standards Australia Committee EL-015, Quality and Performance of Household Electrical Appliances.

The AS 5102—2009 series comprises two parts as follows:

AS

5102 Performance of household electrical appliances—Swimming pool pump-units

5102.1 Part 1: Energy consumption and performance

5102.2 Part 2: Energy labelling and minimum energy performance standard requirements
(this Standard)

The Parts of AS 5102 are defined as follows:

- (a) Part 1 describes the testing required to determine the energy consumption, energy efficiency and sound levels of swimming pool pump-units.
- (b) Part 2 includes algorithms for the calculation of and criteria for energy efficiency rating, Star Rating, details of the energy label and requirements for the valid application thereof. It also contains the minimum energy performance standards (MEPS) that swimming pool pump-units must attain to comply with this Standard.

Part 2 is published with the approval of the combined state regulatory authorities and is intended to be suitable for reference in energy labelling regulations. It refers to Part 1 for test procedures.

This Standard becomes mandatory when it is called up by regulation in any relevant jurisdiction. From that time all pump-units within the scope of this Standard, manufactured or imported for sale in that jurisdiction shall meet the energy labelling and MEPS requirements and at the time of sale, such pump-units will hold a valid registration that indicates compliance with the relevant requirements.

The terms ‘normative’ and ‘informative’ are used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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FOREWORD

Swimming pool pump-units are significant users of electricity in homes where swimming pools are installed. Until now, specifiers and purchasers of swimming pool pump-units have had no means of comparing the relative energy efficiency of different models.

The desire of governments to improve the energy efficiency of appliances has led to the development of energy labelling and Minimum Energy Performance Standards (MEPS) for a range of products. This series of Standards describes the testing and analysis of data required for energy labelling and MEPS for swimming pool pump-units.

STANDARDS AUSTRALIA

Australian Standard

Performance of household electrical appliances—Swimming pool pump-units

Part 2: Energy labelling and minimum energy performance standard requirements

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies the energy information disclosure, energy labelling and MEPS requirements for swimming pool pump-units.

In particular, the Standard specifies—

- (a) the calculation of the Star Rating Index value based on the energy factor as defined in Clause 7.4 of Part 1 (AS 5102.1);
- (b) the method of calculation for Star Ratings;
- (c) the registration of energy efficiency information by product suppliers;
- (d) formats and printing requirements for energy labels on swimming pool pump-units or their packaging; and
- (e) the procedures for check testing to determine the validity of registered and labelled information.

This Standard covers all single phase pump-units intended for use in the operation of residential swimming pools and spa pools, and which are capable of a flow rate equal to or greater than 120 L/min. This Standard applies to single-speed, dual-speed, multi-speed and variable speed pump-units with an input power of less than or equal to 2500 W for any of the available speeds.

This Standard covers pump-units for the circulation of water through filters, sanitisation devices, cleaning devices, water heaters (including solar), spa or jet outlets or other features forming part of the pool.

This Standard covers pump-units that form part of a complete new pool installation as well as pump-units intended for sale as replacements for existing pools.

This Standard covers all water-retaining structures designed for human use—

- (i) that are capable of holding more than 680 litres of water; and
- (ii) that incorporate, or are connected to, equipment that is capable of filtering and heating any water contained in it and injecting air bubbles or water into it under pressure so as to cause water turbulence.

1.2 APPLICATION

This Standard shall be read in conjunction with AS 5102.1 *Performance of household electrical appliances—Swimming pool pump-units, Part 1: Energy consumption and performance*.