Australian/New Zealand Standard™

Demand response capabilities and supporting technologies for electrical products

Part 3.2: Interaction of demand response enabling devices and electrical products—Operational instructions and connections for devices controlling swimming pool pump-units





AS/NZS 4755.3.2:2012

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-054, Remote Demand Management of Electrical Products. It was approved on behalf of the Council of Standards Australia on 19 April 2012 and on behalf of the Council of Standards New Zealand on 26 April 2012.

This Standard was published on 17 May 2012.

The following are represented on Committee EL-054:

Air conditioning and Refrigeration Equipment Manufacturers Association of Australia Australian Industry Group Australian Institute of Refrigeration, Air conditioning and Heating **Consumer Electronics Suppliers Association** Consumers' Federation of Australia Copper Development Centre Australia CSIRO Energy Technology Department of Climate Change and Energy Efficiency Department of Resources, Energy and Tourism Electricity Engineers' Association of New Zealand Electricity Networks Association of New Zealand Energy Networks Association Energy Users Association of Australia Refrigeration and Air Conditioning Association of New Zealand Swimming Pool and Spa Association of Australia

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 Standards may also be withdrawn.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 joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at www.saiglobal.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR AS/NZS 4755.3.2.

Australian/New Zealand Standard[™]

Demand response capabilities and supporting technologies for electrical products

Part 3.2: Interaction of demand response enabling devices and electrical products—Operational instructions and connections for devices controlling swimming pool pump-units

First published as AS/NZS 4755.3.2:2012.

COPYRIGHT

© Standards Australia Limited/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Australia) or the Copyright Act 1994 (New Zealand).

Jointly published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, Private Bag 2439, Wellington 6140

2

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-054, Remote Demand Management of Electrical Products.

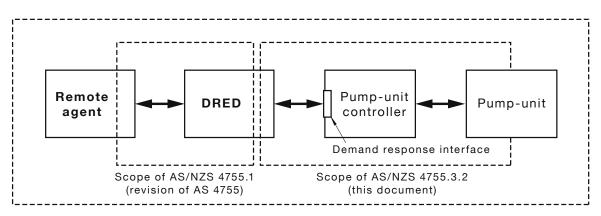
This Standard forms part of a series of Standards that is intended to define the nomenclature, architecture and operational instructions for systems that can be used to remotely control electrical products. AS 4755—2007 will be revised and re-designated to become AS/NZS 4755.1. When complete, the series will comprise the following:

AS/NZS

4755	Demand response capabilities and supporting technologies for electrical products	
4755.1	Part 1:	Framework for demand response capabilities and requirements for
		demand response enabling devices (DREDs)
4755.3.1	Part 3.1:	Interaction of demand response enabling devices and electrical products—Operational instructions and connections for air
		conditioners
4755.3.2	Part 3.2:	Interaction of demand response enabling devices and electrical
		products—Operational instructions and connections for devices
		controlling swimming pool pump-units (this Standard)
4755.3.3	Part 3.3:	Interaction of demand response enabling devices and electrical
		products—Operational instructions and connections for electric and
		electric-boosted water heaters
4755.3.4	Part 3.4:	Interaction of demand response enabling devices and electrical products—Operational instructions and connections for
		charge/discharge controllers for electric vehicles and other energy storage devices
4755.3.5	Part 3.5:	Interaction of demand response enabling devices and electrical
		products—Operational instructions and connections for inverters
		and controllers for photovoltaic and other small-scale generators

The figure below depicts the structure of the AS/NZS 4755 series. This Standard (AS/NZS 4755.3.2) covers the interaction of pump-unit controllers with demand response enabling devices (DREDs) and with pump-units.

This Standard does not cover all aspects of construction and performance, which may be subject to other standards.



It is recommended that this Standard be read in conjunction with AS/NZS 4755.1.

The AS/NZS 4755 series creates a framework that will allow off-the-shelf equipment, communications technologies and electrical products to be integrated and adapted so that demand management solutions may be developed and deployed in a timely and economical fashion.

Although the series has been developed to support situations where demand response is initiated or managed by a remote agent, with the consent of the owner or user of the electrical product, there is no technical reason that prevents the owner or user taking direct responsibility for demand response, by managing the DRED independently of any remote agent, provided the DRED meets the requirements of AS/NZS 4755.1

This Standard pertains to a particular electrical product, the swimming pool pump-unit controller. The Standard—

- (a) specifies a standard demand response interface on a pump-unit controller; and
- (b) specifies a standard set of operational instructions for that pump-unit controller.

Detailed standards covering demand response operational instructions and interfaces with DREDS for other electrical products may also be prepared as needs are identified.

This Standard is intended to support demand response programs that optimize the operation of the electricity supply system and allow the efficient planning and use of capital equipment, while minimizing the risks to the amenity of swimming pool users.

Where pump-units with integral or separate controllers subject to this Standard are installed for use in pools where pump-unit operation is subject to health and safety requirements, or a user does not accept interruption to operation for other reasons, the demand response interfaces should not be used.

The costs and benefits of making this Standard mandatory are the subject of consideration by Australian and New Zealand Governments. If compliance were mandated, it would also be mandatory to register product details with the regulators of the national energy labelling and minimum energy performance standards program. Information about the status of this Standard and registration procedures (if required) is available at <u>www.energyrating.gov.au</u>.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.



This is a free preview. Purchase the entire publication at the link below:

Product Page

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation