

AS/NZS 2401.2:1995

Australian/New Zealand Standard

Battery chargers for lead-acid batteries—Domestic type

Part 2: Battery chargers for valve-regulated cells

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The following interests are represented on Committee EL/5:

Australian Automobile Association
Australian Automotive Aftermarket Association
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Australian Lead Development Association
Department of Defence, Australia
Electrical Development Association of New Zealand
Electricity Supply Association of Australia
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Battery chargers for lead-acid batteries—Domestic type

Part 2: Battery chargers for valve-regulated cells

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL/5 on Secondary Batteries as a Joint Standard. It applies to domestic battery chargers used for charging valve-regulated lead-acid batteries used in cyclic applications.

The electrical safety requirements for domestic battery chargers are not covered by this Standard but are specified in AS 3100, *Approval and test specification—General requirements for electrical equipment*, and for transformer-type battery chargers in AS 3193, *Approval and test specification—Transformer type battery chargers*.

This Standard is Part 2 of the following series:

AS/NZS

2401 Battery chargers for lead-acid batteries—Domestic type

2401.1 Part 1: Battery chargers for vented cells

2401.2 Part 2: Battery chargers for valve-regulated cells

Consideration has been given to the charging conditions which influence battery service life. The requirements stipulated are intended to ensure optimum battery life. Because the ripple content of the d.c. output of a battery charger is an important factor in battery service life, a ripple requirement has been stipulated.

The terms 'normative' and 'informative' have been 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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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard**Battery chargers for lead-acid batteries—Domestic type****Part 2: Battery chargers for valve-regulated cells**

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies requirements for battery chargers for domestic or similar use for charging valve-regulated lead-acid batteries used in cyclic applications, e.g. golf buggies and prawning lights. These chargers may be left connected to a battery for extended periods without damage to the battery.

This Standard does not apply to battery chargers—

- (a) having an input rating greater than 2.5 kVA;
- (b) used for float charging;
- (c) embodied in appliances and not provided with an accessible outlet; and
- (d) intended to recharge a battery within 16 hrs.

NOTES:

- 1 AS 4044 specifies requirements for the charging of float-type stationary batteries.
- 2 Battery chargers complying with this Standard may also be suitable for charging vented lead-acid batteries used for cyclic applications.
- 3 Battery chargers complying with this Standard are not suitable for charging batteries for an extended time with a parallel connected load.
- 4 Appendix A provides guidance on charger selection.
- 5 AS 3696.14 specifies requirements for battery chargers supplied with wheelchairs.

1.2 REFERENCED DOCUMENTS The documents below are referred to in this Standard:

AS

1042	Direct-acting indicating electrical measuring instruments and their accessories
1044	Limits and methods of measurement of radio interference characteristics of household electrical appliances, portable tools and similar electrical apparatus
1939	Degrees of protection provided by enclosures for electrical equipment (IP Code)
3100	Approval and test specification—General requirements for electrical equipment
3193	Approval and test specification—Transformer type battery chargers
3696	Wheelchairs
3696.14*	Part 14: Power and controls—Electric wheelchairs
4044	Battery chargers for stationary batteries

* Produced as an interim standard