

Australian Standard<sup>®</sup>

**Arc welding equipment**

**Part 6: Limited duty portable arc  
welding and allied process power  
sources**

**(IEC 60974-6:2003, MOD)**

**STANDARDS**  
Australia



This Australian Standard® was prepared by Committee EL-019, Electrical Welding Plant. It was approved on behalf of the Council of Standards Australia on 19 July 2006. This Standard was published on 25 August 2006.

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The following are represented on Committee EL-019:

- Australian Chamber of Commerce and Industry
  - Australian Industry Group
  - Australian Manufacturing Workers Union
  - Electrical Regulatory Authorities Council
  - Welding Technology Institute of Australia
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## PREFACE

This Standard was prepared by the Standards Australia Committee EL-019, Electrical Welding Plant, to supersede AS/NZS 3195:2002, *Approval and test specification—Portable machines for electric arc welding and allied processes*.

The objective of this Standard is to specify requirements for limited duty arc welding and allied process power sources, which are mainly used by laymen.

This Standard is an adoption with national modifications and has been reproduced from IEC 60974-6:2003, *Arc welding equipment, Part 6: Limited duty portable arc welding and allied process power sources*, and has been varied as indicated to take account of Australian conditions.

Variations to IEC 60974-6, Ed. 1.0 (2003) are indicated at the appropriate places throughout this Standard. Strikethrough (~~example~~) identifies IEC text, tables and figures which, for the purposes of this Australian Standard, are deleted. Where text, tables or figures are added, each is set in its proper place and identified by shading (**example**). Added figures are not themselves shaded, but are identified by a shaded border.

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## STANDARDS AUSTRALIA

## Australian Standard

## Arc welding equipment

## Part 6: Limited duty portable arc welding and allied process power sources (IEC 60974-6:2003, MOD)

Any table, figure or text of the international standard that is struck through is not part of this Standard. Any Australian table, figure or text that is added is part of this Standard and is identified by shading.

## 1 Scope

This Standard applies to limited duty arc welding and allied process power sources with thermal cut-out devices. (Referred to in this Standard as the welding power source).

~~This part of IEC 60974 is applicable to power sources with a thermal cut-out device for manual metal arc welding with limited duty.~~

These welding power sources are mainly used by laymen.

This Standard specifies safety requirements for construction and performance requirements of power sources having a rated input not exceeding 3.6 kV.

~~This part of IEC 60974 specifies safety requirements for construction and performance requirements of welding power sources, limited to a rated maximum welding current of 160 A.~~

This Standard part of IEC 60974 is not applicable to:

- rotating welding power sources
- welding power sources with remote control;
- welding power sources incorporating frequency conversion.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

References to international standards that are struck through in this clause are replaced by references to Australian or Australian/New Zealand Standards that are listed immediately hereafter and identified by shading. Any Australian or Australian/New Zealand Standard that is identical to the International Standard it replaces is identified as such.

~~IEC 60050-151:2001, *International Electrotechnical Vocabulary (IEV) – Part 151: Electrical and magnetic devices*~~

AS 1852.151, *International electrotechnical vocabulary, Part 151: Electric and magnetic devices*

IEC 60050-851:1991, *International Electrotechnical Vocabulary (IEV) – Chapter 851: Electric welding*