AS IEC 61800.5.1—2013
IEC 61800-5-1, Ed.2.0 (2007)
IEC 61800-5-1:2007/AMD1:2016
(Incorporating Amendment No. 1)

Australian STANDARD®

STANDARDS Australia

Adjustable speed electrical power drive systems

Part 5.1: Safety requirements—Electrical, thermal and energy

AS IEC 61800.5.1—2013

This Australian Standard® was prepared by Committee EL-027, Power Electronics. It was approved on behalf of the Council of Standards Australia on 4 February 2013.

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Australian Industry Group
Bureau of Steel Manufacturers of Australia
Energy Networks Australia
Engineers Australia
University of Newcastle

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Preface

This Standard was prepared by the Standards Australia Committee EL-027, Power Electronics.

〈A1〉 *This Standard incorporates Amendment No. 1 (March 2022). The start and end of changes introduced by the Amendment are indicated in the text by tags including the Amendment number 1.* 〈A1〉

〈A1〉 Amendment No. 1 to this Standard was prepared by the Standards Australia Committee EL-027, Power Electronics. 〈A1〉

The objective of this Standard is to specify requirements for adjustable speed power drive systems, or their elements, with respect to electrical, thermal and energy safety considerations. Unless specifically stated, the requirements of this Standard apply to all parts of the Power Drive Systems (PDS), including the complete drive module (CDM)/ basic drive module (BDM).

〈A1〉 This Standard is identical with, and has been reproduced from, IEC 61800-5-1, Ed.2.0 (2007), *Adjustable speed electrical power drive systems – Part 5-1: Safety requirements – Electrical, thermal and energy* and its Amendment No. 1 (2016) which has been added at the end of the source text. 〈A1〉

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Reference to International Standard		*Australian or Australian/New Zealand Standard*	
IEC		AS	
60034 (all parts)	Rotating electrical machines	60034 (all parts)	Rotating electrical machines
60034-1	Part 1: Rating and performance	60034.1	Part 1: Rating and performance
60034-5	Part 5: Degrees of protection provided by the integral design of rotating electrical machines (IP code)—Classification	60034.5	Part 5: Degrees of protection provided by the integral design of rotating electrical machines (IP code)—Classification
60068	Environmental testing	60068	Environmental testing
60068-2-6	Part 2-6: Tests—Test Fc: Vibration (sinusoidal)	60068.2.6	Part 2.6: Tests—Test Fc: Vibration (sinusoidal)
60068-2-78	Part 2-78: Tests—Test Cab: Damp heat, steady state	60068.2.78	Part 2.78: Tests—Test Cab: Damp heat, steady state
60204	Safety of machinery—Electrical equipment of machines	60204	Safety of machinery—Electrical equipment of machines

60204-11	Part 11: Requirements for HV equipment for voltages above 1000 V a.c or 1500 V d.c and not exceeding 36 kV	60204.11	Part 11: Requirements for HV equipment for voltages above 1000 V a.c or 1500 V d.c and not exceeding 36 kV (IEC 60204-11, Ed. 1.0 (2000) MOD)
60417	Graphical symbols for use on equipment	60417	Graphical symbols for use on equipment
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60695	Fire hazard testing	60695	Fire hazard testing
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60695-2-13	Part 2-13: Glowing/hot-wire based test methods—Glowwire ignitability test method for materials	60695.2.13	Part 2.13: Glowing/hot-wire based test methods—Glowwire ignitability test method for materials
60695-11-10	Part 11-10: Test flames—50 W horizontal and vertical flame test methods	60695.11.10	Part 11.10: Test flames—50 W horizontal and vertical flame test methods
60695-11-20	Part 11-20: Test flames—500 W flame test methods	60695.11.20	Part 11.20: Test flames—500 W flame test methods
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60947	Low-voltage switchgear and controlgear	60947	Low-voltage switchgear and controlgear
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60947-7-2: 2002	Part 7-2: Ancillary equipment—Protective conductor terminal blocks for copper conductors	60947.7.2: 2002	Part 7.2: Ancillary equipment—Protective conductor terminal blocks for copper conductors
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60990:1999	Methods of measurement of touch current and protective conductor current	60990:2002	Methods of measurement of touch current and protective conductor current
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61800	Adjustable speed electrical power drive systems	61800	Adjustable speed electrical power drive systems
61800-1	Part 1: General requirements—Rating specifications for low voltage adjustable speed d.c. power drive systems	61800.1	Part 1: General requirements—Rating specifications for low voltage adjustable speed d.c. power drive systems