AS 1359.47-1988

Australian Standard®

ROTATING ELECTRICAL MACHINES— GENERAL REQUIREMENTS

Part 47—BRUSHES AND BRUSH-HOLDERS— DIMENSIONS

This Australian Standard was prepared by Committee EL/9, Rotating Electrical Machinery. It was approved on behalf of the Council of the Standards Association of Australia on 30 March 1988 and published on 17 June 1988.

The following interests are represented on Committee EL/9:

Australian British Chamber of Commerce

Australian Electrical and Electronic Manufacturers' Association

Bureau of Steel Manufacturers of Australia

Confederation of Australian Industry

Department of Defence

Electricity Supply Association of Australia

Institution of Engineers, Australia

This Standard was issued in draft form for comment as DR 87239.

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

AS 1359.47-1988

Australian Standard®

ROTATING ELECTRICAL MACHINES— GENERAL REQUIREMENTS

Part 47—BRUSHES AND BRUSH-HOLDERS— DIMENSIONS

First published as AS C43—1927T. Second edition 1957 (endorsement of BS 96—1954 without amendment). Revised and redesignated AS 1359.47—1988.

PUBLISHED BY STANDARDS AUSTRALIA (STANDARDS ASSOCIATION OF AUSTRALIA) 1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 5102 X

PREFACE

This Standard was prepared by the Association's Committee on Rotating Electrical Machinery to supersede AS C43—1957, *Carbon brushes (parallel-sided) for use on commutator and slip-ring machines.* It is identical with and has been reproduced from IEC 136 (1986), *Dimensions of brushes and brush-holders for electrical machinery.* However typographical errors have been corrected in Note 2 to Table 1 and in the text of Clause 7.2, and the layout of Appendix B has been adjusted.

For the purposes of this Australian Standard, the cross references to other publications should be replaced by references to Australian Standards as shown below except where the words 'No Australian equivalent' are used. It should be noted that this statement applies only at the time of publication of this Standard.

The page references in the text apply to the IEC page numbers which are given on the bottom left corner of each page.

Reference to IEC or ISO Publication		Appropriate Australian Standard			
IEC 228	Conductors of insulated cables		No Australian equivalent		
ISO 68	General purpose screw threads— Basic profile	AS 1721	General purpose metric screw threads		
ISO/R 286	ISO system of limits and fits Part 1: General tolerances and deviations	AS 1654	Limits and fits for engineering		
ISO/R 388	ISO metric series for basic thicknesses of sheet and dia- meters of wire		No Australian equivalent		

IEC has published two other publications which are not referred to in this Standard, but may be of interest to those dealing with the subject matter.

- IEC 356 (1971) Dimensions for commutators and slip-rings
- IEC 778 (1984) Brush-holders for slip-rings Group R-Type RA.

© Copyright - STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

Page

CONTENTS

SECTION ONE — PRINCIPAL DIMENSIONS AND TOLERANCES

Clau	ıse			
1.	Scope			
2. Letter symbols for the principal dimensions of brushes for				
	cylindrical commutators and slip rings			
3.		dard dimensions	4 5	
4.	Marking			
5.	5. Limits and tolerances on principal dimensions t and a of the carbon brushes and brush-holders and on dimension r of carbon brushes $\dots \dots \dots$			
6.	Reco	ommended combinations of the principal dimensions t , a and r	8	
Se	CTIO	n Two — Complementary dimensions of brushes — Terminations of brus	HES	
7.	Com	plementary dimensions of brushes	12	
	7.1	Chamfers of brushes	12	
	7.2	Angles for contact and top bevels	13	
	7.3	Pressure area	13	
	7.4	Depth of insertion q of the flexible (shunt) in the brush \ldots	15	
	7.5	Safe length of a worn brush, dimension rm	18	
8.	Tern	ninations of brushes	19	
	8.1	Terminal types, slots or holes and suitable screw sizes also the thickness of metal for spade, flag and double shoe terminals — Box or tubular terminals	19	
	8.2	Spade terminals	19	
	8.3	Flag terminals	19 20	
	8.4	Double shoe terminals	20 20	
	8.5	Box or tubular terminals	20 21	
	8.6	Length of flexibles (shunts)	21 22	
	8.0 8.7	Details of flexibles (shunts)	22 23	
			23 23	
	8.8	Current capacity and minimum thickness of terminals	23	
Api	APPENDIX A — Details of brush-holders			
Api	APPENDIX B — IEC Technical Questionnaire for users of carbon brushes			
Api	APPENDIX C — Test procedures for determining physical properties of carbon brushes for electrical machines			



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