SLOVENSKI STANDARD
SIST-TP CLC/TR 60778:2005

01-junij-2005

Krtaļ na drģala za drsne obroļ e skupine R ï Tip RA (IEC/TR 60778:1984)

Brush-holders for slip-rings group R - Type RA

Bürstenhalter für Schleifringe Gruppe R - Typ RA

Porte-balais pour bagues groupe R - Exécution RA

Ta slovenski standard je istoveten z: **CLC/TR 60778:2004**

ICS:

29.160.10	Sestavni deli rotacijskih strojev	Components for rotating machines

SIST-TP CLC/TR 60778:2005 **en**

TECHNICAL REPORT

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

CLC/TR 60778

September 2004

ICS 29.160.10

English version

Brush-holders for slip-rings group R – Type RA
(IEC/TR 60778:1984)

Porte-balais pour bagues groupe R – Exécution RA
(CEI/TR 60778:1984)

Bürstenhalter für Schleifringe Gruppe R – Typ RA
(IEC/TR 60778:1984)

This Technical Report was approved by CENELEC on 2004-07-03.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC
European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. CLC/TR 60788:2004 E

Foreword

The text of the Technical Report IEC/TR 60778:1984, prepared by IEC TC 2, Rotating machinery, was submitted to the formal vote and was approved by CENELEC as CLC/TR 60778 on 2004-07-03 without any modification.

Endorsement notice

The text of the Technical Report IEC/TR 60778:1984 was approved by CENELEC as a Technical Report without any modification.

RAPPORT TECHNIQUE

TECHNICAL REPORT

CEI
IEC
60778

Première édition
First edition
1984-01

Porte-balais pour bagues groupe R – exécution RA

Brush-holders for slip-rings group R – type RA

International Electrotechnical Commission 3, rue de Varembé Geneva, Switzerland
Telefax: +41 22 919 0300 e-mail: inmail@iec.ch IEC web site http: //www.iec.ch

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE L

Pour prix, voir catalogue en vigueur
For price, see current catalogue

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

BRUSH-HOLDERS FOR SLIP-RINGS GROUP R – TYPE RA

FOREWORD

1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.

2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.

3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

PREFACE

This report has been prepared by Sub-Committee 2F: Carbon Brushes, Brush-holders, Commutators and Slip-rings, of IEC Technical Committee No. 2: Rotating Machinery.

The text of this report is based upon the following documents:

Six Months' Rule	Report on Voting
2F(CO)47	2F(CO)54

Further information can be found in the Report on Voting indicated in the table above.

The following IEC publications are quoted in this report:

Publications Nos. 136-1 (1962): Dimensions of Brushes and Brush-holders for Electrical Machinery, Part 1: Principal Dimensions and Tolerances.
136-1A (1972): First supplement.
560 (1977): Definitions and Terminology of Brush-holders for Electrical Machines.

BRUSH-HOLDERS FOR SLIP-RINGS GROUP R – TYPE RA

SECTION ONE – GENERAL

1. Scope

This report for brush-holders is applicable to medium-size asynchronous industrial machines of conventional construction for general applications, having shaft heights between 160 mm and 400 mm in the recommended range (in millimetres):

160 180 200 225 250 280 315 355 400

2. Object

This report defines radial brush-holders for slip-rings to be used on the above machines.

3. Definitions

3.1 These brush-holders are distinguished by "*t*" (*t*angential dimension of the brush) being greater than "*a*" (*a*xial dimension of the brush):

$$t > a$$

3.2 These brush-holders will be known as

brush-holders type RA

4. Utilization limits

4.1 The standard type RA brush-holders are intended for use in a limited number of slip-ring sizes for each motor shaft height.

4.2 The slip-ring diameters which can be used for each shaft height are given in Table I (figures in heavy type indicate the preferred values).

TABLE I

Slip-ring sizes

Diameter (mm)	Shaft height (mm)								
	160	180	200	225	250	280	315	355	400
80	x								
90	x	x							
100	x	x	x						
112	x	x	x	x					
125		x	x	x	x				
140			x	x	x	x			
160				x	x	x	x		
180					x	x	x	x	
200						x	x	x	x
224							x	x	x
250								x	x
280									x

4.3 *Fixing*

Type RA brush-holders are intended exclusively for fixing by clamping on a single round bar.

Type RA brush-holders are intended to be located 2 mm from the slip-ring at its nominal diameter.

4.4 Provision for taking up slip-ring wear is not mandatory for the design of type RA brush-holders.

SECTION TWO – GENERAL CHARACTERISTICS

5. Number and arrangement of the brushes

5.1 Slip-rings of industrial asynchronous machines are normally provided with one brush-holder having two identical radial brushes per ring (2T with 2×1 Box. See IEC Publication 560: Definitions and Terminology of Brush-holders for Electrical Machines, Table II).

5.2 The corresponding brush-holders type RA are therefore normally provided for two radial brushes. In this form, the brush-holder is known as

Brush-holder type RAA

5.3 However, within stated overall dimensions and with the same characteristics, the brush-holders type RA can be made with one single brush box, for one brush (T with 1 Box. See IEC Publication 560, Table II). In this form, the brush-holder is known as

brush-holder type RAB