

# RDC 16

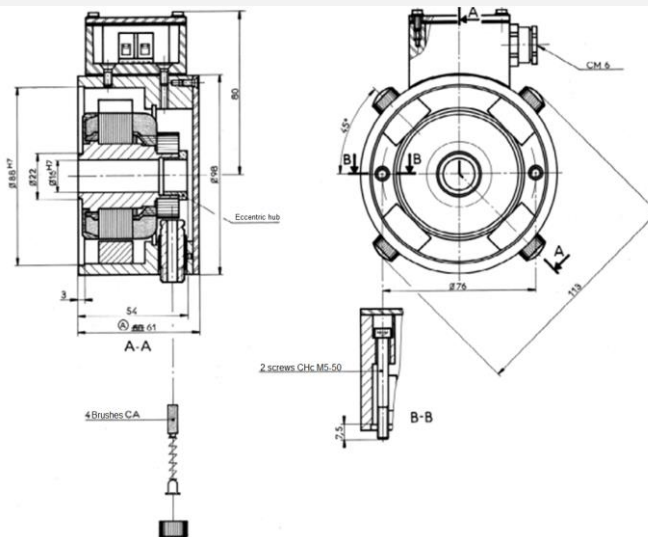
## Direct Current Tachometer generator



- Applications :**
- Industrial applications
  - Machine tools

- Description :**
- Hollow shaft tachometer generator : rotor/stator set (metal housing)
  - Permanent magnet excitation
  - Sturdy machine
  - Commutator on mounting side
  - Mounted on smooth shaft

### DIAGRAM



### MAIN CHARACTERISTICS

DESIGNATION	SYMB	VALUES
Max. speed (mechanical)	$n_m$	7500 rpm
Moment of inertia	J	1,8 km cm <sup>2</sup>
No load driving torque	Mr	0,5 N.cm
Maximum E.M.F	$E_m$	300 V
Maximum linearity error	$\Delta E$	$\leq 0,15 \% E_T$
Overall ripple rate (peak to peak)	$\Delta E_c$	$\leq 0,6 \% E_c$
Rotation harmonics (f=2 p.n)	$\Delta E_p$	$\leq 0,05 \% E_c$
Slot harmonics (f=Z.n)	$\Delta E_z$	$\leq 0,55 \% E_c$
Calibration precision	$\Delta E_o$	$\pm 2\%/E_{T0}$
E.M.F. tempetaure drift		
- not compensated	$\Delta E_c$	0,005 % °C
- compensated		
Time constant	$C_t$	0,7 ms
Filter : Time constant of filter		0,1 ms
Load current		1,5 mA
Speed		3000 rpm

### CONSTRUCTION DETAILS

Number of poles	2p	4
Number of armature slots		33
Number of commutator blades		33
Insultation class		B (IEC 34-1)
Operating temperature		-20°C +110 °C
Climatic protection		C <sub>a</sub> (IEC 68-1)
Protection degree		IP44 IP55 (IEC 34-5)
Direction of rotation		reversible
Excitation : Aimants permanents		Alnico

<b>Weight</b>	<b>1,8 kg</b>
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### MECHANICAL OPTIONS

Standard	ARMATURE BORE Ø d (mm)		MOTOR CENTERING END FRAME Ø D (mm) Standard	ARMATURE CLAMPING DEVICE
	Max.	Min.		
16 <sup>H7</sup>	16	8	88	Smooth shaft, expanding device

#### OPTIONS

- Waterproof version (ME) : IP 55

#### AVAILABLES OPTIONS

- On request



Markings and polarity of terminals (cables) for counter-clockwise rotation viewing the mounting face

A1 : +  
A2 : -

### ELECTRICAL OPTIONS

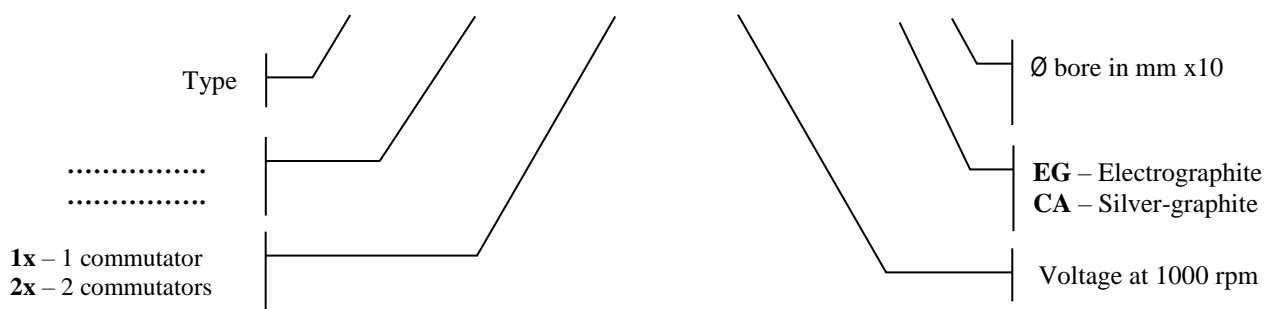
DESCRIPTION	SYMB	UNIT	VALEURS					
			Min.	10	20	30	40	50
<b>E.M.F. at 1000 rpm</b>	<b>E<sub>n</sub></b>	<b>V</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>40</b>	<b>50</b>	<b>60</b>
Voltage gradient	C <sub>v</sub>	V/rpm	0,01	0,02	0,03	0,04	0,05	0,06
Armature resistance	R <sub>a</sub>	Ω	8	33	73	130	200	290
Max thermal load	I <sub>th</sub>	mA	400	200	150	100	80	60
Max. allowed speed	n <sub>a</sub>	rpm	7500	7500	7500	7500	6000	5000

### BRUSHES

GRADE	CODE	APPLICATION LIMITS	DIMENSIONS	NUMBER
EG - Electrographite	/0002607	Special applications, on request	6,4 x 5 x 14 mm	4
CA - Silver-graphite	/0001397	STANDARD for normal use at E.M.F < 300 v		

### PRODUCT DESCRIPTION

## RDC16 MF 1x 60 EG 160



When inquiring, please advise the serial number of the tachogenerator to be replaced.

#### RADIO-ENERGIE

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