

# RDC 207-208

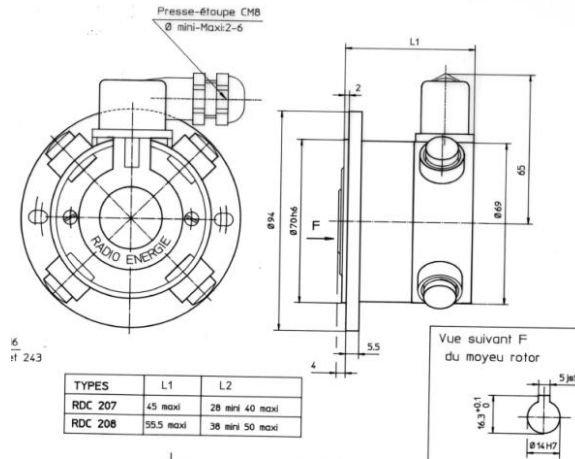
## Direct Current Tachometer generator



- Applications :**
- Industrial applications
  - Machine tools
  - Robots

- Description :**
- Dc tachometer generator : rotor/stator set
  - Permanent magnet excitation
  - Mounted on smooth shaft or fixed by key
  - Small size
  - Commutator on opposite of mounting side
  - **COPPER OR SILVER COMMUTATOR**

### DIAGRAM



### MAIN CHARACTERISTICS

DESIGNATION	SYMB	UNIT	VALUES	
			RDC 207	RDC 208
Max. speed (mechanical)	$n_m$	tr/min	6000	6000
Moment of inertia	J	km cm <sup>2</sup>	0,12	0,08
No load driving torque	$M_r$	N.cm	≤ 0,3	≤ 0,3
Maximum E.M.F	$E_m$	V	300	300
Maximum linearity error	AE	% $E_T$	≤ 0,15	≤ 0,15
Overall ripple rate (peak to peak)	$\Delta E_c$	% $E_c$	≤ 0,5	≤ 0,5
Rotation harmonics (f=2 p.n)	$\Delta E_p$	% $E_c$	≤ 0,05	≤ 0,05
Slot harmonics (f=Z.n)	$\Delta E_z$	% $E_c$	≤ 0,45	≤ 0,45
Calibration precision	$\Delta E_o$	%/ $E_{T_o}$	± 2	± 2
E.M.F. tempetaure drift - not compensated - compensated	$\Delta E_e$	% °C	0,03 -	0,03 -
Time constant	$C_t$	ms	0,4	0,25
Filter : Time constant of filter		ms	0,1	0,1
Load current		mA	2	2
Speed		rpm	3000	3000

### CONSTRUCTION DETAILS

Number of poles $2p$	4	4
Number of armature slots	33	33
Number of commutator blades	33	33
Insultation class	B (IEC34-1)	B (IEC34-1)
Operating temperature	0°C 80° C	-20° +80°C
Climatic protection	$C_a$ (IEC68-1)	$C_a$ (IEC68-1)
Protection degree	IP 00 (IEC34-5)	IP 00 (IEC34-5)
Direction of rotation	reversible	
Excitation : Aimants permanents	SmCo	

<b>Weight</b>	<b>0,5 kg</b>	<b>0,5 kg</b>
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### MECHANICAL OPTIONS

ARMATURE BORE Ø d (mm)			MOTOR CENTERING END FRAME Ø D (mm)			ARMATURE CLAMPING DEVICE		
Standard	Max.	Min.	Standard					
14 <sup>H7</sup>	16	12	70			Key or expanding device		

#### OPTIONS

- No adaptation possible

#### AVAILABLES OPTIONS

- No adaptation possible



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

A1 : +  
A2 : -

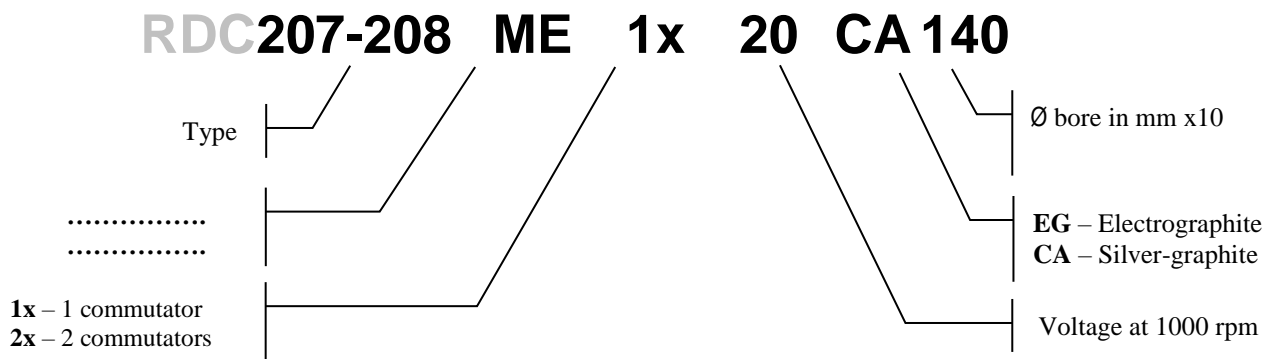
### ELECTRICAL OPTIONS

DESCRIPTION	SYMB	UNIT	VALUES							
			Min.				Max.			
E.M.F. at 1000 rpm	E <sub>n</sub>	V	RDC 207 RDC 208	10	20	30	30	40	50	60
Voltage gradient	C <sub>v</sub>	V/rpm	RDC 207 RDC 208	0,01	0,02	0,03	0,03	0,04	0,05	0,06
Armature resistance	R <sub>a</sub>	Ω	RDC 207 RDC 208	28	55	104	50	68	105	160
Max termal load	I <sub>th</sub>	mA	RDC 207 RDC 208	100	77	61	180	150	120	100
Max. allowed speed	n <sub>a</sub>	rpm	RDC 207 RDC 208	6000	6000	6000	6000	6000	6000	5000

### BRUSHES

GRADE	CODE	APPLICATION LIMITS	DIMENSIONS	NUMBER
EG - Electrographite	/0002607	Special applications, on request	6 x 4 x 11 mm	4
CA - Silver-graphite	/0001397	STANDARD for normal use at E.M.F < 200 v		

### PRODUCT DESCRIPTION



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

#### RADIO-ENERGIE

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