

TYPE

RDC 210



DESTINATION

- Industrial applications
- Machine tools
- Robots

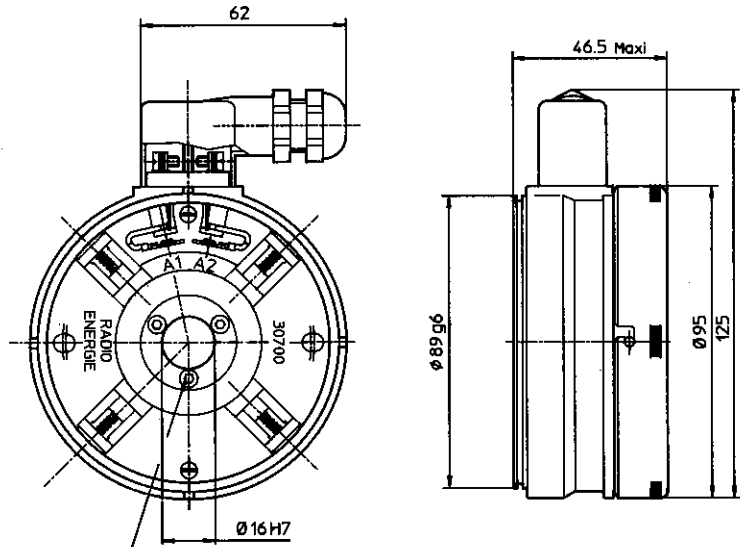
DISCRIPTION

- Hollow shaft tachometer generator: rotor / stator set
- Permanent magnet excitation
- Collector on opposite of mounting side
- Several mechanical options (IP 00 – IP 68)
- Small version
- **SILVER COLLECTOR**

RDC 210 ME/MF



Weight	kg	0,5
--------	----	-----



Armature fixing: 3 screws of type CHc M3
Recommended torque: 140 N.cm

GENERAL DATA

Designation	Symbol	Unit	Value	
Maximum speed (mechanical)	n_m	rpm	6000	
Moment of inertia	J	Kg cm ²	0,7	
No load driving torque	M_r	N. cm	≤ 0,5	
Maximum E.M.F.	E_m	V	120	
Maximum linearity error	ΔE	% E_T	≤ 0,15	
Overall ripple rate (peak to peak)	ΔE_C	% E_C	≤ 0,5	
Rotation harmonics (f = 2 p. n.)	ΔE_P	% E_C	≤ 0,05	
Slot harmonics (f = Z. n.)	ΔE_Z	% E_C	≤ 0,45	
Calibration precision	ΔE_O	% E_{T0}	± 2,0	
E.M.F. temperature drift - not compensated - compensated	ΔE_e	% /°C	0,03	
Time constant	C_t	Ms	0,45	
*Filter: Time constant	RF x CF	Ms	0,1	
Load current	I_c	mA	3	
Speed	n	rpm	3000	

Construction Details	
Number of poles	4
Number of armature slots	33
Number of collector blades	33
Insulation class	B (IEC 34-1)
Operating temperature	-20° - 80 °C
Climatic protection	C_a (IEC 68-1)
Protection degree	IP00 (IEC 34-5) IP68 (DIN 40050)**
Direction of rotation	Reversible
Excitation	Permanent magnets SmCo

* Filter-connection diagram see following pages
** The protection degree refers to a mounted machine

Rev.: 02

DESTINATION

- Industrial applications
- Machine tools
- Robots

DISCRIPTION

- Hollow shaft tachometer generator: rotor / stator set
- Permanent magnet excitation
- Collector on opposite of mounting side
- Several mechanical options (IP 00 – IP 68)
- Small version
- **SILVER COLLECTOR**

TYPE
RDC 210

Mechanical options

Armature bore Ø d (mm)			Motor centring end frame Ø D (mm)			Armature clamping device		
Standard	Max.	Min.	Standard					
16 ^{H7}	16	8	89					Key or expanding device

Options

- For incorporation purpose: IP 00
- Closed version: IP 44
- Watertight version: IP 68
- Conic bore

Available options**Markings and Polarity of Terminals (cables) for counter clockwise rotation viewing the mounting face**

1 collector	2 collector
A1: + - A2: -	

Electrical options

			Min.				Max.						
E.M.F. at 1000 rpm.	E _n	V	5	7	10	14	20						
Voltage gradient	C _v	V/rpm	0,005	0,007	0,010	0,014	0,02						
Armature resistance	R _a	Ω	5	11	22	45	80						
Max. thermal load	I _{th}	A	280	190	136	92	74						
Max. allowed speed	n _a	rpm	6000	6000	6000	6000	6000						

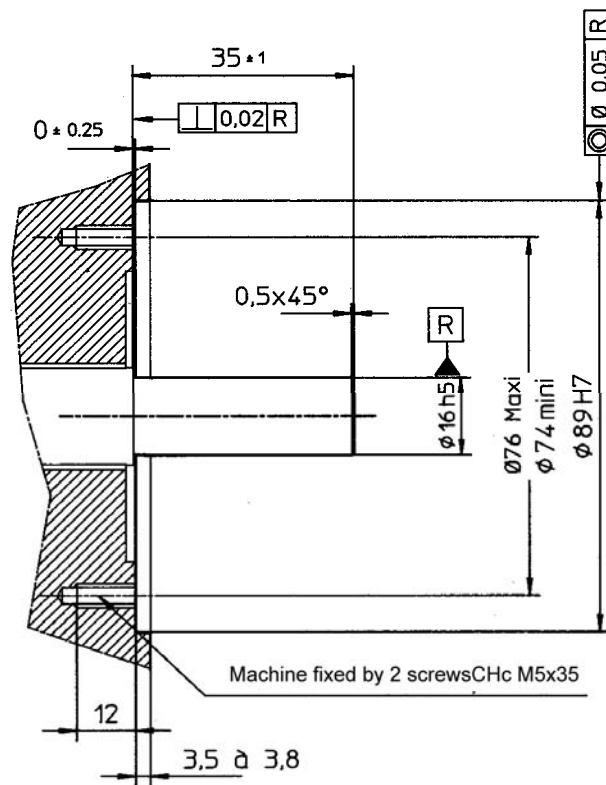
Brushes

Number	Size	Quality	Application limits		Reference
4	4 x 6 x 13	Electro-graphite (EG)	Special applications, on request		
		Silver-graphite (CA)	STANDARD for normal use at E.M.F. < 300 V		60 - 40 - CA

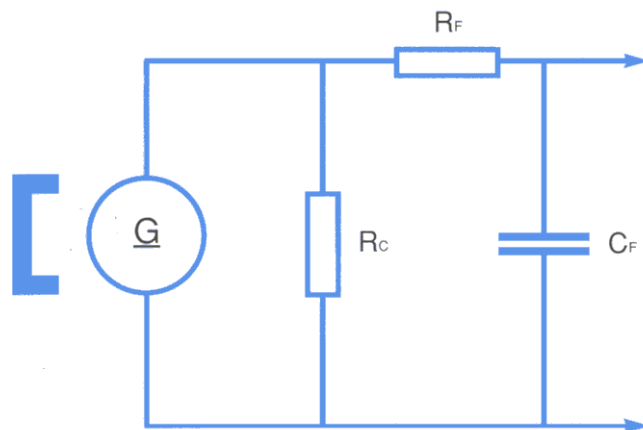
Rev.: 02

We reserve the right to modify technical features in the interest of technical advance.

MOUNTING INSTRUCTION



Filter Scheme



R_C : Load resistance
 R_F : Filter resistance
 C_F : Filter capacity