

# RE.0220

## Direct Current Tachometer generator



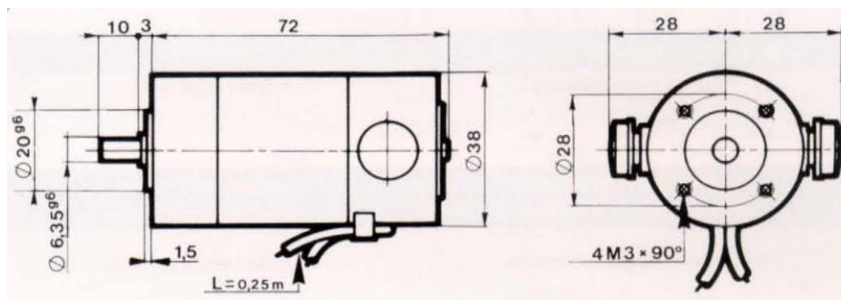
### Destination:

- General applications
- Small size

### Description:

- Small DC tachometer generator
- Permanent magnet excitation
- Cable connection
- Brushes easily accessible
- Flange B 14

### DIAGRAM



### MAIN CHARACTERISTICS

DESIGNATION	SYMB	VALUE
Max. speed (mechanical)	$n_m$	15 000 rpm
Moment of inertia	J	0.05 Kg cm <sup>2</sup>
No-load driving torque	$M_r$	0.40 N.cm
Max. radial shaft stress	F	0.2 da N
Maximum E.M.F.	$E_m$	200 V
Maximum linearity error	$\Delta E$	$\leq 0.15 \% E_T$
Overall ripple rate (peak to peak)	$\Delta E_c$	$\leq 5 \% E_c$
Rotation harmonics (f=2 p.n)	$\Delta E_p$	$\leq 0.5 \% E_c$
Slot harmonics (f=Z.n.)	$\Delta E_z$	$\leq 4.5 \% E_c$
Calibration precision	$\Delta E_o$	$\pm 1 \% E_{T_o}$
E.M.F. temp. drift		
- Not compensated	$\Delta E_e$	0.02 %/°C
- Compensated		-
Time constant	$C_t$	1.0 ms
*Filtre: Time constant		0.2 ms
Load current		3 mA
Speed		3 000 rpm

### CONSTRUCTION DETAILS

Number of poles 2p	2
Number of armature slots	9
Number of collector blades	18
Insulation class	B (IEC34-1)
Operating temperature	-30°C-130°C
Climatic protection	C (IEC68-1)
Protection degree	IP 44 (IEC34-5)
Direction of rotation	reversible
Excitation: Permanents magnet:	Alnico

<b>Weight</b>	<b>0.3 kg</b>
---------------	---------------



## RE.0220

### Direct Current Tachometer generator

#### MECHANICAL OPTIONS

Shaft ends and bearings

	MOUNTING SIDE			OPPOSITE MOUNTING SIDE		
	D (mm)	L (mm)	Bearings	D (mm)	L (mm)	Bearings
Standard	6.35	10	7 x 19 x 6 ZZ	-	-	4 x 13 x 5 ZZ
Max	6.35	-	7 x 19 x 6 ZZ	4	-	4 x 13 x 5 ZZ



Markings and polarity of terminals (cables) for counter-clockwise rotation, seen from the shaft.

A1 : +  
A2 : -

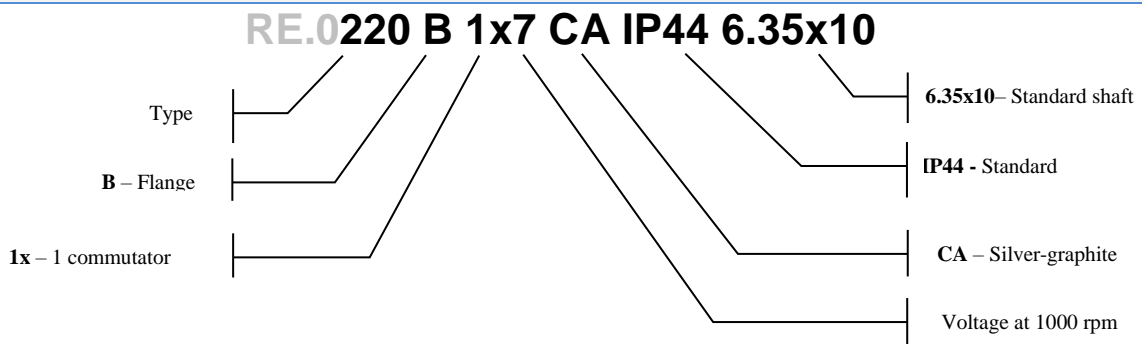
#### ELECTRIC OPTIONS

DESCRIPTION	SYMB	UNIT	VALUES			
			Min.			Max.
E.M.F. at 1 000 rpm	$E_n$	V	5	7	10	12
Voltage gradient	$C_v$	V/rpm	0.005	0.007	0.010	0.012
Armature resistance	$R_a$	$\Omega$	25	50	100	150
Max. thermal load	$I_{th}$	A	0.12	0.09	0.06	0.05
Max. allowed speed	$n_a$	Tr/rpm	15 000	15 000	15 000	15 000

#### BRUSHES

GRADE	CODE	APPLICATION LIMITS	DIMENSIONS	NUMBER
CA – Silver-graphite		E.M.F. < 200 V	2.3 x 6.2 x 10 mm	2

#### PRODUCT DESCRIPTION



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

#### RADIO-ENERGIE

Route de Nonnes-86100 CHATELLERAULT – FRANCE – Tel : +33 5 49 21 76 22 – Fax : +33 5 49 93 26 79

www.radio-energie.eu

Société par Actions Simplifiée au capital de 300 000 Euros immatriculée au RCS de Poitiers sous n° 829 195 668

TVA intracommunautaire : FR94829195668

Code APE 2711Z

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