

RE.0220

Direct Current Tachometer generator



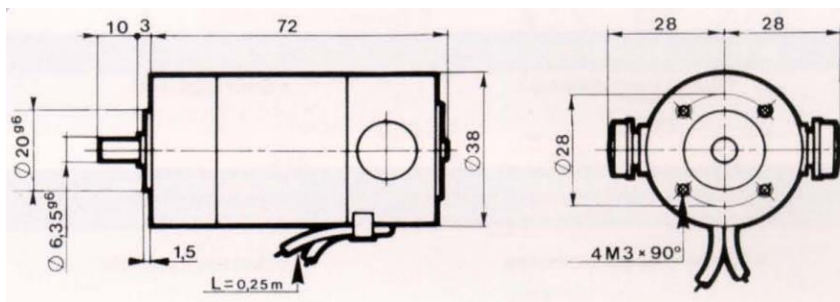
Destination:

- 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 ²
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	ΔE	$\leq 0.15 \% E_T$
Overall ripple rate (peak to peak)	ΔE_c	$\leq 5 \% E_c$
Rotation harmonics (f=2 p.n)	ΔE_p	$\leq 0.5 \% E_c$
Slot harmonics (f=Z.n.)	ΔE_z	$\leq 4.5 \% E_c$
Calibration precision	ΔE_o	$\pm 1 \% E_{T_o}$
E.M.F. temp. drift		
- Not compensated	ΔE_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

Weight	0.3 kg
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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 : -

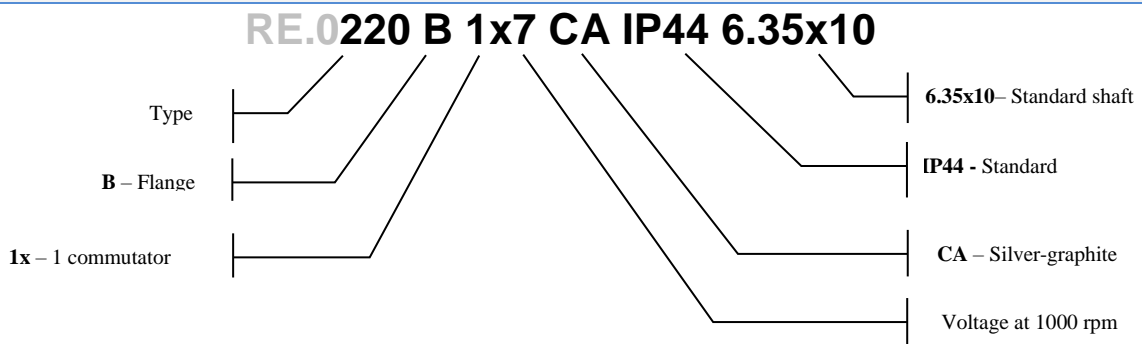
ELECTRIC OPTIONS

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	Ω	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

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