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Tachogenerators

BATAC444R1



Applications:

- Industry Applications
- Speed Control and Regulation

Features:

- Rugged Model
- Terminal box
- Available with one or two commutators

Characteristics:

DESCRIPTION:	VALUE:
MAX. SPEED	: 12 000 RPM
MOMENT OF INERTIA	: 0.95 KG cm ²
NO-LOAD DRIVING TORQUE	: 1.5 N·cm
MAX. RADIAL SHAFT STRESS:	: 1.0 da N
MAX. E.M.F	: 600 V
MAX. LINEARITY ERROR	: ≤ 0.15 % E _T
OVERALL RIPPLE RATE	: ≤ 0.5 % E _c
ROTATION HARMONICS	: ≤ 02 % E _c
SLOTS HARMONICS	: ≤ 03 % E _c
CALIBRATION PRECISION	: ± 1 % E _{To}
E.M.F TEMPERATURE DRIFT	
• NOT COMPENSATED	: 0.02 % /°C
• COMPENSATED	: 0.005 % /°C
TIME CONSTANT	: 2.5 ms
*FILTER:	
• TIME CONSTANT OF FILTER	: 0.47 ms
• LOAD CURRENT	: 5 mA
SPEED	: 3000 RPM

DESCRIPTION:	VALUE:
NUMBER OF POLES	: 2
ARMATURE SLOTS NUMBER	: 19
COMMUTATOR BLADES NUMBER	: 57
INSULATION CLASS	: B (IEC 34-1)
OPERATING TEMPERATURE	: -30° + 130 °C
CLIMATIC PROTECTION	: C _a (IEC 68-1)
INGRESS PROTECTION	: IP44 (IEC 34-5)
DIRECTION OF ROTATION	: Reversible
EXCITATION <i>Permanent Magnets</i>	: Alnico
WEIGHT	: • 2.8 KG (1 commutator)
	: • 3.2 KG (2 commutators)

Mechanical Options:

MOUNTING SIDE			
	D (mn)	L (mn)	BEARINGS:
STANDARD SHAFT	11	30	12 x 28 x 8 ZZ
SPECIAL SHAFT	14	-	15 x 32 x 9 ZZ

OPPOSITE MOUNTING SIDE			
	D (mn)	L (mn)	BEARINGS:
	7	30	8 x 22 x 7 ZZ
	8	-	8 x 22 x 7 ZZ



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

1 COMMUTATOR	2 COMMUTATORS
1 A1: +	2 A1: +
1 A2: -	2 A2: -

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BirCraft
GEARED MOTORS - LINEAR ACTUATORS - CONTROLS

- Over 40 Years of Supplying Africa -

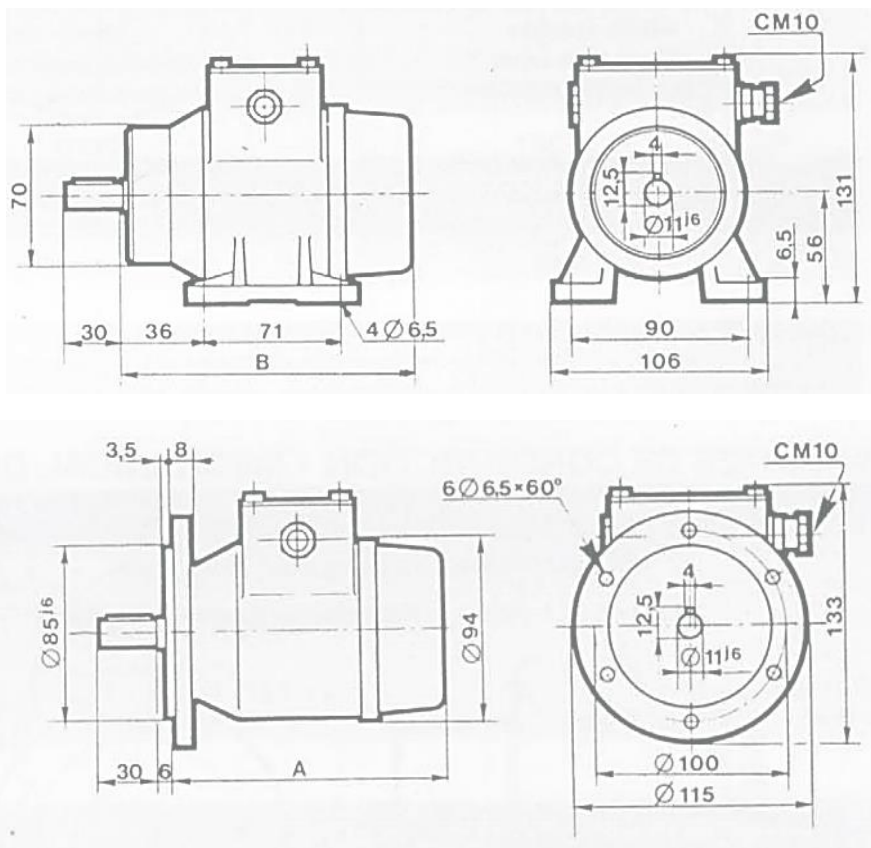
Electrical Options:

DESCRIPTION:	UNIT:	VALUES:											
E.M.F at 1 000 RPM	V	1 com.	6	20	30	40	50	60	80	100	120	150	200
		2 com.		2 x 20	2 x 30		2 x 50	2 x 60		2 x 100			
Voltage Gradient	V/RPM	1 com.	0.006	0.020	0.030	0.040	0.050	0.060	0.080	0.1	0.120	0.150	0.200
		2 com.		2 x 0.02	2 x 0.03		2 x 0.05	2 x 0.06		2 x 0.1			
Armature Resistance	Ω	1 com.	1.50	12	28	45	70	100	180	280	400	640	900
		2 com.		2 x 24	2 x 55		2 x 150	2 x 200		2 x 470			
Max Thermal Load	A	1 com.	1.40	0.55	0.35	0.25	0.22	0.18	0.14	0.11	0.09	0.07	0.07
		2 com.		2 x 0.23	2 x 0.14		2 x 0.09	2 x 0.09		2 x 0.05			
Max. Allowed Speed	RPM	EG	12000		12000			10000	7500	6000	5000	4000	3000
		CA			6000			5000	3750	3000	2500	2000	1500

Brushes:

QUANTITY:	DIMENSION:	GRADE:	MAX OUTPUT VOLTAGE:
4	3.1 x 4.1 x 12.5mm	EG – Electrographite	600 V
4	3.1 x 4.1 x 12.5mm	CA – Silver-graphite	< 300 V

Dimensions:



	1 commutator	2 commutators
A	136 mm	155 mm
B	142 mm	161 mm