

CONVERSION FACTORS		
TO CONVERT	TO	DIVIDE BY
kg	lb	0.453592
kgm ²	lbft ²	0.04214
kgcm/rad	lbin/rad	1.1521246
N/m ²	lbf/in ²	6894.76

NOTES:-

SHAFT STIFFNESS:-

THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ϕ AND THE SHAFT EXTENSION ϕ IS 2.1355×10^6 kgcm/radian (STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)

SHAFT MATERIAL:-

STEEL - C40E TO BSEN 10083-2 2006 (APPROVED BY MARINE AUTHORITIES WHEN APPROPRIATE) MAXIMUM RECOMMENDED VIBRATORY STRESS LEVEL IN THE SHAFT IS 34.47×10^6 N/m² FOR SPEED RANGE OF 0.95 TO 1.1 x NOMINAL SPEED AND 68.94×10^6 N/m² FOR RUN THROUGH CONDITIONS, FOR INDUSTRIAL MACHINES.

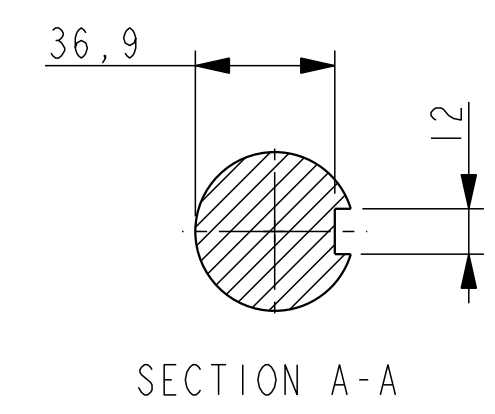
FOR MARINE AUTHORITIES, THEIR APPROPRIATE RULES WILL APPLY.

CUMMINS GENERATOR TECHNOLOGIES LTD SHOULD BE NOTIFIED OF ANY ROTORS NOT COMPLYING WITH THESE RULES. CUMMINS GENERATOR TECHNOLOGIES LTD BALANCE ROTORS TO COMPLY WITH INTERNATIONAL STD ISO 1940 PARTS 1 AND 2. BALANCE GRADE 2.5.

FOR UNBALANCED MAGNETIC PULL (U.M.P.) REFER TO THE FACTORY.

APPROVED DOCUMENT

COMPONENT	MASS (kg)	WR ² (kgm ²)
SHAFT	7.866	0.0029
FAN	0.976	0.0067
MAIN ROTOR	14.829	0.0718
EXCITER ROTOR	3.495	0.0139
TOTAL WITHOUT EBG ROTOR	27.166	0.0953
EBG ROTOR	1.701	0.0017
TOTAL WITH EBG ROTOR	28.867	0.0970



MOD.	ISSUE	DRAWN	DATE	MODIFICATION
4-8440-77	A	BSR	08/05/07	ORIGINAL ISSUE

CONFIDENTIAL PROPERTY OF CUMMINS GENERATOR TECHNOLOGIES LTD.				P04E TWO BEARING MOMENTS OF INERTIA AND SHAFT DETAILS			
MATERIAL PROPS	-	DIMENSIONS IN MILLIMETRES (MM) AT 20°C	PROJECTION 	SCALE	MATERIAL		
FINISH SPEC	-			3:10	-		
GEOMETRY SPEC	-	SURFACE FINISH VALUES IN MICRO METRES	WEIGHT =	DRG. SIZE	CASTING No		
ASSEMBLY SPEC	-			C	-		
PERFORMANCE SPEC	-	UNLIMITED DIMS ± 0.25	DRAWN	REL. PHASE	PART No		
QUALITY SPEC	-			BSR	P	L15-13189	
			CHECKED	PRO/ENGINEER	ISSUE		
			DSG		A		
			APPROVED		SHEET 1 OF 1 SHEETS		
			DPC				