

CONVERSION FACTORS		
TO CONVERT	TO	DIVIDE BY
kg	lb	0.453592
kgm ²	lbf ft 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 2.0112×10^6 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.

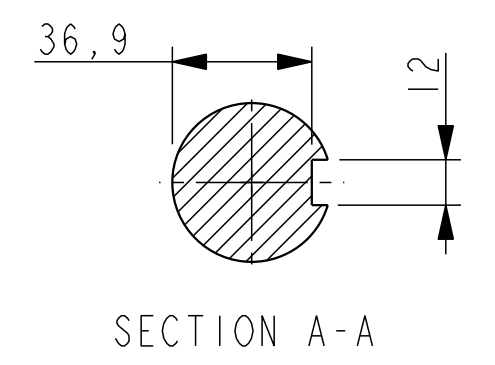
FOR MARINE AUTHORITIES, THEIR APPROPRIATE RULES WILL APPLY.

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	8.568	0.0032
FAN	0.976	0.0067
MAIN ROTOR	17.879	0.0859
EXCITER ROTOR	3.495	0.0139
TOTAL WITHOUT EBG ROTOR	30.918	0.1097
EBG ROTOR	1.701	0.0017
TOTAL WITH EBG ROTOR	32.619	0.1114



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

CONFIDENTIAL PROPERTY OF CUMMINS GENERATOR TECHNOLOGIES LTD.				P04F 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	-		WEIGHT =		DRG. SIZE	CASTING No								
ASSEMBLY SPEC	-		<table border="1"> <tr> <td>DRAWN</td> <td>BSR</td> <td>08/05/07</td> </tr> <tr> <td>CHECKED</td> <td>DSG</td> <td>25/6/07</td> </tr> <tr> <td>APPROVED</td> <td>DPC</td> <td>25/6/07</td> </tr> </table>		DRAWN	BSR	08/05/07	CHECKED	DSG	25/6/07	APPROVED	DPC	25/6/07	C
DRAWN	BSR	08/05/07												
CHECKED	DSG	25/6/07												
APPROVED	DPC	25/6/07												
PERFORMANCE SPEC	-	SURFACE FINISH VALUES IN MICRO METRES	UNLIMITED DIMS ± 0.25		REL. PHASE	PART No								
QUALITY SPEC	-				P	L15-13190								
					Pro/ENGINEER	ISSUE	A							
					SHEET 1 OF 1 SHEETS									