

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 2.0138×10^6 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.

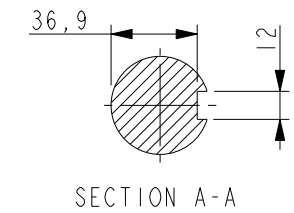
FOR MARINE AUTHORITIES, THEIR APPROPRIATE RULES WILL APPLY.

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	8.449	0.0031
FAN	0.976	0.0067
MAIN ROTOR	20.508	0.0982
EXCITER ROTOR	4.300	0.0170
TOTAL WITHOUT EBG ROTOR	34.233	0.1250
EBG ROTOR	1.701	0.0017
TOTAL WITH EBG ROTOR	35.934	0.1267



MOD.	ISSUE	DRAWN	DATE	MODIFICATION
5-0223-09	B	DW	28/08/09	CHANGED SHAFT STIFFNESS FROM 2.0147 TO 2.0138 , SHAFT DIMS 115 WAS 120 AND 66.5 WAS 61.5
4-8440-77	A	BSR	08/05/07	ORIGINAL ISSUE

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MATERIAL PROPS	-	DIMENSIONS IN MILLIMETRES (MM) AT 20°C	PROJECTION		
FINISH SPEC	-				
GEOMETRY SPEC	-	SURFACE FINISH VALUES IN MICRO METRES	WEIGHT =		
ASSEMBLY SPEC	-				
PERFORMANCE SPEC	-	UNLIMITED DIMS ± 0.25	DRAWN	BSR	08/05/07
QUALITY SPEC	-		CHECKED	DSG	28/08/09
			APPROVED	JB	28/08/09

P04G TWO BEARING MOMENTS OF INERTIA AND SHAFT DETAILS	
SCALE 3:10	MATERIAL --
DRG. SIZE C	CASTING No -
REL. PHASE P	PART No L15-13191
PRO/ENGINEER	ISSUE B
SHEET 1 OF 1 SHEETS	