



COMPONENT	MASS (kg)	WR ² (kgm ²)
SHAFT	10.249	0.0039
FAN	1.664	0.0144
MAIN ROTOR	45.608	0.2092
EXCITOR ROTOR	6.408	0.0249
TOTAL WITHOUT EBG ROTOR	63.929	0.2524
EBG ROTOR	1.701	0.0017
TOTAL WITH EBG ROTOR	65.630	0.2541

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 FACE 'A' IS 2.9487×10^6 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 BS ISO 1940 PARTS 1 AND 2 . BALANCE GRADE 2.5
 FOR UNBALANCED MAGNETIC PULL (U.M.P.) REFER BACK TO THE FACTORY.

ADAPTOR SAE No.	COUPLING SAE No.	COUPLING DIMENSIONS		MASS OF DISCS (kg) (1 X 4mm THICK)	MASS OF SHAFT SPACER (kg)	MASS OF PRESSURE PLATE (kg)	TOTAL MASS OF COUPLING ASSEMBLY (kg)	COUPLING STIFFNESS (kgcm/rad)	COUPLING DISCS WR ² (kgm ²)
		ϕ XX mm	YY mm						
4	28.5	314.2	17.1	2.415	0.324	0.069	2.808	18.154×10^6	0.0296

MOD.	ISSUE	DRAWN	DATE	MODIFICATION
5-0223-65	A	DW	6/9/10	ORIGINAL ISSUE

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MATERIAL PROPS	-	DIMENSIONS IN MILLIMETRES (MM) AT 20°C	PROJECTION		PI4H I-BRG MOMENTS OF INERTIA AND SHAFT DETAILS SAE 10 DISHED COUPLING DISC	
FINISH SPEC	-		WEIGHT =			
GEOMETRY SPEC	-		DRAWN	DW		6/9/10
ASSEMBLY SPEC	-		CHECKED	LL		6/9/10
PERFORMANCE SPEC	-	UNLIMITED DIMS ± --	APPROVED	JB	6/9/10	
QUALITY SPEC	-		PRO/ENGINEER			

SCALE	3:10	MATERIAL	--
DRG. SIZE	C	CASTING No	-
REL. PHASE	P	PART No	L15-13371
		ISSUE	A
SHEET		1 OF 1 SHEETS	