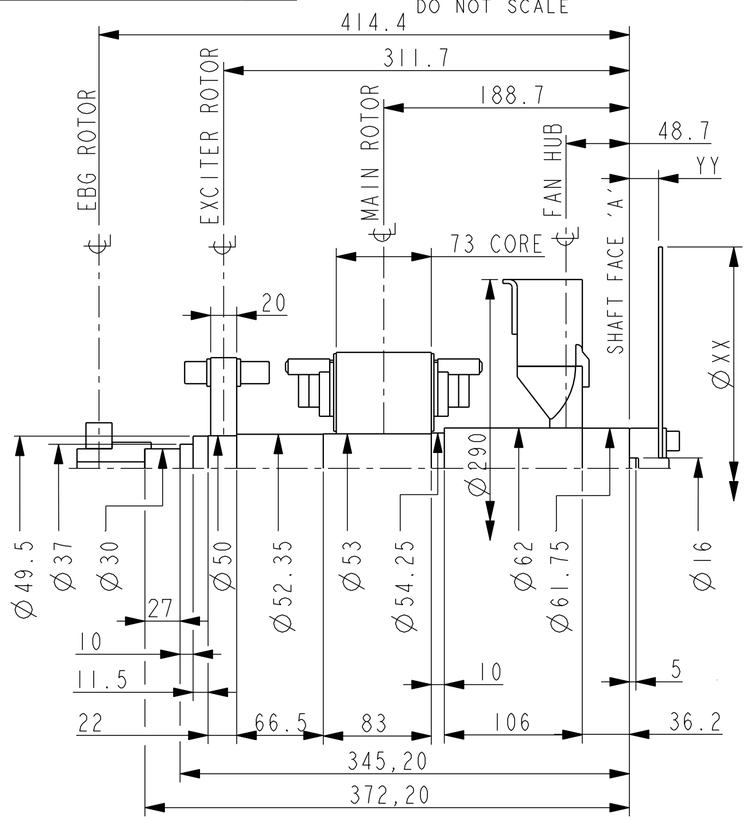
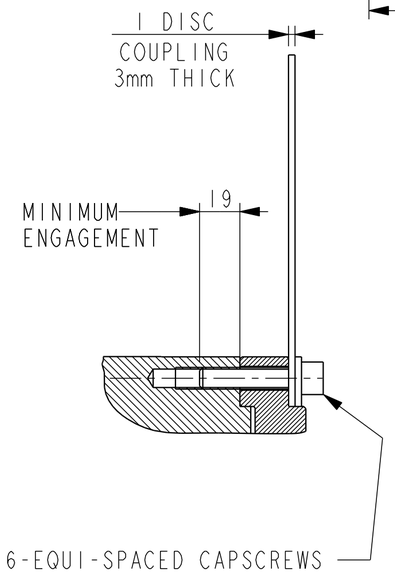
DRG.SIZE	REL. PHASE	PART No	ISSUE
C	P	L15-13177	A

IF IN DOUBT-ASK

DO NOT SCALE





COMPONENT	MASS (kg)	WR^2 (kgm^2)
SHAFT	6.865	0.0028
FAN	0.976	0.0067
MAIN ROTOR	14.829	0.0718
EXCITOR ROTOR	3.495	0.0139
TOTAL WITHOUT EBG ROTOR	26.165	0.0952
EBG ROTOR	1.701	0.0017
TOTAL WITH EBG ROTOR	27.866	0.0969

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 ℄
AND THE SHAFT FACE 'A' IS 5.4334 X 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 X 10^6 N/m^2 FOR SPEED RANGE OF 0.95 TO 1.1 X NOMINAL SPEED AND 68.94 X 10^6 N/m^2 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 ØXX mm	COUPLING DIMENSIONS YY mm	MASS OF DISC (kg) (1 X 3mm THICK)	MASS OF SHAFT SPACER (kg)	MASS OF PRESSURE PLATE (kg)	TOTAL MASS OF COUPLING ASSEMBLY (kg)	COUPLING STIFFNESS (kgcm/rad)	COUPLING DISC WR^2 (kgm^2)
4/5	6 1/2	215.8	10	0.850	0.233	0.069	1.152	13.955 X 10^6	0.0049
4/5	7 1/2	241.2	10	1.069	0.233	0.069	1.371	13.835 X 10^6	0.0079
3/4/5	8	263.5	41.8	1.275	0.974	0.069	2.318	13.747 X 10^6	0.0111
2/3/4	10	314.2	33.6	1.819	0.783	0.069	2.671	13.616 X 10^6	0.0225
2/3	11 1/2	352.3	19.4	2.287	0.452	0.069	2.808	13.555 X 10^6	0.0355

MATERIAL PROPS	-
FINISH SPEC	-
GEOMETRY SPEC	-
ASSEMBLY SPEC	-
PERFORMANCE SPEC	-
QUALITY SPEC	-

DIMENSIONS IN MILLIMETRES (MM) AT 20°C

SURFACE FINISH VALUES IN MICRO METRES

UNLIMITED DIMS ± --

PROJECTION

WEIGHT =

DRAWN	BSR	25/04/07
CHECKED	DSG	22/05/07
APPROVED	DPC	22/05/07

P04E ONE BEARING MOMENTS OF INERTIA AND SHAFT DETAILS

SCALE	3:10
DRG. SIZE	C
REL. PHASE	P
Pro/ENGINEER	
MATERIAL	--
CASTING No	-
PART No	L15-13177
ISSUE	A
SHEET	1 OF 1 SHEETS

MOD.	ISSUE	DRAWN	DATE	MODIFICATION
-	-	-	-	-
4-8440-50	A	BSR	25/04/07	ORIGINAL ISSUE