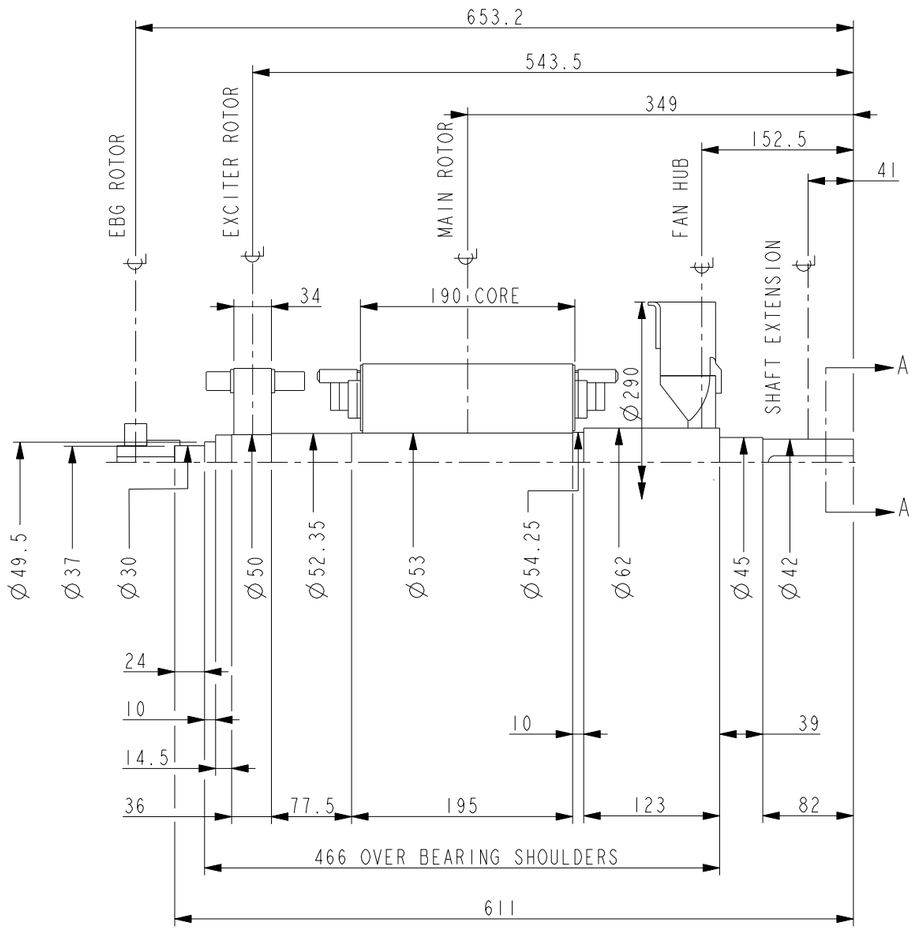
DRG.SIZE	REL. PHASE	PART No	ISSUE
C	P	L15-13195	B

IF IN DOUBT-ASK
DO NOT SCALE



NOTES:-

SHAFT STIFFNESS:-

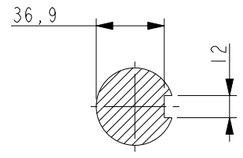
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ℄
AND THE SHAFT EXTENSION ℄ IS 1.7826 x 10^6 kgcm/radian
(STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)

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 ISO 1940 PARTS 1 AND 2 . BALANCE GRADE 2.5.

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

COMPONENT	MASS (kg)	WR^2 (kgm^2)
SHAFT	10.159	0.0037
FAN	0.976	0.0067
MAIN ROTOR	32.850	0.1558
EXCITER ROTOR	5.764	0.0225
TOTAL WITHOUT EBG ROTOR	49.749	0.1887
EBG ROTOR	1.701	0.0017
TOTAL WITH EBG ROTOR	51.450	0.1904



SECTION A-A

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

MOD.	ISSUE	DRAWN	DATE	MODIFICATION
5-0223-09	B	DW	28/08/09	CHANGED SHAFT STIFFNESS FROM 1.7833 TO 1.7826 , SHAFT DIMS 195 WAS 200 AND 77.5 WAS 72.5
4-8440-77	A	BSR	07/05/07	ORIGINAL ISSUE

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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 ± 0.25

PROJECTION
WEIGHT =

DRAWN	BSR	07/05/07
CHECKED	DSG	28/08/09
APPROVED	JB	28/08/09

P14F TWO BEARING MOMENTS OF INERTIA AND SHAFT DETAILS

SCALE 3:10	MATERIAL --
DRG. SIZE C	CASTING No -
REL. PHASE P	PART No L15-13195 ISSUE B
Pro/ENGINEER	SHEET 1 OF 1 SHEETS