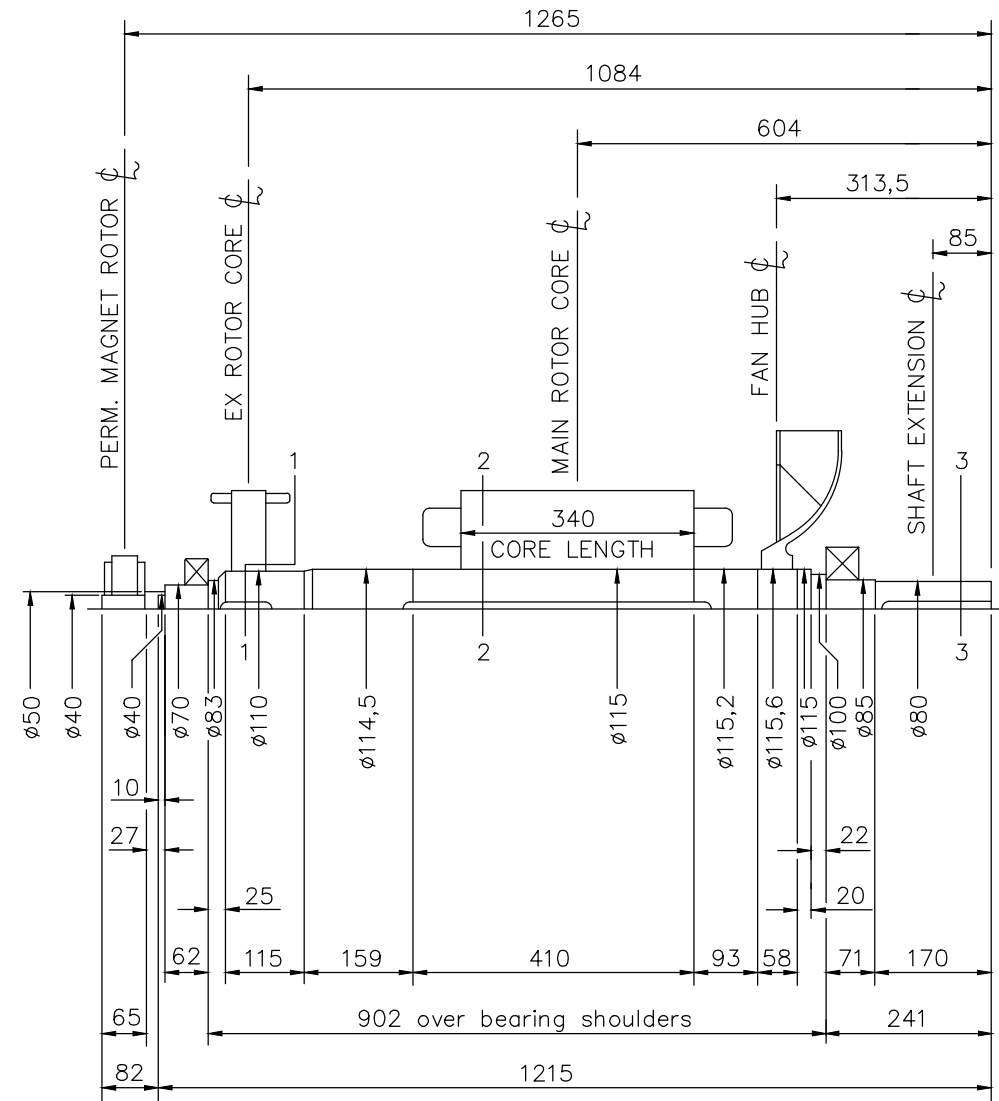


REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-166162	A	1	RELEASED FOR PRODUCTION	PP	AB	B.SURVE	14NOV16



NOTES!

SHAFT STIFFNESS: -  
 THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE  $\phi$  AND THE SHAFT EXTENSION  $\phi$  IS  $14,08 \times 10^6 \text{ kgcm/radian}$  (STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)

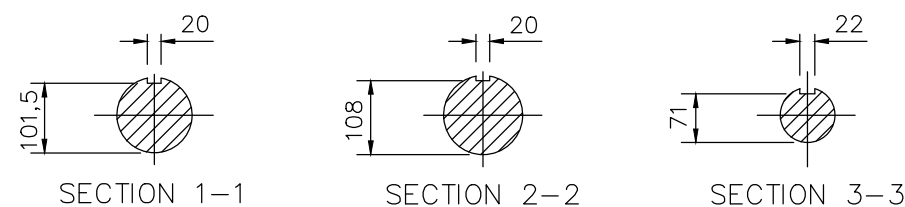
SHAFT MATERIAL: -  
 STEEL - C40E TO BSEN 10083-2 2006 (APPROVED BY MARINE AUTHORITIES WHEN APPROPRIATE)  
 MAXIMUM RECOMMENDED VIBRATORY STRESS LEVEL IN THE SHAFT IS  $34.47 \times 10^6 \text{ N/m}^2$  FOR SPEED RANGE OF 0.95 TO 1.1 X NOMINAL SPEED AND  $68.94 \times 10^6 \text{ N/m}^2$  FOR RUN THROUGH 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 TO THE FACTORY.

COMPONENT	Wt kg	WR <sup>2</sup> kgm <sup>2</sup>
EX. ROTOR	31,290	0,5100
MAIN ROTOR	208,880	2,9690
FAN	9,910	0,2630
SHAFT	82,668	0,1241
P.M. STUB SHAFT	0,955	0,0002
P.M. EX. ROTOR	4,260	0,0120
-	-	-
-	-	-
TOTAL	337,963	3,8783

CONVERSION FACTORS		
TO CONVERT	TO	DIVIDE BY
kg	lb	0,453592
kg m <sup>2</sup>	lb ft <sup>2</sup>	0,04214
kgcm/rad	lbin/rad	1,1521246
N/m <sup>2</sup>	lbf/in <sup>2</sup>	6894,76



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS	SIM TO L15-12482	DRAWN P.PACHPUTE		CUMMINS GENERATOR TECHNOLOGIES		
	<b>DO NOT SCALE PRINT</b>	CHECKED A.BIRARI		DRAWING, TORSIONAL		
SCALE NTS		APPROVED B.SURVE	SITE CODE	S4 D 2-BRG ø80 X 170		
THIS DOCUMENT (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE DISCLOSED TO OTHERS IN HARD COPY OR ELECTRONIC FORM, REPRODUCED BY ANY MEANS, OR USED FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF CUMMINS INC.	DATE 14NOV16	FIRST USED ON S4		STA	DWG SIZE A1	A056N870