SECTION **A-A**



NOTES:


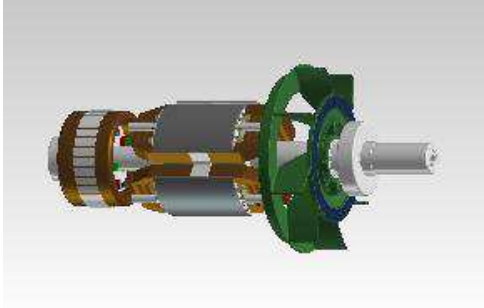
1. SHAFT STIFFNESS:-  
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE  $\phi$  AND THE SHAFT EXTENSION  $\phi$  IS  $0.8995 \times 10^6$  kgcm/radian  
(STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)
2. SHAFT MATERIAL:-  
MINIMUM YEILD :  $260 \times 10^6$  N/m<sup>2</sup>  
MINIMUM TENSILE :  $530 \times 10^6$  N/m<sup>2</sup>  
STEEL - C40E TO BSEN 10083-2 2006  
SHAFT MATERIAL IS APPROVED BY MARINE AUTHORITIES WHEN APPROPRIATE
3. MAXIMUM RECOMMENDED VIBRATORY STRESS LEVEL IN THE SHAFT IS  $34.47 \times 10^6$  N/m<sup>2</sup> OF 0.95 TO 1.1 x NOMINAL SPEED, AND  $68.94 \times 10^6$  N/m<sup>2</sup> 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
4. CUMMINS GENERATOR TECHNOLOGIES LTD BALANCE ROTORS TO COMPLY WITH INTERNATIONAL STD ISO 1940 PARTS 1 AND 2.BALANCE GRADE 2.5
5. FOR UNBALANCED MAGNETIC PULL (U.M.P.) FORCES PLEASE CONTACT CUMMINS GENERATOR TECHNOLOGIES LTD

COMPONENT	MASS (Kg)	$WR^2$ ( $Kgm^2$ )
SHAFT	5.199	0.0011
FAN	0.4929	0.0034
MAIN ROTOR	14.95	0.0452
EXCITER ROTOR	3.6	0.0125
TOTAL	24.2419	0.0622

CONVERSION FACTOR		
TO CONVERT	TO	DIVIDED BY
Kg	lb	0.453592
Kgm <sup>2</sup>	lbf ft <sup>2</sup>	0.04214
Kgcm/rad	lbf in/rad	1.1521246
N/M <sup>2</sup>	lbf/in <sup>2</sup>	6894.76

DRAWING SPECIFICATION DESCRIPTION
SOLI-H, 4P, 2B

PART NUMBER: A077Y656		PART REVISION: A		Cummins Generator Technologies			
PART NAME: ARRANGEMENT,GENERATOR ROTOR TORSIONAL							
DRAWING CATEGORY: OUTLINE				DIMENSIONS ARE IN: MILLIMETERS [ ] ARE IN: -		SIZE: A2	SCALE:1:6
STATE: RELEASED		SHEET: 1 OF 2					
CUMMINS DATA CLASSIFICATION: CUMMINS CONFIDENTIAL				DIMENSIONING AND TOLERANCING PER: ASME Y14.5-2009		 THIRD ANGLE PROJECTION	CAD SYSTEM PTC® Creo® Parametric
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.							

	4	3	2	1												
D		Part Number: A077Y656		  3D image provided when available for visual reference only.												
		Change Notice	CN00162842		Alternates											
		Manufacturer Part (MEP)	No		Usage	Production Only										
		Release Phase Code	Production (P)		Drawing Specification	Number: DS47164457										
		External Regulations	No External Regulation			Revision: A										
C	<div>Drawing Revision Information</div> <div><div>Description of Change(s) Note: Change information is provided for reference only and does not supersede the drawing's primary content.</div><div>SEE CHANGE NOTICE.</div><div>PRODUCTION RELEASE</div></div> <div>Drawing Authorization</div> <table><tr><td>Drafter</td><td>Aishwarya Rajaram Shelar</td><td>Date</td><td>30APR2025</td></tr><tr><td>Checker</td><td>Kuldeep Dilip Pawar</td><td>Date</td><td>30APR2025</td></tr><tr><td>Approver</td><td>Alin Dumitru Visian</td><td>Date</td><td>02MAY2025</td></tr></table>				Drafter	Aishwarya Rajaram Shelar	Date	30APR2025	Checker	Kuldeep Dilip Pawar	Date	30APR2025	Approver	Alin Dumitru Visian	Date	02MAY2025
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	4	3	2	1												