

SECTION A-A



NOTES: -


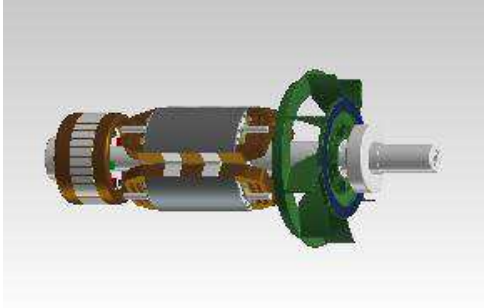
1. SHAFT STIFFNESS:-
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ϕ AND THE SHAFT EXTENSION ϕ IS 0.7382×10^6 kgcm/radian
(STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)
2. SHAFT MATERIAL:-
MINIMUM YEILD : 260×10^6 N/m²
MINIMUM TENSILE : 530×10^6 N/m²
STEEL - C40E TO BSEN 10083-2 2006
SHAFT MATERIAL IS APPROVED BY MARINE AUTHORITIES WHEN APPROPRIATE
3. MAXIMUM RECOMMENDED VIBRATORY STRESS LEVEL IN THE SHAFT IS 34.47×10^6 N/m² 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
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	5.679	0.0012
FAN	0.4929	0.0034
MAIN ROTOR	17.77	0.0533
EXCITER ROTOR	4.1	0.0130
TOTAL	28.0419	0.0709

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

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

PART NUMBER: A077Y658		PART REVISION: A		Cummins Generator Technologies			
PART NAME: ARRANGEMENT,GENERATOR ROTOR TORSIONAL							
DRAWING CATEGORY: OUTLINE				DIMENSIONS ARE IN: MILLIMETERS		SIZE: A2	SCALE:1:6
STATE: RELEASED		SHEET: 1 OF 2		[] ARE IN: -			
CUMMINS DATA CLASSIFICATION: CUMMINS CONFIDENTIAL				DIMENSIONING AND TOLERANCING PER:		 THIRD ANGLE PROJECTION	CAD SYSTEM PTC® Creo® Parametric
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D		Part Number: A077Y658			 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: DS47164459														
		External Regulations	No External Regulation			Revision: A														
C	<div>Drawing Revision Information</div> <table><tr><td>Description of Change(s) Note: Change information is provided for reference only and does not supersede the drawing's primary content.</td></tr><tr><td>SEE CHANGE NOTICE.</td></tr><tr><td>PRODUCTION RELEASE</td></tr></table> <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>					Description of Change(s) Note: Change information is provided for reference only and does not supersede the drawing's primary content.	SEE CHANGE NOTICE.	PRODUCTION RELEASE	Drafter	Aishwarya Rajaram Shelar	Date	30APR2025	Checker	Kuldeep Dilip Pawar	Date	30APR2025	Approver	Alin Dumitru Visian	Date	02MAY2025
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