



- NOTES:**
- SHAFT STIFFNESS:**  
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE  $\phi$  AND THE COUPLING HUB IS  $121.81 \times 10^6$  kgcm/radian (STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)
  - SHAFT PROPERTIES:**  
MINIMUM YIELD : 260MPa  
MINIMUM ULTIMATE TENSILE STRENGTH : 530MPa  
SHAFT MATERIAL IS APPROVED BY MARINE AUTHORITIES WHEN APPROPRIATE
  - MAXIMUM RECOMMENDED VIBRATORY STRESS LEVEL IN THE SHAFT IS  $34.47 \times 10^6$  N/M<sup>2</sup>**  
FOR SPEED RANGE 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. CUMMINS GENERATOR TECHNOLOGIES LTD BALANCE ROTORS TO COMPLY WITH INTERNATIONAL STD ISO 1940 GRADE 2.5 AND BS 6861 PART 1 GRADE 2.5
  - FOR UNBALANCED MAGNETIC PULL (U.M.P) FORCES PLEASE CONTACT CUMMINS GENERATOR TECHNOLOGIES LTD

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

COMPONENT	Wt Kg	WR <sup>2</sup> Kg m <sup>2</sup>
1 SHAFT	714	4.6
2 FAN + HUB	79	4.8
3 MAIN ROTOR	1975	114.8
4 EXCITER	94	2.1
<b>TOTAL</b>	<b>2862</b>	<b>126.3</b>

**Cummins Inc.**

DIMENSIONS ARE IN: MILLIMETERS  
( ) ARE IN: -

DIMENSIONING AND TOLERANCING PER:  
ASME Y14.5-2009

SIZE: **A2** SCALE: 1:5

THIRD ANGLE PROJECTION

CAD SYSTEM  
PTC® Creo® Parametric

S9 H CORE, 2 BRG, ROTOR TORSIONAL DRAWING



**Part Number: A063V981**

Change Notice	CN00010290	Alternates	
Manufacturer Part (MEP)	No	Usage	Production Only
Release Phase Code	Production (P)	Drawing Specification	DS47022082
External Regulations	No External Regulation		

3D image provided when available for visual reference only.

**Associated Specifications**

Number	Name	Type	Category	Sub-Category
ESA030B356	SPECIFICATION,MATERIAL	Engineering Specification	Material Specification	Prohibited and Restricted  Prohibited and Restricted

**Drawing Revision Information**

Description of Change(s)
ORIGINAL ISSUE.

**Drawing Authorization**

Drafter	Silviu-Ionut Nanau	Date	08OCT2019
Checker	Daniel Ciochina	Date	10OCT2019
Approver	NO APPROVAL REQUIRED	Date	

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