

NOTES:

1. SHAFT STIFFNESS:
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ϕ AND THE COUPLING HUB FACE IS 213.76×10^6 kgcm/radian (STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)
2. SHAFT MATERIAL PROPERTIES: STEEL
MINIMUM YIELD : 260×10^6 N/m²
MINIMUM ULTIMATE TENSILE STRENGTH : 530×10^6 N/m²
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 FOR SPEED RANGE OF 0.95 TO 1.1 X NOMINAL SPEED
AND 68.94×10^6 N/m² FOR RUN THROUGH CONDITIONS, FOR INDUSTRIAL MACHINES
4. FOR MARINE AUTHORITIES, THEIR APPROPRIATE RULES WILL APPLY
5. 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
6. 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 ²	lb ft ²	0.04214
kgcm/rad	lbin/rad	1.1521246
N/m ²	lbf/in ²	6894.76

COMPONENT	Wt Kg	WR ² Kg m ²
1 SHAFT	372.150	1.6053
2 MAIN ROTOR	1310.616	71.8359
3 FAN	37.270	4.0490
4 EXCITER	75.400	1.6694
5 HUB	116.50	2.2383
6 P. MAG ROTOR	6.970	0.0190
7 STUB SHAFT	0.929	0.0003
TOTAL	1919.835	81.4172

COUPLING SAE NO	COUPLING DIMENSIONS		COUPLING ASSEMBLY MASS	COUPLING STIFFNESS 10- PLATES Nm/rad	COUPLING DISC WR ² kg m ²
	XX	YY			
18	571.4	16	29.2	316.8×10^6	0.980
21	673	0	31.6	287.3×10^6	1.891

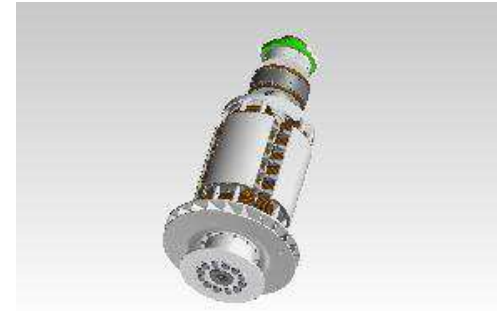
Cummins Generator Technologies

DIMENSIONS ARE IN: MILLIMETERS
 SIZE: A1 SCALE: 0.275
 DIMENSIONING AND TOLERANCING PER: ASME Y14.5-2009
 THIRD ANGLE PROJECTION
 CAD SYSTEM: PTC® Creo® Parametric

DRAWING SPECIFICATION DESCRIPTION
 S9LV, C-CORE, 4P, IBRG



Part Number: A072G236



3D image provided when available for visual reference only.

Change Notice	CN00113556	Alternates	
Manufacturer Part (MEP)	No	Usage	Production Only
Release Phase Code	Production (P)	Drawing Specification	Number: DS47106446
External Regulations	No External Regulation		Revision: C

Drawing Revision Information

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

Drawing Authorization

Drafter	Pratik Vijay Patil	Date	16NOV2023
Checker	Sneha Pundlikrao Bondlewad	Date	16NOV2023
Approver	Matthew Hammond	Date	16NOV2023

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