

NOTES !
 SHAFT STIFFNESS : -
 THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ϕ AND THE COUPLING HUB FACE IS 15.23×10^6 kgcm/radian
 (STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE).

SHAFT MATERIAL: -
 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 34.47×10 N/m² FOR SPEED RANGE OF 0.95 TO 1.1 X NOMINAL SPEED AND 68.94×10 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. 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.) PLEASE CONTACT CUMMINS GENERATOR TECHNOLOGIES LTD.

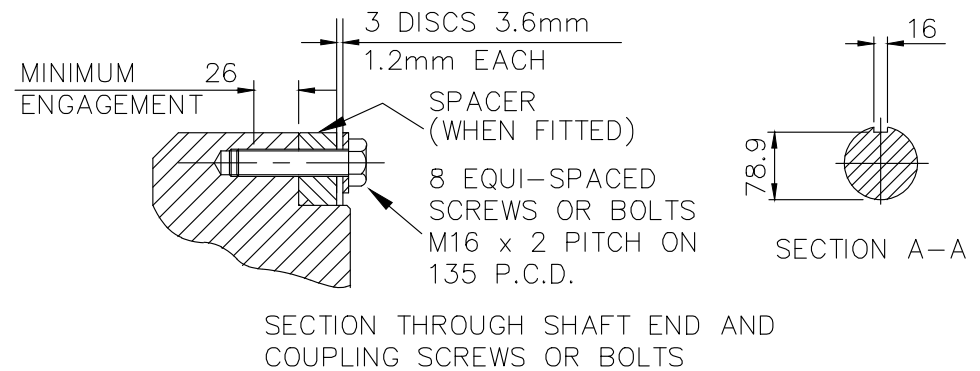
COMPONENT	Wt kg	WR ² kgm ²
EX. ROTOR	12.280	0.0726
MAIN ROTOR	99.790	1.0880
FAN	3.389	0.0709
SHAFT	35.824	0.03175
HUB	8.823	0.03984
TOTAL	160.106	1.3030
PERM. MAG.	5.450	0.0150
TOTAL	165.556	1.31809

COUPLING SAE No	COUPLING DIMEN'S		COUPLING ASSEMBLY WEIGHT kg	COUPLING STIFFNESS 3-PLATES kgcm/rad	COUPLING DISC WR ² kgm ²
	XX	YY			
* 10	314	14.3	5.55	216.3x10 ⁶	0.0266
* 11½	352	-	2.64	204.7x10 ⁶	0.0423
! 11½	352	14.3	4.95	204.7x10 ⁶	0.0423
! 14	467	-	4.74	189.1x10 ⁶	0.1317

NOTES
 1.*COUPLING DETAILS NOT APPLICABLE WHEN USED WITH SAE No 1 FLYWHEEL HOUSING

2.!COUPLING DETAILS APPLICABLE TO SAE No 1 HOUSING ONLY

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



DRAWING DESCRIPTION
UC274E-SINGLE BEARING MOMENTS OF INERTIA AND SHAFT DETAILS

Cummins Inc.		
DIMENSIONS ARE IN: MILLIMETERS [] ARE IN: --	SIZE: A3 SCALE: NTS	
DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-2009	 THIRD ANGLE PROJECTION	CAD SYSTEM AutoCAD®

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Part Number: A063L633

Change Notice	CN00005631	Alternates	
Manufacturer Part (MEP)	No	Usage	Production Only
Release Phase Code	Production (P)	Drawing Specification	DS47016159
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)
PRODUCTION RELEASE

Drawing Authorization

Drafter	Bhushan Ashok Surve	Date	20AUG2019
Checker	Rahul Hanabar	Date	27AUG2019
Approver	NO APPROVAL REQUIRED	Date	

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