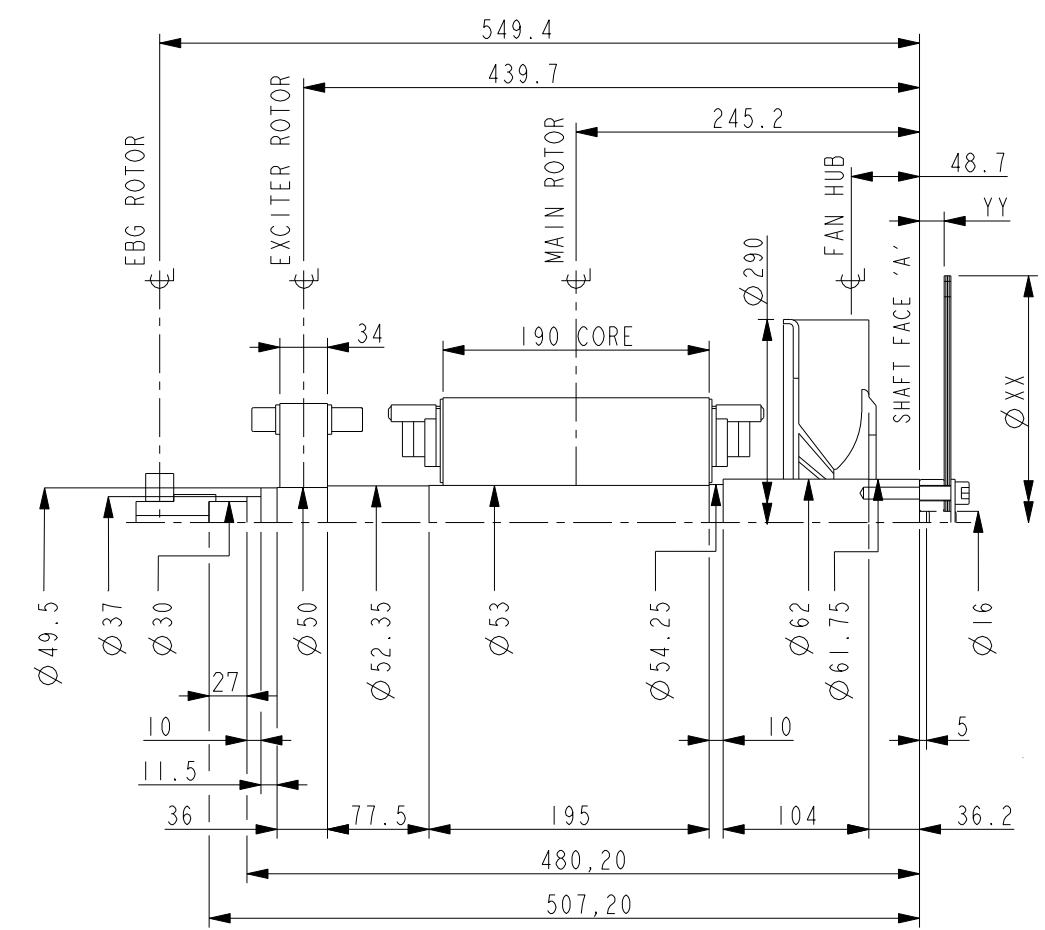


CREO PARAMETRIC

REL NO	REV	DETAIL	DWN	CKD	APVD	DATE
ECO-151673	A	RELEASED FOR PRODUCTION	RT	SK	NNS	13APR15



NOTES:-

SHAFT STIFFNESS:-

THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ϕ AND THE SHAFT FACE 'A' IS 3.4679×10^6 kgcm/radian (STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)

SHAFT MATERIAL:-

STEEL - C40E TO BSEN 10083-2 2006 (APPROVED BY MARINE AUTHORITIES WHEN APPROPRIATE) 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.

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.) REFER BACK TO THE FACTORY.

4 DISCS
COUPLING
1.2MM THK

MINIMUM
ENGAGEMENT

6-EQUI-SPACED CAPSCREWS
M10 X 1.5 PITCH ON 42 P.C.D.

COMPONENT	MASS (kg)	WR ² (kgm ²)
SHAFT	9.150	0.0036
FAN	0.976	0.0067
MAIN ROTOR	32.850	0.1558
EXCITOR ROTOR	5.764	0.0225
TOTAL WITHOUT EBG ROTOR	48.750	0.1886
EBG ROTOR	1.701	0.0017
TOTAL WITH EBG ROTOR	50.451	0.1903

CONVERSION FACTORS		
TO CONVERT	TO	DIVIDE BY
kg	lb	0.453592
kgm ²	lbf ft ²	0.04214
kgcm/rad	lbin/rad	1.1521246
N/m ²	lbf/in ²	6894.76

ADAPTOR SAE No.	COUPLING SAE No.	COUPLING DIMENSIONS		MASS OF DISC (kg) (4 X 1.2mm THICK)	MASS OF SHAFT SPACER (kg)	MASS OF PRESSURE PLATE (kg)	TOTAL MASS OF COUPLING ASSEMBLY (kg)	COUPLING STIFFNESS (kgcm/rad)	COUPLING DISC WR ² (kgm ²)
		ØXX mm	YY mm						
3	11 1/2	352.3	17.6	3.616	0.332	0.069	4.017	21.71 X 10 ⁶	0.01405

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS		SIM TO	DWN RT		CUMMINS GENERATOR TECHNOLOGIES	
DO NOT SCALE PRINT			CKD SK		P14F ONE BEARING MOMENTS OF INERTIA AND SHAFT DETAILS	
DIM	HOLE	FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5M-1994	APVD NNS	DATE 13APR15	SITE CODE	SHEET REV
X ± 1	0.00-4.99 +0.15/-0.08	- CONFIDENTIAL - PROPERTY OF CUMMINS GENERATOR TECHNOLOGIES	DATE 13APR15	PI	STA	1 A
X.X ± 0.1	5.00-9.99 +0.20/-0.10		FIRST USED ON	PI	DWG SIZE A2	A052P012
X.XX ± 0.01	10.00-17.49 +0.25/-0.13					
ANG TOL: ± 0.5°		SCALE: 3:10				