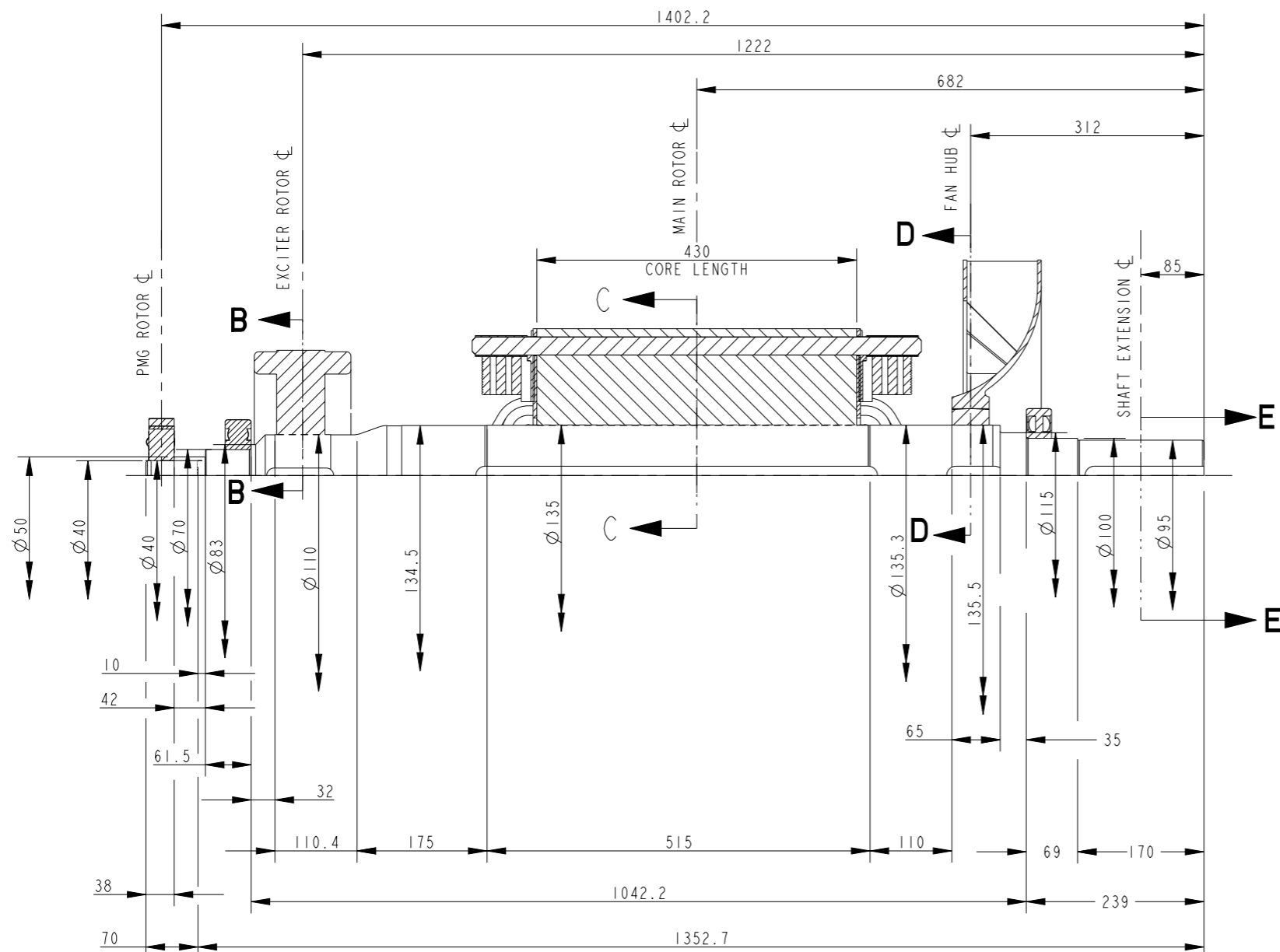


REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-178539	B	1	MINOR DIMENSIONING ERRORS CORRECTED	DGL	MR	K.WEJRZANOWSKI	28JUN18

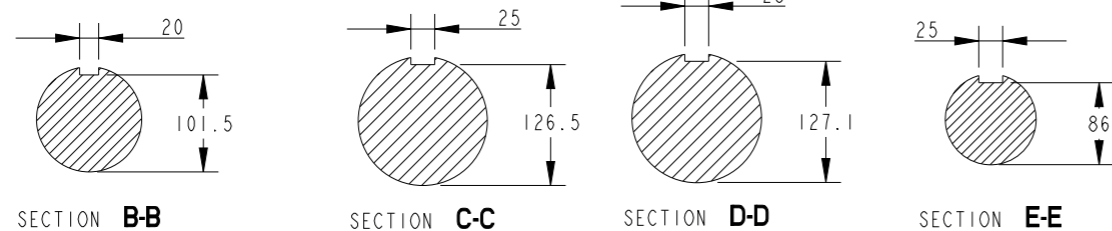
NOTES:

- SHAFT STIFFNESS: -
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ϕ AND THE SHAFT EXTENSION ϕ IS 24.95×10^6 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 34.47×10^6 N/M² FOR A SPEED RANGE OF 0.95 TO 1.1 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 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



COMPONENT	WT (Kg)	WR ² kgm ²
EX. ROTOR	31.290	0.5100
MAIN ROTOR	358.090	6.5530
FAN	12.530	0.3930
SHAFT	124.919	0.2546
PM EXC ROTOR	6.970	0.0180
PM STUB SHAFT	0.929	0.0003
TOTAL	534.728	7.7289

CONVERSION FACTORS		
TO CONVERT	TO	DIVIDE BY
Kg	lb	0.453592
Kgm ²	lb ft ²	0.04214
Kgcm/rad	lbin/rad	1.1521246
N/M ²	ibf/in ²	6894.76



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS		SIM TO	DWN T. KULKARNI		CUMMINS GENERATOR TECHNOLOGIES		
DO NOT SCALE PRINT		CKD P. NAIK	APVD K. WEJRZANOWSKI		DRAWING, TORSIONAL		
DIM	± 0.25	HOLE	0.00-4.99 +0.15/-0.08 5.00-9.99 +0.20/-0.10 10.00-17.49 +0.25/-0.13 17.50-24.99 +0.30/-0.13	DATE 17APR18	S5LIM S5LIS, D-CORE 4 POLE 2 BRG		
ANG TOL	$\pm 1.0^\circ$	SCALE	0.190	FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009	FIRST USED ON	S5	
THIS DOCUMENT (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE DISCLOSED TO OTHERS IN HARD COPY OR ELECTRONIC FORM, REPRODUCED BY ANY MEANS, OR USED FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF CUMMINS INC.			STA	DWG SIZE	A2	A060A164	
						CAD SHEET	1 of 1