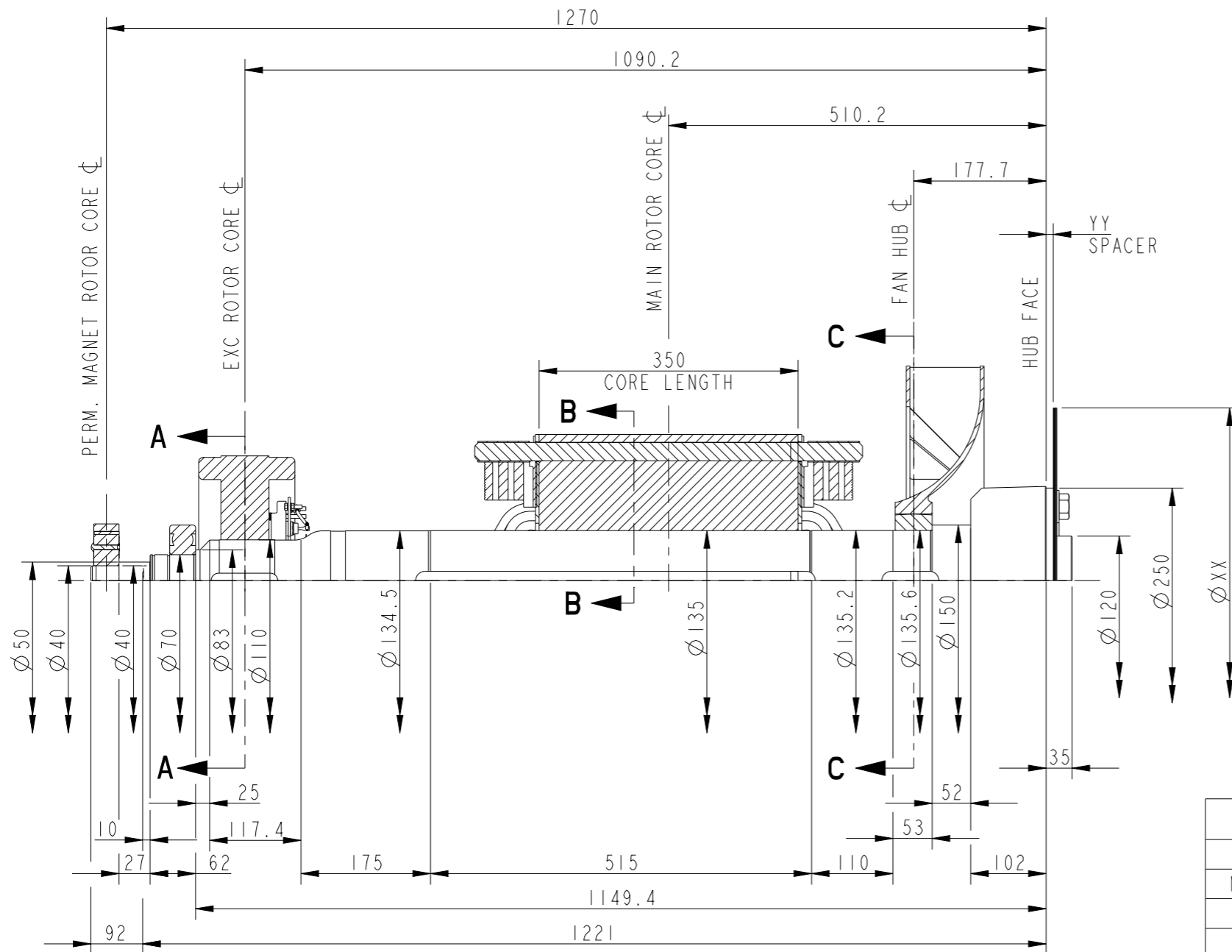


REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-180669	B	1	SEE ECO DESCRIPTION	TVK	DGL	K.WEJRZANOWSKI	05DEC18

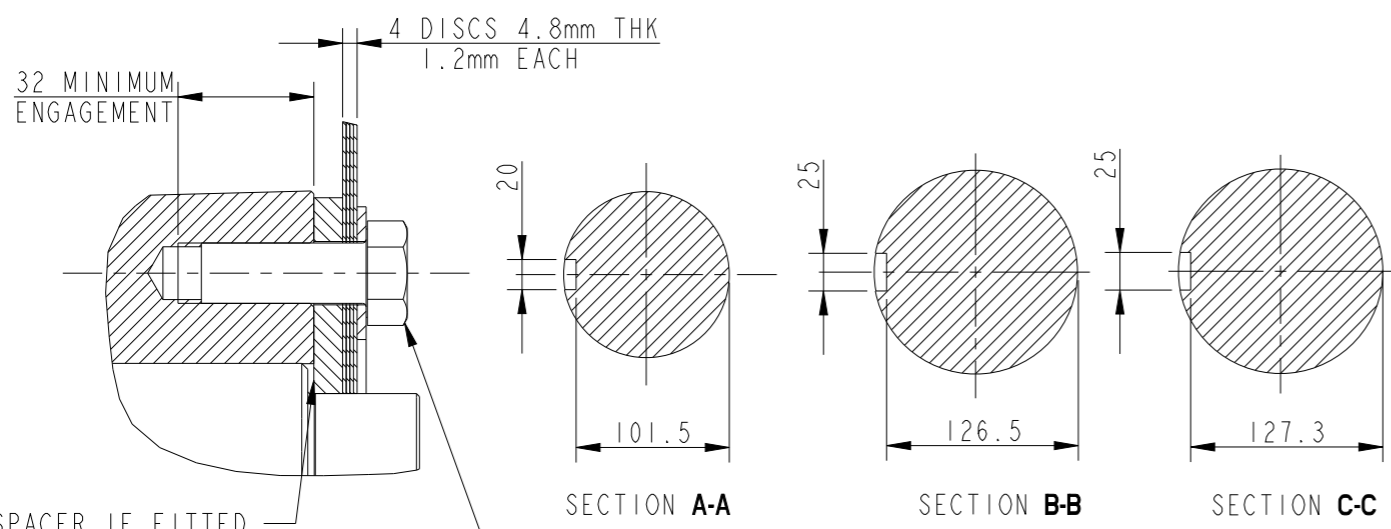
NOTES:

- SHAFT STIFFNESS:-
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ϕ AND THE COUPLING HUB FACE IS 66.46×10^6 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 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 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	296.820	5.4390
FAN	12.530	0.3930
SHAFT	129.664	0.2870
HUB	23.922	0.2455
PM STUB SHAFT	0.929	0.0003
PM EXC ROTOR	6.970	0.0180
TOTAL	502.125	6.8928

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



COUPLING SAE NO	COUPLING DIMENSIONS		COUPLING ASSEMBLY WEIGHT (Kg)	COUPLING STIFFNESS 4-PLATES (Kgcm/rad)	COUPLING DISC WR ² (Kg ²)
	XX	YY			
14	467	25.4	17.67	632×10^6	0.174
18	572	16.0	18.06	579×10^6	0.396
21	673	0	17.10	554×10^6	0.756
Ø17.75"	450.9	18.2	14.97	675×10^6	0.152

SECTION THRU SHAFT END AND COUPLING SCREWS OR BOLTS
8 EQUISPACED SCREW OR BOLTS M20 X 2.5P ON A 200 PCD

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS
SCALE 1:1
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DWN V. SHIPPARKAR
CKD P. NAIK
APVD M. VUCENOVIC
DATE 08MAR18

Cummins
CUMMINS GENERATOR TECHNOLOGIES
DRAWING, TORSIONAL
S5L1D, S5L1M, C-CORE 4P 1B

FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009
FIRST USED ON S5

STA
DWG SIZE A2
A059K283

CAD SHEET 1 of 1