

REL NO	REV	NO	REVISION	DWN	CKD
ECO-164765	A	1	RELEASED FOR PRODUCTION	PP	AB

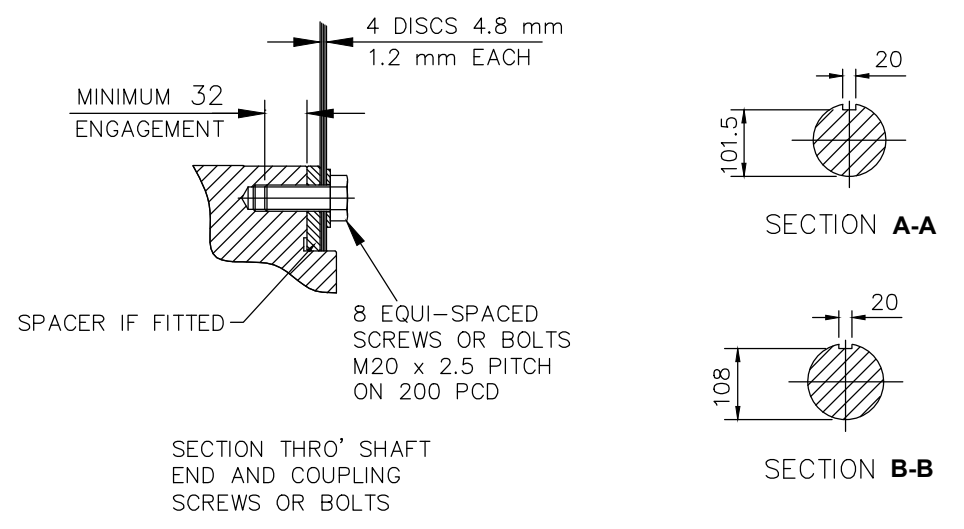
NOTES:

- SHAFT STIFFNESS: -  
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE  $\phi$  AND THE COUPLING HUB FACE  $\phi$  IS  $34.82 \times 10^6$  kgcm/radian (STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)
- SHAFT MATERIAL: -  
STEEL - 080M40 TO BS970 PART 1 (APPROVED BY MARINE AUTHORITIES WHEN APPROPRIATE) MAXIMUM RECOMMENDED VIBRATORY STRESS LEVEL IN THE SHAFT IS  $34.47 \times 10^6$  N/m<sup>2</sup> FOR SPEED RANGE OF 0.95 TO 1.1 X NOMINAL SPEED AND  $68.94 \times 10^6$  N/m<sup>2</sup> FOR RUN THROUGH CONDITIONS, FOR INDUSTRIAL MACHINES. FOR MARINE AUTHORITIES, THEIR APPROPRIATE RULES WILL APPLY. CUMMINS GENERATOR TECHNOLOGIES SHOULD BE NOTIFIED OF ANY ROTORS NOT COMPLYING WITH THESE RULES
- CUMMINS GENERATOR TECHNOLOGIES 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.) REFER TO THE GENERATOR MANUAL

COMPONENT	Wt kg	WR <sup>2</sup> kgm <sup>2</sup>
EX.ROTOR	31.290	0.5100
MAIN ROTOR	248.15	3.525
FAN	9.910	0.2630
SHAFT	87.191	0.1450
HUB	18.507	0.1779
P.M. STUB SHAFT	0.955	0.0002
P.M. EX. ROTOR	4.260	0.0120
TOTAL	400.263	4.6331

COUPLING SAE No	COUPLING DIMEN's		COUPLING ASSEMBLY WEIGHT kg	COUPLING STIFFNESS 4-PLATES kgcm/rad	COUPLING DISC WR <sup>2</sup> kg m <sup>2</sup>
	XX	YY			
$\phi 11.5"$	352	23.8	12.08	$755.8 \times 10^6$	0.055
$\phi 17.75"$	450.9	2.5	9.11	$662.4 \times 10^6$	0.150
$\phi 14"$	467	9.5	11.66	$622.8 \times 10^6$	0.172
$\phi 18"$	572	0.0	12.07	$570.0 \times 10^6$	0.386

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



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS  
SIM TO L15-12487  
DO NOT SCALE PRINT  
SCALE NTS  
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FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009  
FIRST USED ON S4

**Greenpower AB.**  
DRAWING, TORSIONAL  
S4 E 1-BRG  
Green Power  
SITE CODE STA  
DWG SIZE A0  
A056E028  
CAD SHEET 1 of 1