



REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-184042	B	1	TITLE BLOCK, ADDITIONAL DESCRIPTION, ADD S5L1	TVK	DGL	K.WEJRZANOWSKI	22FEB19

- 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 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
P.M. STUB SHAFT	0.929	0.0003
P.M. EX. ROTOR	6.970	0.0180
TOTAL	534.728	7.7289

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

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS	SIM TO -	DRAWN S.MCLEAN		CUMMINS GENERATOR TECHNOLOGIES	
	DO NOT SCALE PRINT	CHECKED S.MCLEAN		DRAWING, TORSIONAL	
SCALE NTS		APPROVED S.GREEN	SITE CODE	S5L1/HC534 D-CORE 4P 2B	
		DATE 29JUN00		STA	DWG SIZE A2
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.		FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009	FIRST USED ON HC5		