

DL15-12662

ISSUE  
A

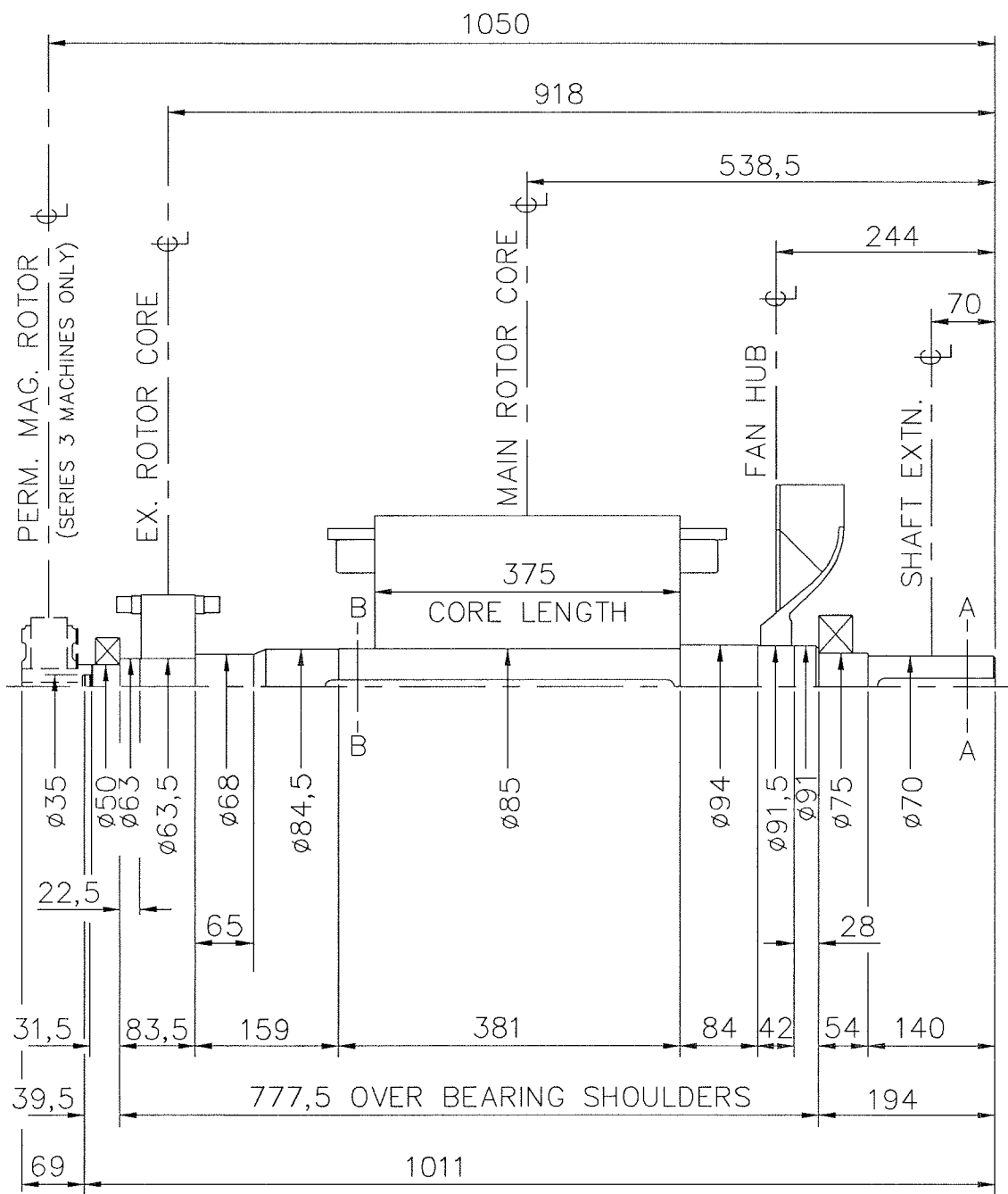
IF IN DOUBT-ASK  
DO NOT SCALE

FIRST W.O.

NOTES !

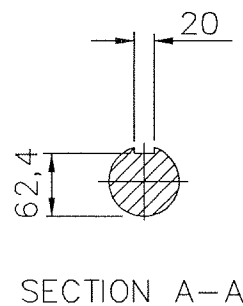
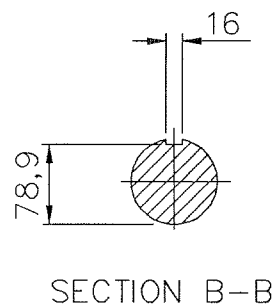
SHAFT STIFFNESS: -  
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE  $\phi$  AND THE SHAFT EXTENSION  $\phi$  IS  $7,60 \times 10^6$  kgcm/radian  
(STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE).

SHAFT MATERIAL: -  
STEEL - 080M40 TO B.S.970 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 A 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.  
NEWAGE INTERNATIONAL Ltd SHOULD BE NOTIFIED OF ANY ROTORS NOT COMPLYING WITH THESE RULES.  
NEWAGE INTERNATIONAL Ltd BALANCE ROTORS TO COMPLY WITH INTERNATIONAL STD I.S.O. 1940 GRADE 2,5 & B.S.6861 PART 1 GRADE 2,5.  
FOR UNBALANCED MAGNETIC PULL (U.M.P.) FORCES REFER TO GENERATOR MANUAL.



COMPONENT	Wt kg	WR <sup>2</sup> kgm <sup>2</sup>
EX. ROTOR	12,280	0,0726
MAIN ROTOR	155,800	1,6921
FAN	3,389	0,0709
SHAFT	39,651	0,0337
TOTAL	211,120	1,8693
PERM. MAG.	5,450	0,0150
TOTAL	216,570	1,8843

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



CERTIFIED PRINT (ONLY IF SIGNED)		UC274H - TWO BEARING MOMENTS OF INERTIA AND SHAFT DETAILS		SCALE	FIRST W.O.
BY				NTS	UNIT OF MEASUREMENT MILLIMETRES (mm)
DATE					
DRAWN	S.M.C.	16.11.00	NEWAGE INTERNATIONAL LTD STAMFORD ENGLAND	DL15-12662	ISSUE A
CH'D	S.M.C.	20.11.00			
APP'D	S.M.C.	21/11/00			

4/2892/5	A	S.M.C.	16.11.00	ORIGINAL ISSUE
MOD'N	ISSUE	DRAWN	DATE	ALTERATION