

DL15-12626

ISSUE
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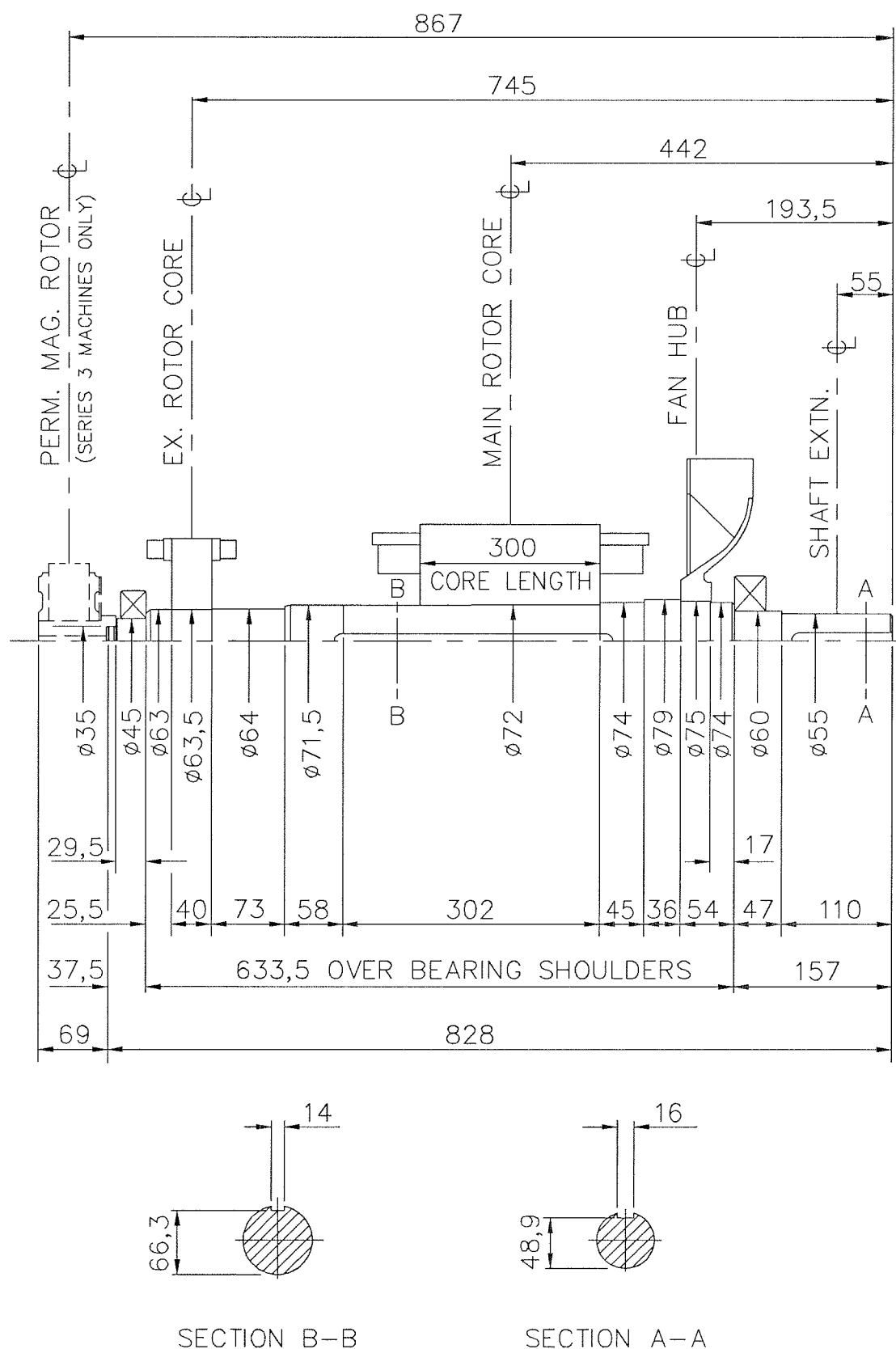
IF IN DOUBT-ASK
DO NOT SCALE

FIRST W.O.

NOTES !

SHAFT STIFFNESS: -
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ϕ AND THE
SHAFT EXTENSION ϕ IS $4,05 \times 10^6$ 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/m² FOR A SPEED RANGE OF 0,95 TO 1,1 x NOMINAL SPEED, AND
 $68,94 \times 10^6$ N/m² 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 AND B.S. 6861 PART 1 GRADE 2,5.
FOR UNBALANCED MAGNETIC PULL (U.M.P.) FORCES REFER TO GENERATOR MANUAL.



COMPONENT	Wt kg	WR ² kgm ²
EX. ROTOR	8,490	0,0508
MAIN ROTOR	79,080	0,5748
FAN	1,940	0,0271
SHAFT	23,416	0,0141
TOTAL	112,926	0,6668
PERM. MAG.	5,450	0,0150
TOTAL	118,376	0,6818

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

CERTIFIED PRINT (ONLY IF SIGNED)		UC224G - TWO BEARING MOMENTS OF INERTIA AND SHAFT DETAILS	SCALE	FIRST W.O.
BY			NTS	UNIT OF MEASUREMENT MILLIMETRES (mm)
DATE				
DRAWN	S.M.C. 08.11.00	NEWAGE INTERNATIONAL LTD STAMFORD ENGLAND	DL15-12626	ISSUE
CH'D	S.M.C. 20.11.00			A
APP'D	S.M.C. 20/11/00			

4/2892/5	A	S.M.C.	08.11.00	ORIGINAL ISSUE
MOD'N	ISSUE	DRAWN	DATE	ALTERATION