

DL15-12742 ISSUE A

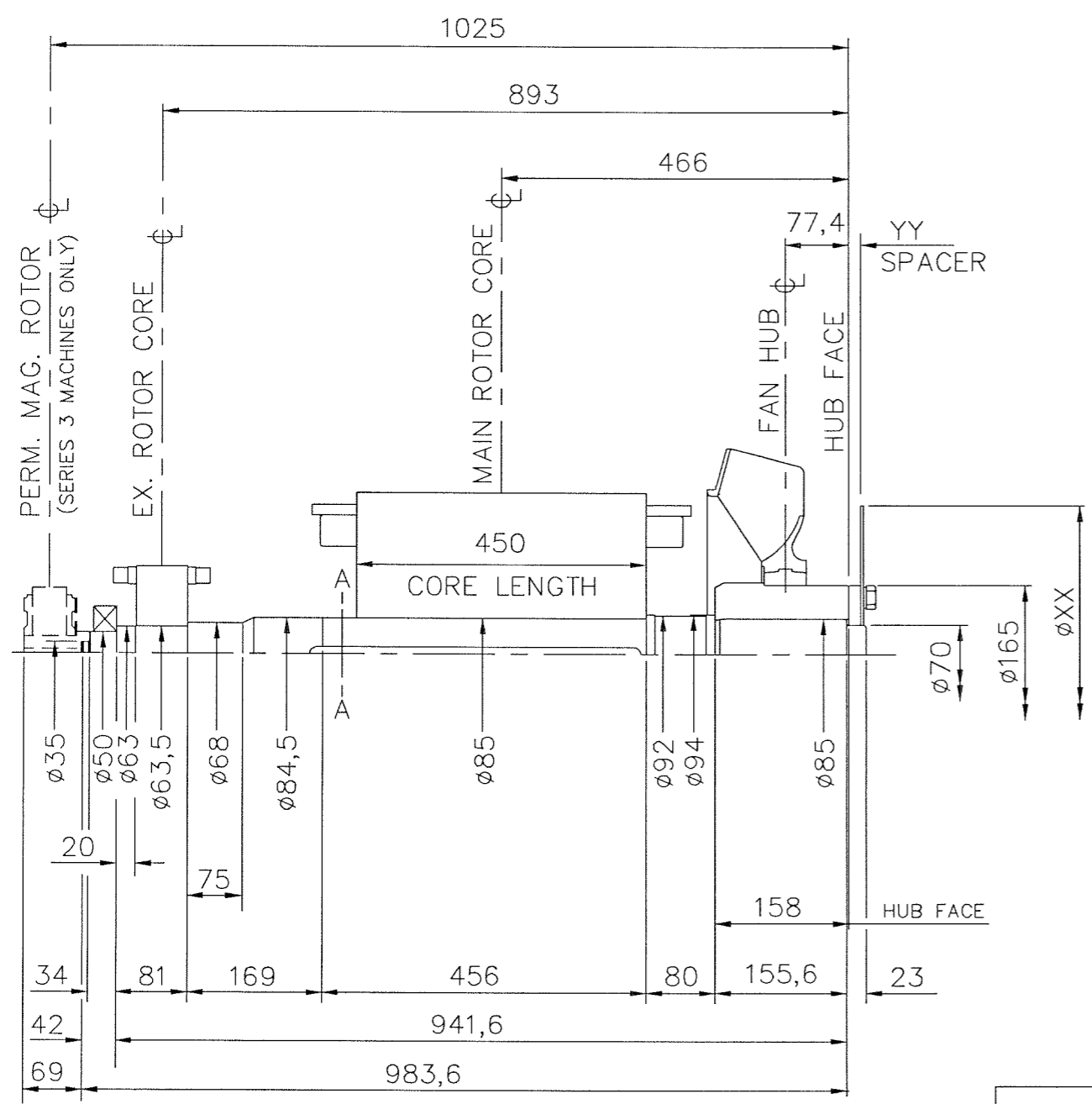
IF IN DOUBT-ASK  
DO NOT SCALE

FIRST W.O.

NOTES !

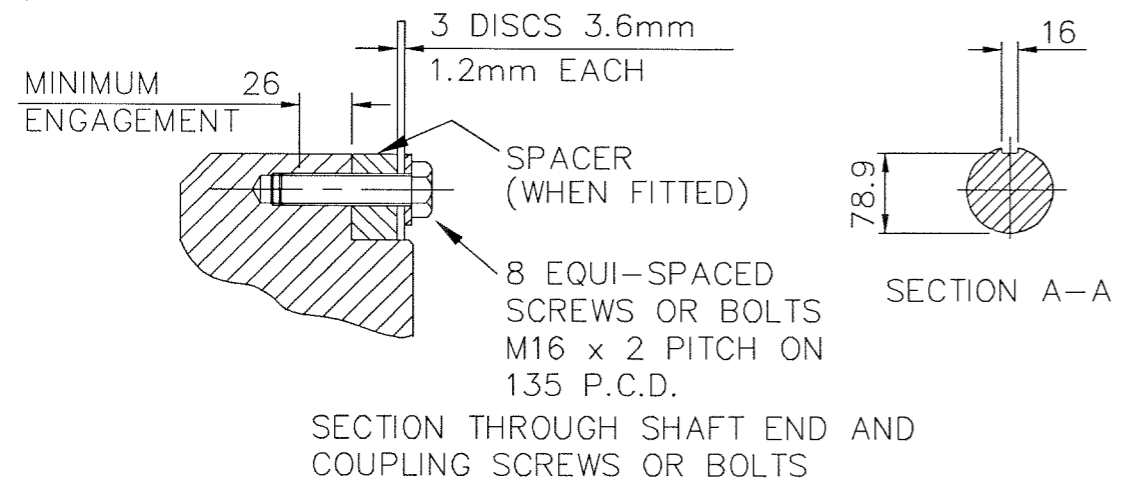
SHAFT STIFFNESS: -  
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE  $\phi$  AND THE COUPLING HUB FACE IS  $13,89 \times 10^6$  kgcm/radian  
(STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE).

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	185,780	2,0274
FAN	8,470	0,1570
SHAFT	40,826	0,0353
HUB	19,805	0,0861
TOTAL	266,461	2,3594
PERM. MAG.	5,450	0,0150
TOTAL	272,611	2,3934

COUPLING SAE No	COUPLING DIMEN's		COUPLING ASSEMBLY WEIGHT kg	COUPLING STIFFNESS 3-PLATES kgcm/rad	COUPLING DISC WR <sup>2</sup> kgm <sup>2</sup>
	XX	YY			
10	314	28.58	7,65	216.3x10 <sup>6</sup>	0,0266
11½	352	14.3	2,64	204,7x10 <sup>6</sup>	0,0423
14	467	-	4,74	189,1x10 <sup>6</sup>	0,1317



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)	UCD274K-SINGLE BEARING MOMENTS OF INERTIA AND SHAFT DETAILS	SCALE	FIRST W.O.	
		NTS	UNIT OF MEASUREMENT MILLIMETRES (mm)	
BY	NEWAGE INTERNATIONAL LTD STAMFORD ENGLAND	DL15-12742		
DATE				ISSUE
DRAWN AV 19:03:01 CH'D 19-03-01 APP'D 19/3/01				A

MOD'N	ISSUE	DRAWN	DATE	ALTERATION
4/3018/7	A	AV	19:03:01	ORIGINAL ISSUE