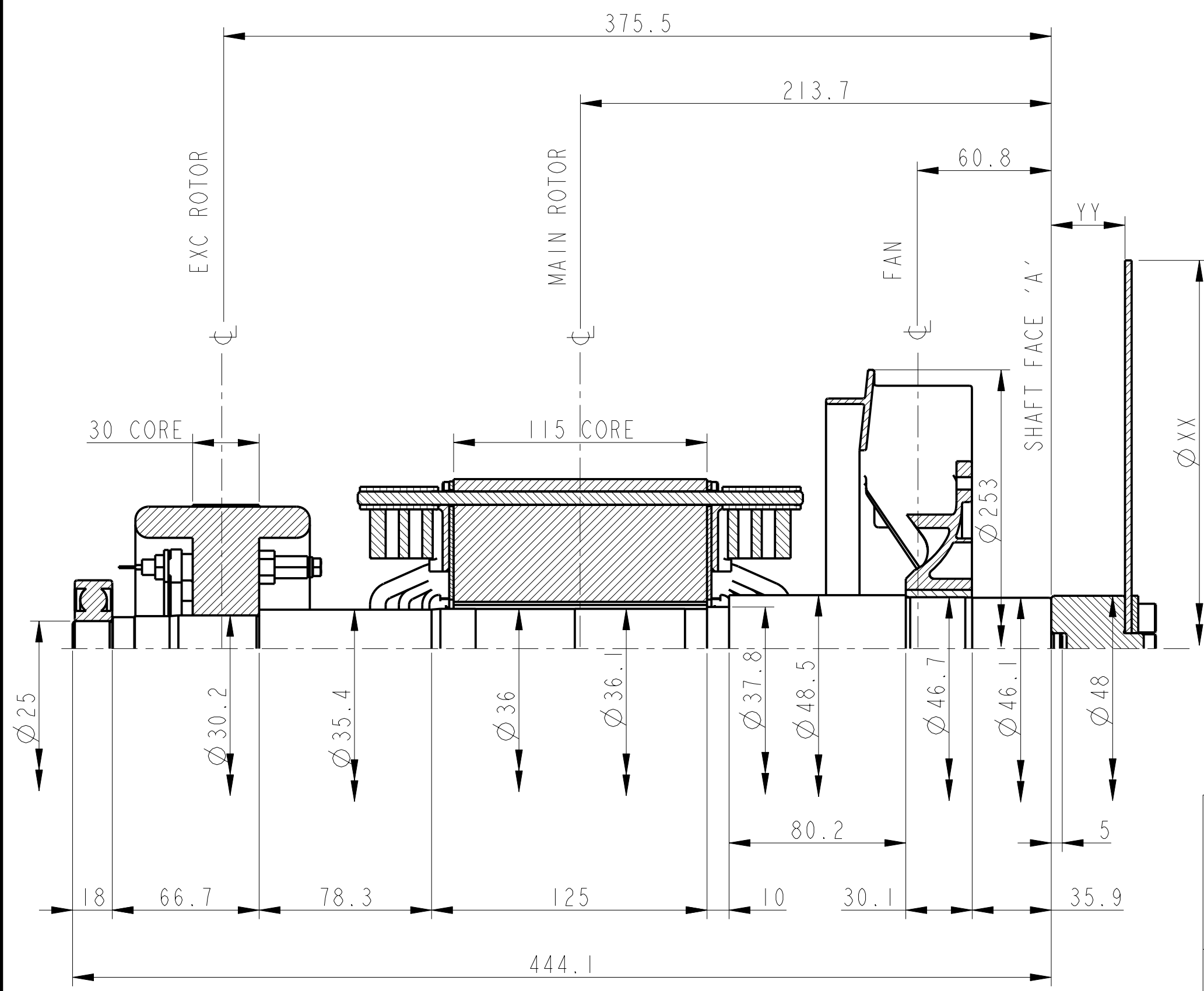


REL NO	REV	DETAIL	DWN CKD	APVD	DATE
ECO-148572	C	PRODUCTION RELEASE	MMA UKD	S. JOSHI	26AUG16

NOTES:

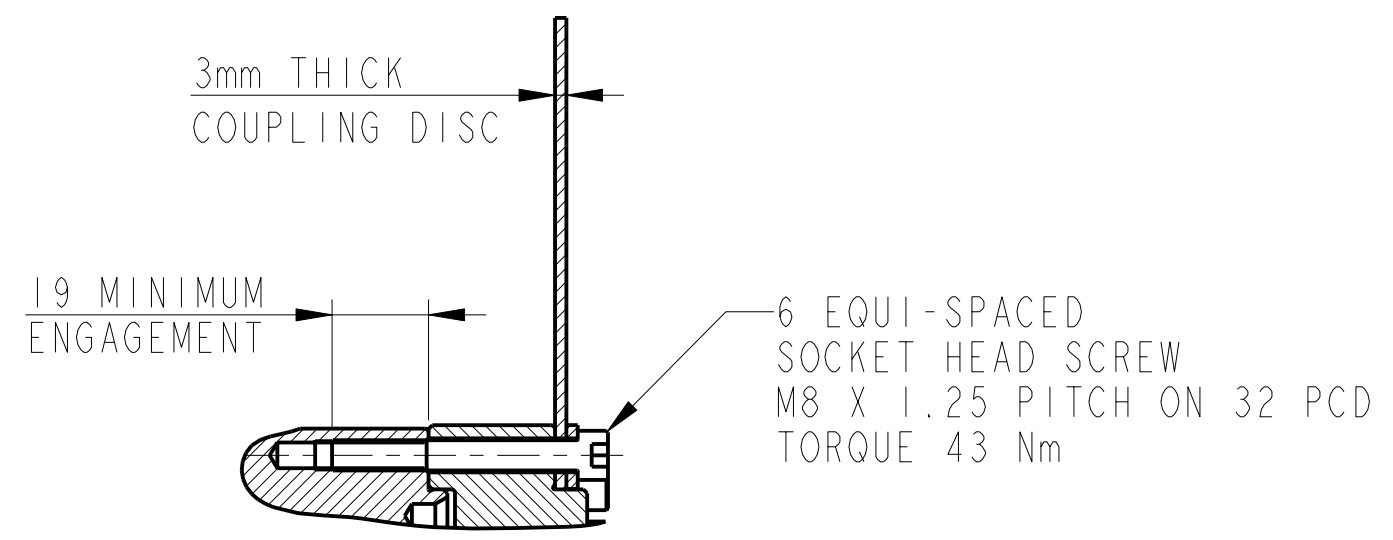
- SHAFT STIFFNESS:  
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE  $\phi$  AND THE SHAFT FACE 'A' IS  $1.1768 \times 10^6$  kgcm/radian (STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)
- SHAFT MATERIAL:  
STEEL - C40E TO BSEN 10083-2 2006  
MAXIMUM RECOMMENDED VIBRATORY 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
- 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 BS ISO 1940 PARTS 1 AND 2. BALANCE GRADE 2.5
- FOR UNBALANCED MAGNETIC PULL (U.M.P) REFER BACK TO THE FACTORY



ADAPTOR SAE No.	COUPLING SAE No.	COUPLING DIMENSIONS		MASS OF DISCS (kg) (3mm THICK)	MASS OF SHAFT SPACER (kg)	MASS OF PRESSURE PLATE (kg)	TOTAL MASS OF COUPLING ASSEMBLY (kg)	COUPLING STIFFNESS (kgcm/rad)	COUPLING DISC WR <sup>2</sup> (kgm <sup>2</sup> )
		$\phi$ XX mm	YY mm						
4/5	6 1/2	215.8	9.88	0.840	0.111	0.030	0.981	$7.95 \times 10^6$	0.0049
4/5	7 1/2	241.2	9.88	1.052	0.111	0.030	1.193	$7.91 \times 10^6$	0.0076
3/4	10	314.2	33.47	1.795	0.374	0.030	2.199	$7.84 \times 10^6$	0.0221
3	11 1/2	352.3	19.27	2.265	0.215	0.030	2.510	$7.82 \times 10^6$	0.0351

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

COMPONENT	Wt Kg	WR <sup>2</sup> Kgm <sup>2</sup>
FAN	0.4929	0.0034
SHAFT	4.08	0.0009
MAIN ROTOR	14.95	0.0452
EXCITER ROTOR	3.6	0.0125
TOTAL	23.123	0.062



SECTION B-B  
SCALE 1:2

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS

DIM	X $\pm 1$	0.00-4.99 $\pm 0.15/-0.08$
	X.X $\pm 0.1$	5.00-9.99 $\pm 0.20/-0.10$
	X.XX $\pm 0.01$	10.00-17.99 $\pm 0.25/-0.13$
		17.99-24.99 $\pm 0.30/-0.13$

ANG TOL:  $\pm 0.5^\circ$  SCALE: 1:2

SIN TO - DO NOT SCALE PRINT

OWN K. PAWAR  
CKD U. DAGWALE  
APVD S. JOSHI  
DATE 15 JAN 16

CUMMINS GENERATOR TECHNOLOGIES  
DRAWING, TORSIONAL  
SOLI-HI 4P

SITE CODE PUN  
SHEET 1  
REV C

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FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5M-1994

FIRST USED ON

SIZE A2  
A053E709