PREDICTED GENERATOR PERFORMANCE VALUES

6P6.5-2100 SN 98138 (1990)								
KW	**KVA**	**PF**	**TAMB**	**TRISE**	**POLES**	**RPM**	**SLOTS**	**HZ**
528.	660.	0.8	40	105	6	1000	54	50
VOLTS-PH	**VOLTS-LL**	**AMPS-PH**	**AMPS-LN**	**BASE Z**	**025**	**026**	**PHASE/CONNECTION**	
5774	10000	38.1	38.1	151.515	60025	60035	3 PHASE WYE	

0.7778 PER UNIT PITCH

REACTANCES		SAT	UNSAT		HI POT VALUES	VOLTS	
SYNCHRONOUS					STATOR	21000	
DIRECT AXIS	Xd	103.7	118.1		ROTOR	1500	
QUADRATURE AXIS	Xq	68.2	69.5		EXCITER FIELD	1500	
TRANSIENT					EXCITER ARM	1500	
DIRECT AXIS	X'd	18.6	21.1				
QUADRATURE AXIS	X'q	68.2	69.5		MOTOR STARTING	0 P.F.	
SUBTRANSIENT						INRUSH	%VOLT
DIRECT AXIS	X"d	17.8	20.9		SKVA AT GENERATOR	SKVA	DIP
QUADRATURE AXIS	X"q	10.7	12.6		TERMINALS	347.0	10
NEGATIVE SEQUENCE	X2	14.3	16.8			551.1	15
ZERO SEQUENCE	X0	8.0	9.4			780.7	20
LEAKAGE REACTANCE	XL	9.577	10.883			1040.9	25
						1338.3	30
RESISTANCES @ 25C -	RDCa	1.50729					
	RDCf	1.4248					

NL-FL VOLTAGE DIP AT RATED P.F. = 12.7%
USED XID= 21.1% FOR DIP CALCULATION.

TIME CONSTANTS (SECONDS)		
D-AXIS 3-PH S.C. TRANSIENT	T'd3	0.407
D-AXIS O.C. TRANSIENT	T'd0	2.419
D-AXIS 3-PH S.C. SUB-TRANS	T"d3	0.023
D-AXIS O.C. SUB-TRANS	T"d0	0.024
ARM CKT (ASYMMETRICAL S.C.)	TA	0.031

TRANSIENT TORQUES				KW		HEAT REJ
	TORQUE	MAX TORQUE		@0.8P.F.	%EFF	BTU/HR
CONDITION	P.U.	FT-LBS				
3-PH S.C.	5.6	26080	FL	528.0	93.0	135561
L-L S.C.	8.1	37625	3/4L	396.0	93.1	99703
			1/2L	264.0	92.5	73554
			1/4L	132.0	88.8	57014

EFFICIENCY CALCULATED AT 120.0C

SHORT CIRCUIT CURRENT	INSTANTANEOUS SYMMETRICAL FAULT CURRENT		INSTANTANEOUS ASYMMETRICAL FAULT CURRENT	
TYPE	P.U.	AMPS	P.U.	AMPS
3-PH	5.62	214	9.73	371
L-L	5.40	206	9.36	357
L-N	7.49	285	12.97	494

OVERSPEED: 1250.0 RPM FOR 1 MINUTE. MINIMUM 3 PHASE MOTORING POWER: 52.80 KW

	FULL LOAD	NO LOAD
SYNCH COEFF	1465KW/RAD	898KW/RAD

DISPLACEMENT ANGLE: 22.2 DEGREES

BY Lori