



SYNCHRONOUS GENERATOR DATA

S/N 331924	7000 KW	7778 KVA	0.90 P.F.
80 °C RISE	4160 VOLTS	1079 AMPS	1800 RPM

REACTANCES

PER UNIT ON 7778 KVA BASE

Direct Axis Synchronous	(Unsaturated)	Xd	1.837
Direct Axis Transient	(Rated Voltage)	X'd	0.234
Direct Axis Subtransient	(Rated Voltage)	X" d	0.148
Quadrature Axis Synchronous	(Unsaturated)	Xq	0.972
Quadrature Axis Subtransient	(Rated Voltage)	X" q	0.168
Negative Sequence	(Rated Voltage)	X2	0.162
Zero Sequence	(Rated Voltage)	Xo	0.019
Short Circuit Ratio		SCR	0.601

TIME CONSTANTS

Direct Axis Open Circuit Transient	T'do	5.390 Sec.
Direct Axis Short Circuit Transient	T'd	0.687 Sec.
Direct Axis Open Circuit Subtransient	T"do	0.049 Sec.
Direct Axis Short Circuit Subtransient	T" d	0.031 Sec.
Short Circuit Armature	Ta	0.080 Sec.

RESISTANCES

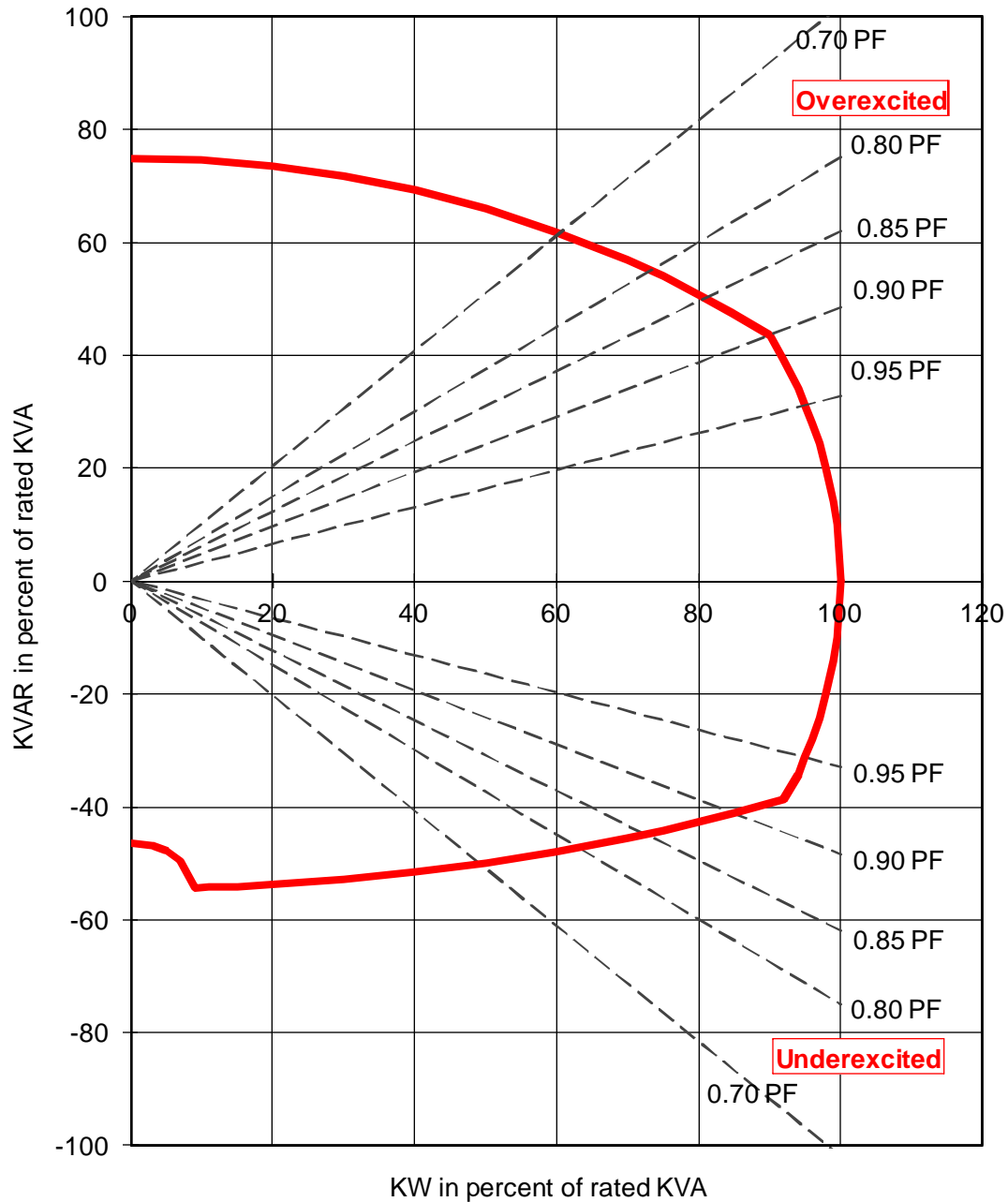
Armature (per phase at 25°C)	0.00751 Ohms
Field (at 25°C)	0.909 Ohms
Rotor Inertia	8132 Lb-Ft ²

EFFICIENCY

Load	Eff. at 0.90 P.F.
4/4	97.22%
3/4	96.94%
1/2	96.13%

DATE	19-Nov-14	rev. 0	Ref: EE-9187
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REACTIVE CAPABILITY CURVE



Rating:

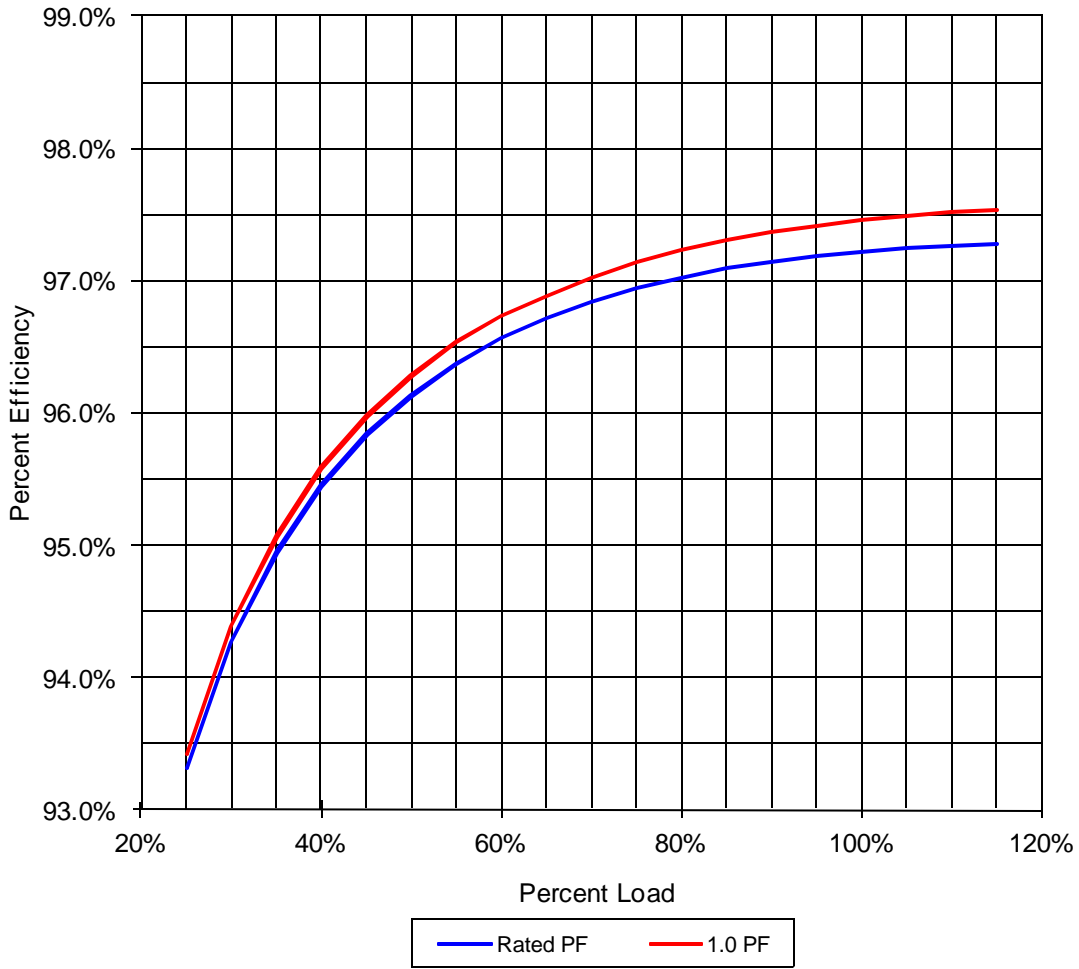
- 7778 KVA
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S/N 331924

rev. 0

EE- 9187A

EFFICIENCY CURVES

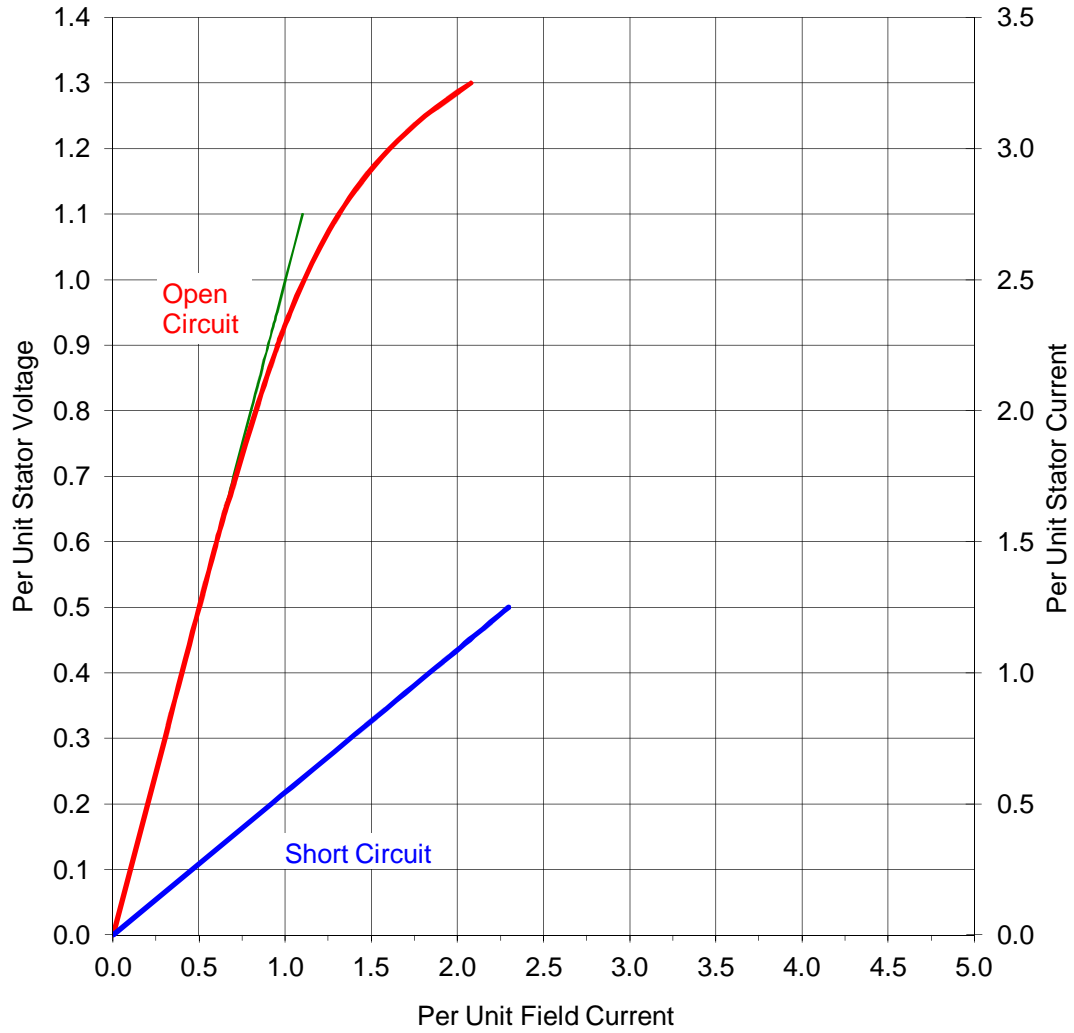


100% Load = 7,000 kW

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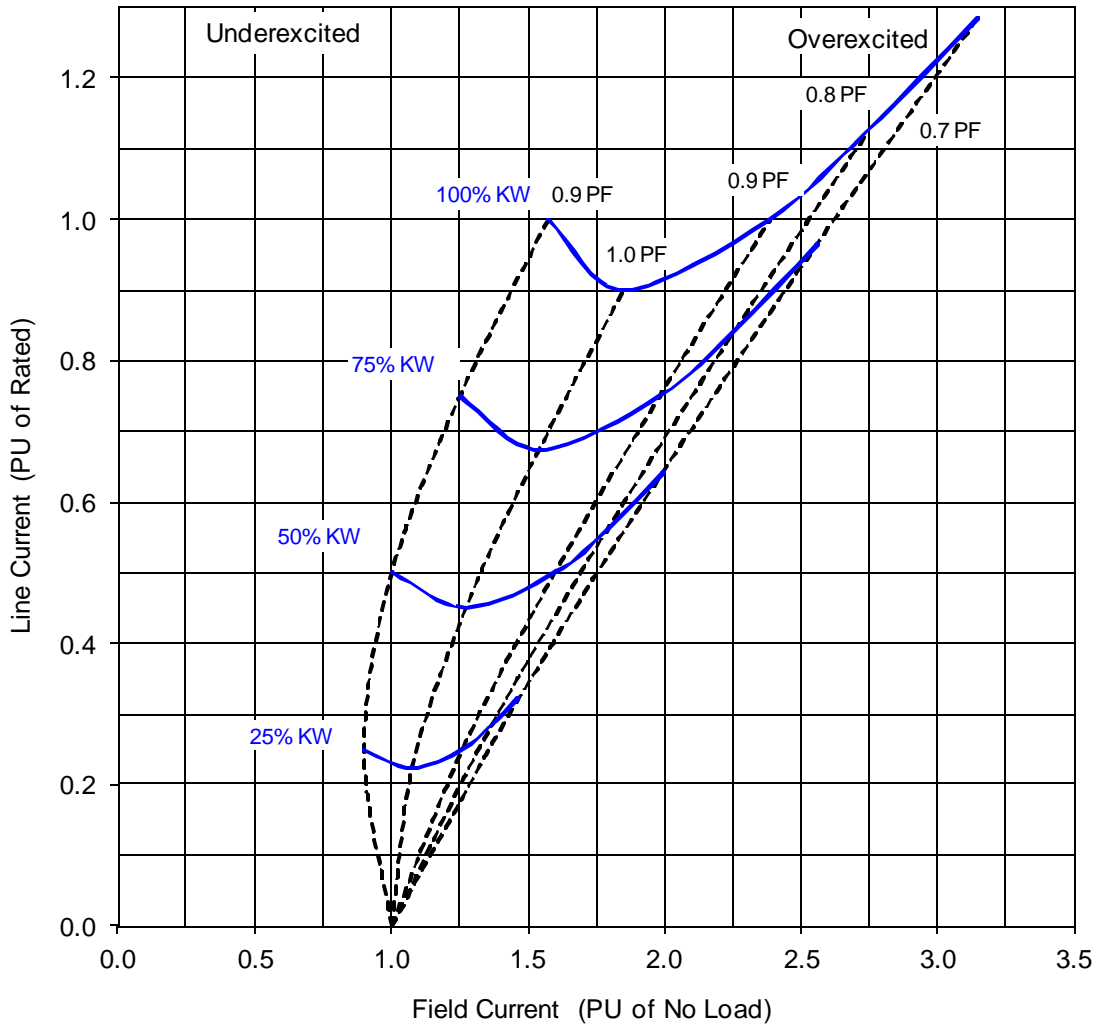
SATURATION CURVES



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V CURVES



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