

# MARATHON ELECTRIC MAGNAPLUS GENERATORS

Section 3600

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Basic Model 432PSL6212

Test Report No. WC1905

Date: 1-1-00

## TYPICAL SUBMITTAL DATA

kW (kVA)	1800 RPM			60 Hertz			12 Leads		
	3 Phase			0.8 Power Factor			Dripproof or Open Enclosure		
	Class B	Class F			Class H				
	80° C ①	90° C ①	95° C ①	105° C	105° C ①	130° C ①	125° C	125° C ①	150° C ①
Voltage*	Continuous	Lloyds	ABS	British Standard	Continuous	Standby	Standard	Continuous	Standby
240/480	230 (288)	250 (313)	260 (325)	275 (344)	275 (344)	300 (375)	282 (353)	293 (366)	310 (388)
230/460	230 (288)	250 (313)	260 (325)	275 (344)	275 (344)	300 (375)	282 (353)	292 (365)	310 (388)
220/440	227 (284)	245 (306)	252 (315)	266 (333)	266 (333)	290 (363)	273 (341)	285 (356)	300 (375)
208/416	225 (281)	240 (300)	245 (306)	260 (325)	260 (325)	280 (350)	265 (331)	276 (345)	300 (375)
190/380	212 (265)	227 (284)	232 (290)	243 (304)	243 (304)	265 (331)	250 (313)	256 (320)	275 (344)

① Rise by resistance method, Mil-Std-705, Method 680.1b.

Rating per BS 5000.

Submittal Data: 240/480 Volts*, 375 kVA, 1800 RPM, 60 Hz, 3 Phase					
Mil-Std-705B			Mil-Std-705B		
Method	Description	Value	Method	Description	Value
301.1b	Insulation Resistance	> 1.5 Meg	505.3b	Overspeed	2250 RPM
302.1a	High Potential Test		507.1c	Phase Sequence CCW-ODE	ABC
	Main Stator	2000 Volts	508.1c	Voltage Balance, L-L or L-N	0.2%
	Main Rotor	1500 Volts	601.4a	L-L Harmonic Maximum - Total	5.0%
	Exciter Stator	1500 Volts		(Distortion Factor)	
	Exciter Rotor	1500 Volts	601.4a	L-L Harmonic Maximum - Single	3.0%
	PMG Stator	1500 Volts**	601.1c	Deviation Factor	5.0%
401.1a	Stator Resistance, Line to Line		--	TIF (1960 Weightings)	<50
	High Wye Connection	0.0222 Ohms	625.1c	Mechanical Strength (High Wye	
	Rotor Resistance	0.866 Ohms		Connection, Sustained 3 Phase	
	Exciter Stator	18.5 Ohms		Short Circuit Current) <sup>(3)</sup>	< 300%
	Exciter Rotor	0.116 Ohms	652.1a	Shaft Current	< 0.1 ma
	PMG Stator	2.1 Ohms**	652.1a	Main Stator Capacitance to	
410.1a	No Load Exciter Field Amps			Ground	0.021 mfd
	at 480 Volts Line to Line	0.65 A DC			
420.1a	Short Circuit Ratio	0.39			
421.1a	Xd Synchronous Reactance	2.836 pu			
422.1a	X2 Negative Sequence				
	Reactance	0.205 pu	--	Generator Frame	432
423.1a	X0 Zero Sequence Reactance	0.037 pu	--	Type	Ext. Voltage Regulated, Brushless
425.1a	X'd Transient Reactance	0.157 pu	--	Insulation	Class H
426.1a	X"d Subtransient Reactance	0.137 pu	--	Coupling - Single Bearing	Flexible
--	Xq Quadrature Synchronous		--	Amortisseur Windings	Full
	Reactance	1.434 sec.	--	Cooling Air Volume	1020 CFM
427.1a	T'd Transient Short Circuit		--	Exciter	Rotating
	Time Constant	0.062 sec.	--	Voltage Regulator	SE350***
428.1a	T"d Subtransient Short Circuit		--	Voltage Regulation	1%***
	Time Constant	0.013 sec.	--	Sensing	1 Phase***
430.1a	T'do Transient Open Circuit				
	Time Constant	1.84 sec.			
432.1a	Ta Short Circuit Time				
	Constant of Armature Winding	0.015 sec.			

<sup>(3)</sup> Excitation support system or PMG required to sustain short circuit currents.

\* Voltage refers to wye (star) connection, unless otherwise specified.

\*\*Not supplied as standard equipment.

\*\*\*DVR<sup>®</sup>2000 voltage regulator supplied with PMG option. DVR<sup>®</sup>2000 voltage regulation 1/4%, 1 or 3 Phase sensing.

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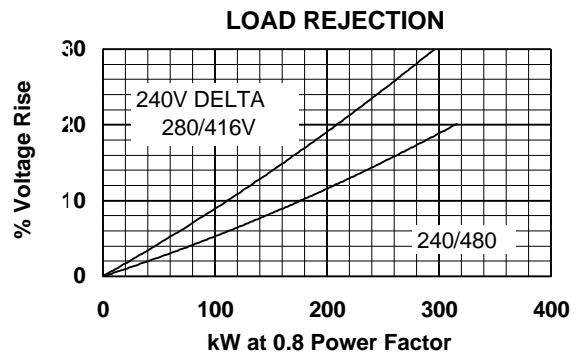
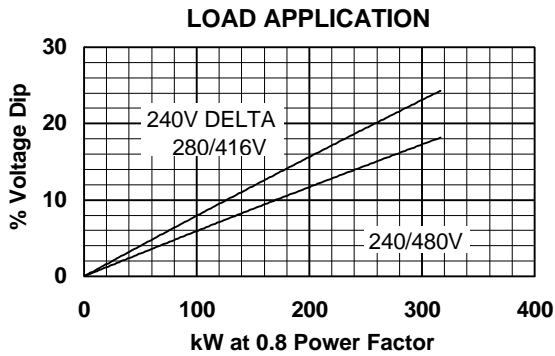
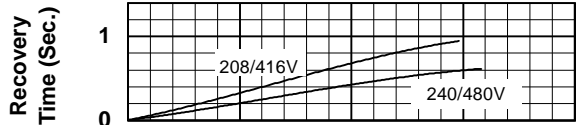
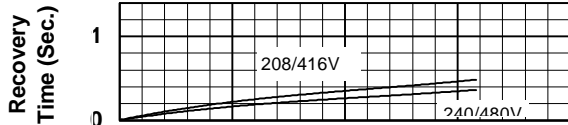
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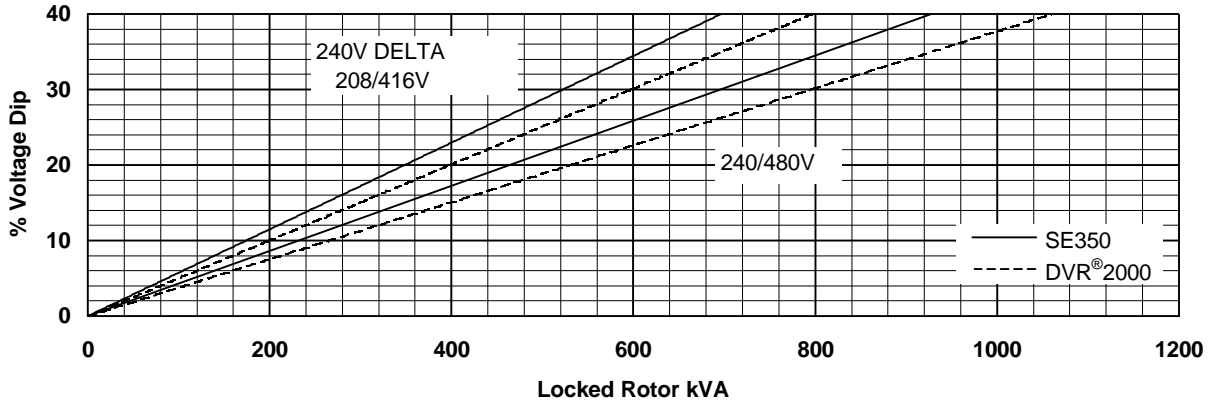
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## TYPICAL DYNAMIC CHARACTERISTICS

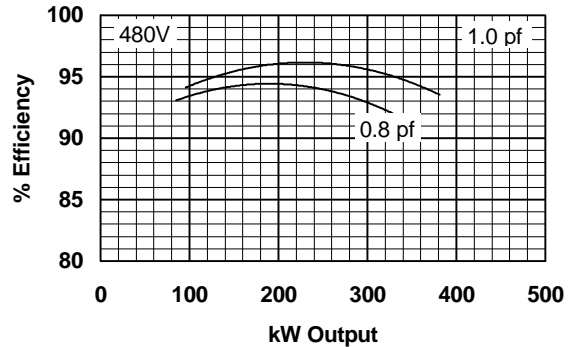
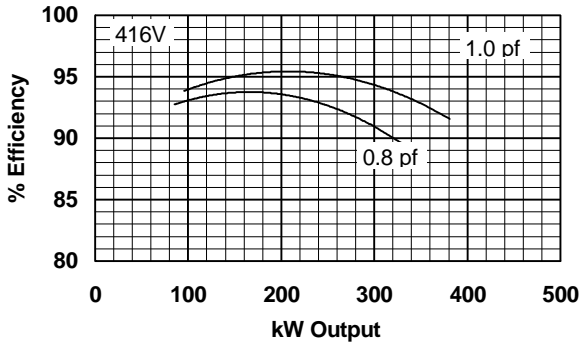
60 HERTZ



## TYPICAL MOTOR STARTING CHARACTERISTICS



## TYPICAL GENERATOR EFFICIENCY



Voltage refers to wye (star) connection, unless otherwise specified.