



**MARATHON ELECTRIC
SYNCHRONOUS AC GENERATOR
TYPICAL SUBMITTAL DATA**

Basic Model 362CSL1606

Date: 4-27-05

kW (kVA)	1800 RPM			60 Hertz			12 Leads		
	3 Phase			0.8 Power Factor			Dripproof or Open Enclosure		
	Class B		Class F				Class H		
Voltage*	80° C ① Continuous	90° C ① Lloyds	95° C ① ABS	105° C † British Standard	105° C ① Continuous	130° C ① Standby	125° C † British Standard	125° C ① Continuous	150° C ① Standby
240/480	80 (100)	83 (104)	83 (104)	96 (120)	96 (120)	105 (131)	105 (131)	105 (131)	113 (141)
230/460	80 (100)	83 (104)	83 (104)	96 (120)	96 (120)	105 (131)	105 (131)	105 (131)	113 (141)
220/440	82 (102)	84 (105)	84 (105)	92 (115)	92 (115)	102 (128)	102 (128)	102 (128)	107 (134)
208/416	80 (100)	82 (103)	82 (103)	90 (113)	90 (113)	100 (125)	100 (125)	100 (125)	105 (131)
190/380	72 (90)	75 (94)	75 (94)	81 (101)	81 (101)	90 (113)	90 (113)	90 (113)	95 (118)

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

† Rating per BS 5000.

Submittal Data: 480 Volts, 125 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	601.4a	L-L Harmonic Maximum - Total (Distortion Factor)	3.5%
	Main Rotor	1500 Volts	601.4a	L-L Harmonic Maximum - Single	2.5%
	Exciter Stator	1500 Volts	601.1c	Deviation Factor	7.0%
	Exciter Rotor	1500 Volts	---	TIF (1960 Weightings)	<50
401.1a	Stator Resistance, Line to Line		Additional Prototype Mil-Std Methods are Available on Request.		
	High Wye Connection	0.098 Ohms	--	Generator Frame	360
	Rotor Resistance	1.2 Ohms	--	Type	Ext. Voltage Regulated, Brushless
	Exciter Stator	23.5 Ohms	--	Insulation	Class H
	Exciter Rotor	0.12 Ohms	--	Coupling - Single Bearing	Flexible
410.1a	No Load Exciter Field Amps at 480 Volts Line to Line	0.46 A DC	--	Amortisseur Windings	Full
420.1a	Short Circuit Ratio	0.536	--	Cooling Air Volume	700 CFM
421.1a	Xd Synchronous Reactance	2.1 pu	--	Exciter	Rotating
422.1a	X2 Negative Sequence Reactance	0.109 pu	--	Voltage Regulator	SE350
423.1a	X0 Zero Sequence Reactance	0.035 pu	--	Voltage Regulation	1%
425.1a	X'd Transient Reactance	0.138 pu			
426.1a	X"d Subtransient Reactance	0.097 pu			
427.1a	T'd Transient Short Circuit Time Constant	0.053 sec.			
428.1a	T"d Subtransient Short Circuit Time Constant	0.006 sec.			
430.1a	T'do Transient Open Circuit Time Constant	0.63 sec.			
432.1a	Ta Short Circuit Time Constant of Armature Winding	0.015 sec.			

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

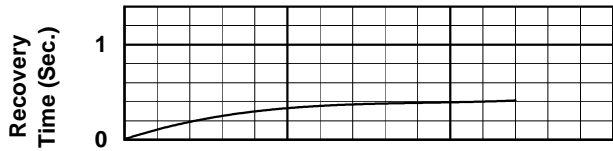


MARATHON ELECTRIC
SYNCHRONOUS AC GENERATOR
TYPICAL DYNAMIC CHARACTERISTICS

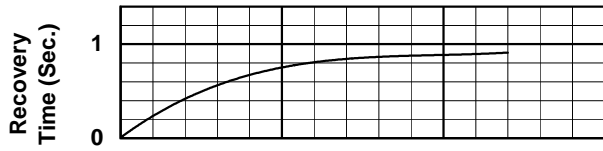
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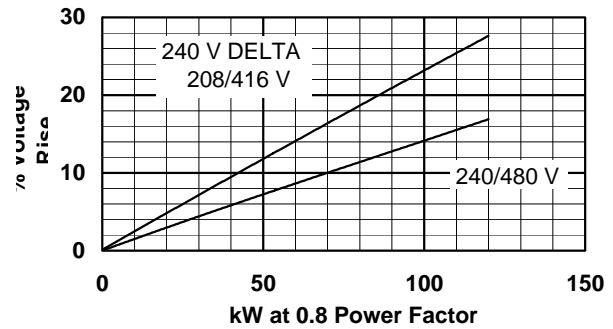
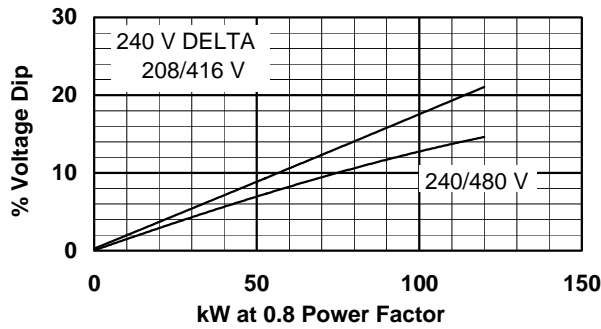
60 HERTZ



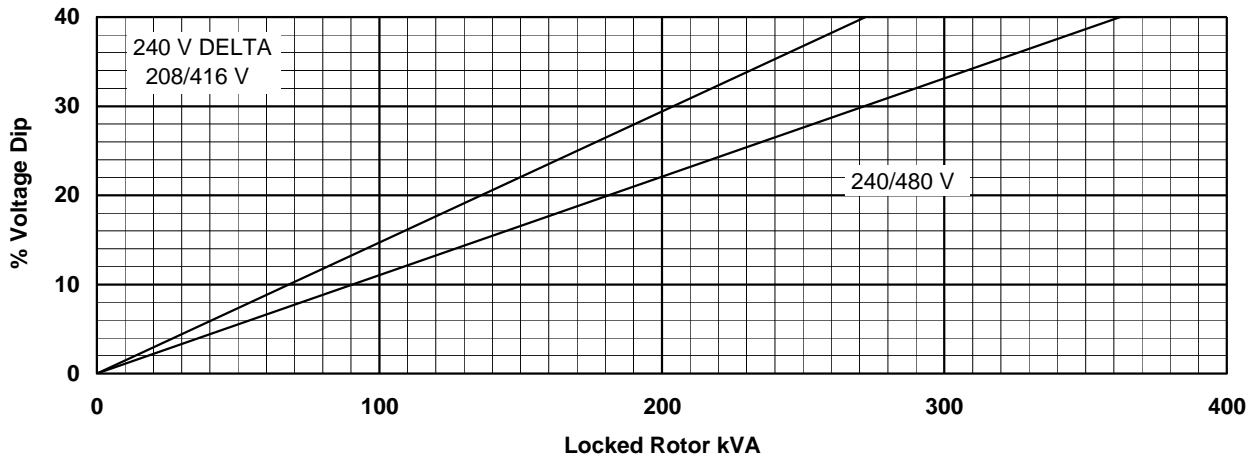
LOAD APPLICATION



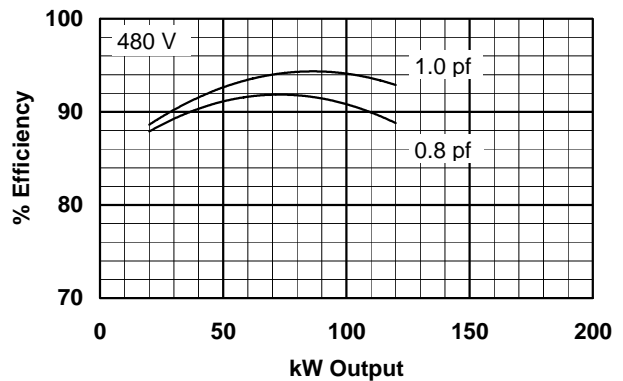
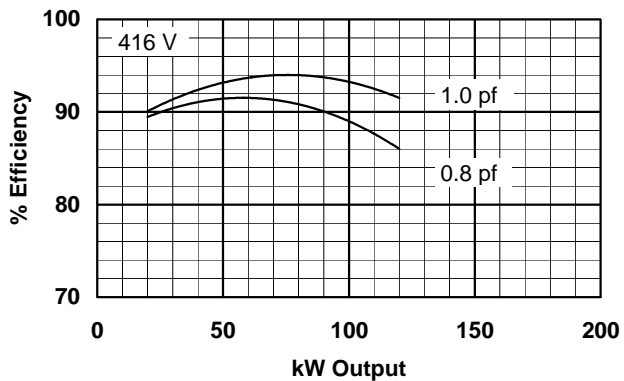
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TYPICAL MOTOR STARTING CHARACTERISTICS



TYPICAL GENERATOR EFFICIENCY



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