

**TYPICAL SUBMITTAL DATA**

MODEL : 284PSL1536

BASE MODEL: 284PSL1536

Winding WC- 1536

12/12/2000

Submittal Data: 600 Volts\*, 38.4 kW, 48 kVA, 0.8 P.F., 1800 RPM, 60 Hz, 3 Phase

Kilowatt ratings at		1800 RPM	60 Hertz	4 LEADS	Dedicated voltage 3 phase				
kW (kVA)		3 Phase			0.8 Power Factor		Dripproof or Open Enclosure		
Voltage*	Class B	Class F					Class H		
	80° C ∅ Continuous	90° C ∅ Lloyds	95° C ∅ ABS	105° C British Standard	105° C Continuous	130° C ∅ Standby	125° C British Standard	125° C Continuous	150° C ∅ Standby
600	27 (33.8)	30 (37.5)	30 (37.5)	32 (40)	32 (40)	35 (43.8)	35 (43.8)	35 (43.8)	38 (47.5)

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

British Standard Rating per BS 5000

Submittal Data: 600 Volts*, 38.4 kw, 48 kVA, 0.8 P.F., 1800 RPM, 60 Hz, 3 Phase				STD. CONNECTION	
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	0.20%
	Main Rotor	1500 Volts	601.4a	L-L Harmonic Maximum - Total (Distortion Factor)	3.0%
	Exciter Stator	1500 Volts	601.4a	L-L Harmonic Maximum - Single	2.5%
	Exciter Rotor	1500 Volts	601.1c	Deviation Factor	6.0%
	PMG Stator	NS**	---	TIF (1960 Weightings)	< 50
401.1a	Stator Resistance, Line to Line		652.1a	Shaft Current	< 0.1 ma
	High Wye Connection	0.346 Ohms	---	Main Stator Capacitance to Ground	@NA mfd
	Rotor Resistance	0.875 Ohms	<b>Additional Prototype Mil-Std Methods are Available on Request.</b>		
	Exciter Stator	23 Ohms	--	Generator Frame	284
	Exciter Rotor	0.12 Ohms	--	Type	MAGNAPLUS
	PMG Stator	NS**	--	Insulation	Class H
410.1a	No Load Exciter Field Amps at 600 Volts Line to Line	0.52 A DC	--	Coupling - Single Bearing	Flexible
420.1a	Short Circuit Ratio	0.591	--	Amortisseur Windings	Full
421.1a	Xd Synchronous Reactance	2 p.u.	--	Excitation	Ext. Voltage Regulated, Brushless
422.1a	X2 Negative Sequence React.	15.062 ohms	--	Voltage Regulator	SE350
423.1a	X0 Zero Sequence Reactance	0.161 pu	--	Voltage Regulation	1.00%
425.1a	X'd Transient Reactance	1.212 ohms	--	Cooling Air Volume	250 CFM
426.1a	X"d Subtransient Reactance	0.038 pu	--	Heat rejection rate	345 Btu's/min
		0.286 ohms	--	Full load current	46 amps
--	Xq Quadrature Synch. React.	0.11 pu	--	Minimum Input hp required	59.6
		0.828 ohms	--	Efficiency at rated load :	86.3%
		Not Available	--	Full load torque	174 Lb-ft
427.1a	T'd Transient Short Circuit Time Constant	0.036 sec.			
428.1a	T"d Subtransient Short Circuit Time Constant	0.01 sec.			
430.1a	T'do Transient Open Circuit Time Constant	0.6 sec.			
432.1a	Ta Short Circuit Time Constant of Armature Winding	0.008 sec.			

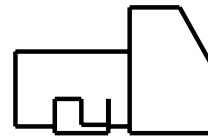
(3) Excitation support system or PMG required to sustain short circuit currents.

\* Voltages refer to wye (star) connection, unless otherwise specified.

\*\* Not supplied as standard equipment.

# MARATHON ELECTRIC GENERATORS

## TYPICAL DYNAMIC CHARACTERISTICS



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