TAYLOR POWER SYSTEMS

TYPICAL SUBMITTAL DATA

MODEL : 573RSL4035

BASE MODEL: 573RSL4035 **Winding H-SG570076**

Submittal Data: 480 Volts*, 749.6 kW, 937 kVA, 0.8 P.F., 1800 RPM, 60 Hz, 3 Phase

Kilowatt ratings at	**1800 RPM**		**60 Hertz**			**12 LEADS**	**Standard 3 phase**		
kW (kVA)		**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 ② British Standard**	**105° C ① Continuous**	**130° C ① Standby**	**125° C ② British Standard**	**125° C ① Continuous**	**150° C ① Standby**
480/240	585 (731)	645 (806)	670 (838)	710 (888)	710 (888)	750 (938)	735 (919)	750 (938)	810 (1013)
460/230	615 (769)	670 (838)	660 (825)	735 (919)	735 (919)	785 (981)	760 (950)	780 (975)	800 (1000)
440/220	620 (775)	660 (825)	645 (806)	715 (894)	715 (894)	765 (956)	760 (950)	760 (950)	765 (956)
416/208	590 (738)	630 (788)	605 (756)	680 (850)	680 (850)	725 (906)	720 (900)	720 (900)	725 (906)
380/190	545 (681)	580 (725)	565 (706)	625 (781)	625 (781)	625 (781)	625 (781)	625 (781)	625 (781)

① *Rise by resistance method, Mil-Std-705, Method 680.1b.* ② *British Standard Rating per BS 5000*

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Mil-Std-705B

Method	**Description**	**Value**
301.1b	Insulation Resistance	>1.5 Meg
302.1a	High Potential Test	
	Main Stator	2000 Volts
	Main Rotor	1500 Volts
	Exciter Stator	1500 Volts
	Exciter Rotor	1500 Volts
	PMG Stator	1500 Volts
401.1a	Stator Resistance, Line to Line	
	High Wye Connection	0.0059 Ohms
	Rotor Resistance	0.507 Ohms
	Exciter Stator	23 Ohms
	Exciter Rotor	0.045 Ohms
	PMG Stator	2.1 Ohms
410.1a	No Load Exciter Field Amps	0.74 A DC
	at 240/480 Volts Line to Line	
420.1a	Short Circuit Ratio	0.617
421.1a	Xd Synchronous Reactance	2.55 pu
		0.627 ohms
422.1a	X2 Negative Sequence React.	0.196 pu
		0.048 ohms
423.1a	X0 Zero Sequence Reactance	0.049 pu
		0.012 ohms
425.1a	X'd Transient Reactance	0.131 pu
		0.032 ohms
426.1a	X"d Subtransient Reactance	0.087 pu
		0.021 ohms
--	Xq Quadrature Synchronous	1.1 pu
		0.27 ohms
427.1a	T'd Transient Short Circuit	
	Time Constant	0.119 sec.
428.1a	T"d Subtransient Short Circuit	
	Time Constant	0.009 sec.
430.1a	T'do Transient Open Circuit	
	Time Constant	2.27 sec.
432.1a	Ta Short Circuit Time	
	Constant of Armature Winding	0.02 sec.

Mil-Std-705B

Method	**Description**	**Value**
505.3b	Overspeed	2250 RPM
507.1c	Phase Sequence CCW-ODE	ABC
508.1c	Voltage Balance, L-L or L-N	0.20%
601.4a	L-L Harmonic Maximum - Total	5.0%
	(Distortion Factor)	
601.4a	L-L Harmonic Maximum - Single	3.0%
601.1c	Deviation Factor	5.0%
---	TIF (1960 Weightings)	< 50
---	THF (IEC, BS & NEMA Weightings)	< 2 %
652.1a	Shaft Current	< 0.1 ma
---	Main Stator Capacitance to ground	0.043 mfd
	Additional Prototype Mil-Std Methods are Available on Request.	
--	Generator Frame	573
--	Type	MAGNAMAXDVR
--	Insulation	Class H
--	Coupling - Single Bearing	Flexible
--	Amortisseur Windings	Full
--	Excitation	Ext. Voltage Regulated, Brushless
--	Voltage Regulator	DVR2000E+
--	Voltage Regulation	0.25%
--	Cooling Air Volume	1340 CFM
--	Heat rejection rate	2195 Btu's/min
--	Full load current	1127 amps
--	Minimum Input hp required	1056.5
	Efficiency at rated load :	95.1%
--	Full load torque	3081 Lb-ft

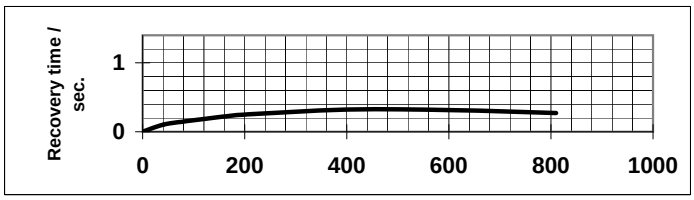
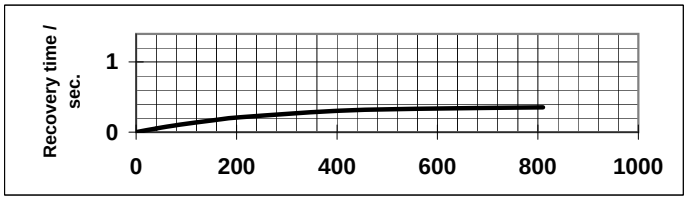
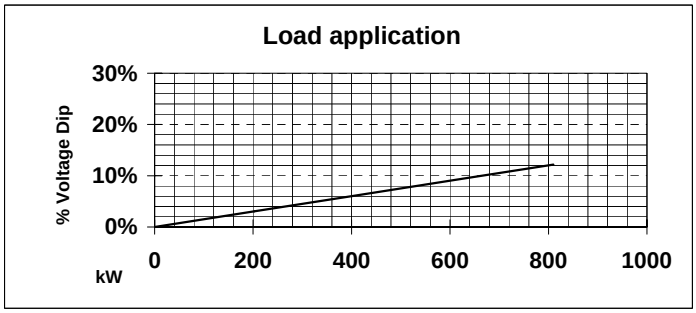
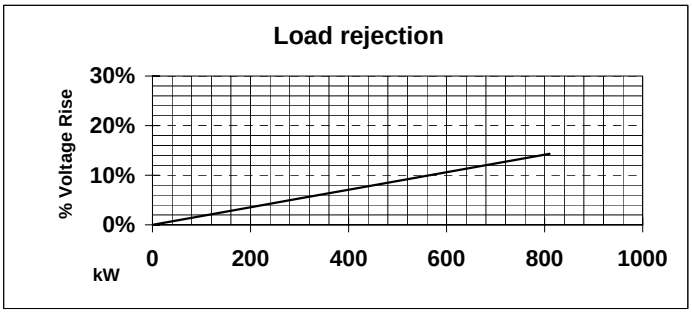
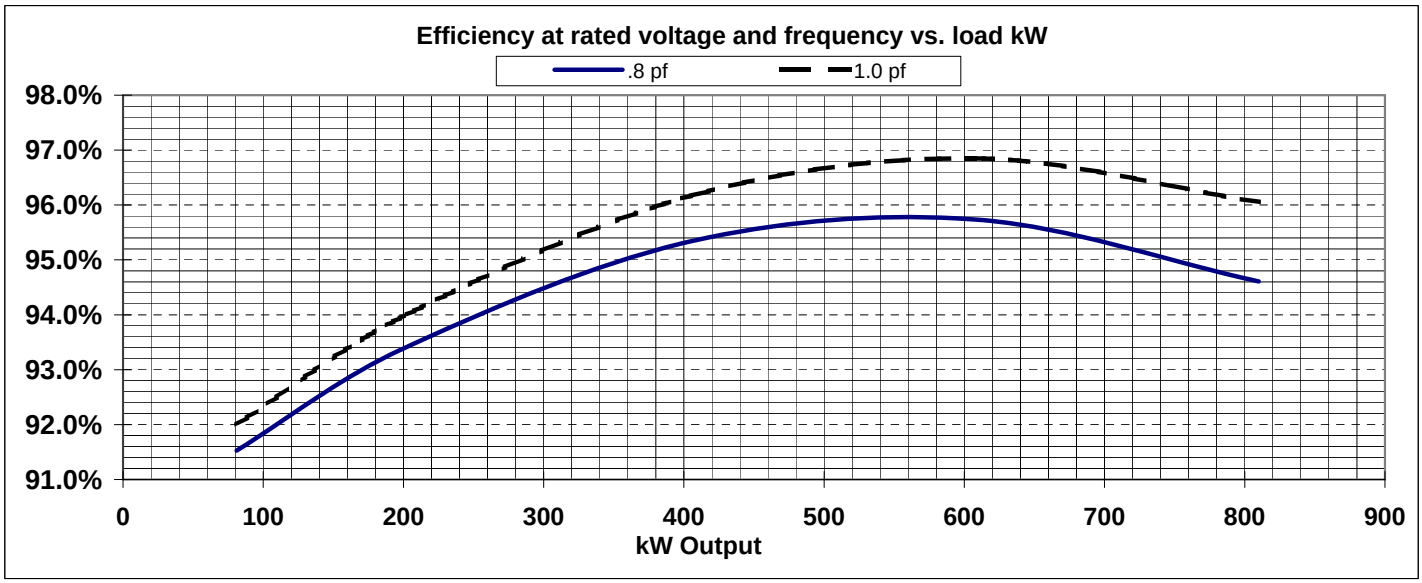
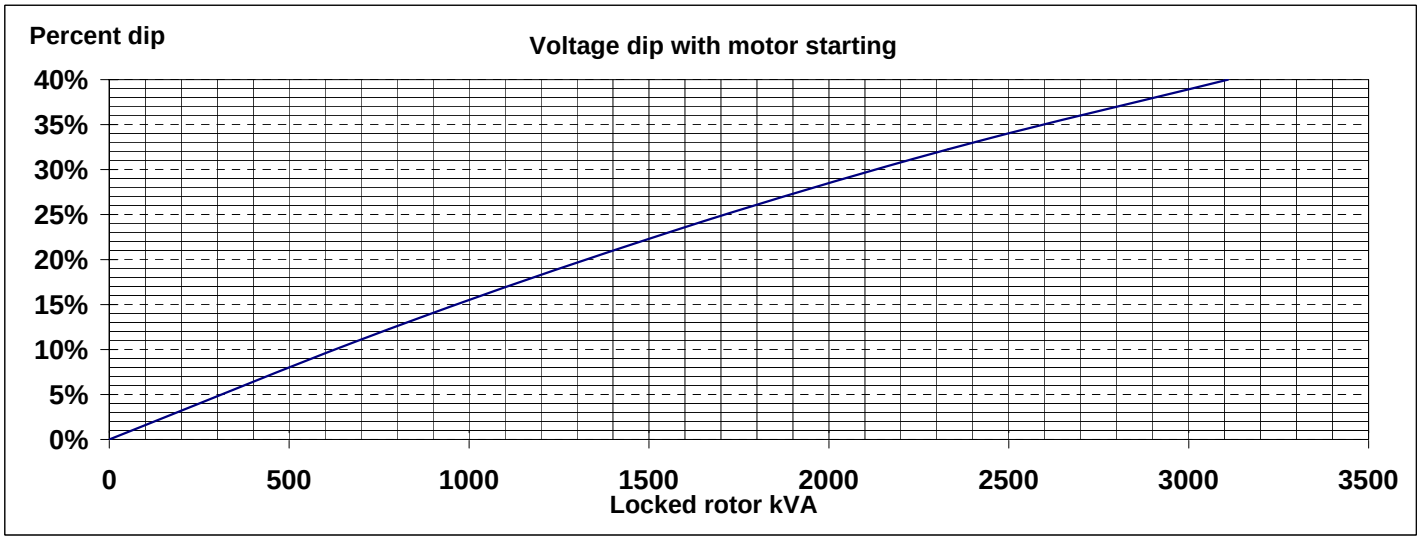
(3) Excitation support system or PMG required to sustain short circuit currents.

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

TAYLOR POWER SYSTEMS

TYPICAL DYNAMIC CHARACTERISTICS

MODEL : 573RSL4035

BASE MODEL: 573RSL4035 **Winding H-SG570076**

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