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WINDING	TOL	SYMBOL	UNITS	E	G	H	I	K	L	M	
MAX RATED DC BUS VOLTAGE	MAX	V _{bus}	V _{dc}	640	640	640	640	640	640	320	
CONT TORQUE (STALL) FOR ΔT WDG = 100°C	NOM	T _{cs}	lb-in	73.8	74.6	75.1	75.5	76.1	76.7	76.1	
			Nm	8.34	8.43	8.48	8.53	8.60	8.67	8.60	
CONT CURRENT (STALL) FOR ΔT WDG = 100°C	NOM	I _{cs}	Arms	2.99	4.72	5.9	7.4	9.3	11.6	13.1	
CONT TORQUE (STALL) FOR ΔT WDG = 60°C	NOM	T _{cs}	lb-in	59.0	59.7	60.0	60.4	61.0	61.4	61.0	
			Nm	6.67	6.74	6.78	6.82	6.88	6.94	6.88	
MAX MECHANICAL SPEED	NOM	N _{max}	rpm	6000	6000	6000	6000	6000	6000	6000	
PEAK TORQUE	NOM	T _p	lb-in	261	263	263	264	266	266	266	
			Nm	29.5	29.7	29.7	29.9	30.0	30.1	30.0	
PEAK CURRENT	NOM	I _p	Arms	15.0	23.6	29.5	37.0	46.5	58.0	65.5	
RATED TORQUE (SPEED) @ 75 V _{dc} BUS		T _{rtd}	lb-in								
			Nm								
RATED SPEED @ 75 V _{dc} BUS		N _{rtd}	rpm								
RATED POWER @ 75 V _{dc} BUS		P _{rtd}	Hp								
			kW								
RATED TORQUE (SPEED) @ 160 V _{dc} BUS		T _{rtd}	lb-in								
			Nm								
RATED SPEED @ 160 V _{dc} BUS		N _{rtd}	rpm								
RATED POWER @ 160 V _{dc} BUS		P _{rtd}	Hp								
			kW								
RATED TORQUE (SPEED) @ 320 V _{dc} BUS		T _{rtd}	lb-in		68.1	66.6	51.2	60.2	56.6	46.0	
			Nm		7.69	7.53	5.79	6.80	6.40	5.20	
RATED SPEED @ 320 V _{dc} BUS		N _{rtd}	rpm		1500	1800	2250	3000	3500	4500	
RATED POWER @ 320 V _{dc} BUS		P _{rtd}	Hp		1.62	1.90	1.83	2.86	3.15	3.28	
			kW		1.21	1.42	1.36	2.14	2.35	2.45	
RATED TORQUE (SPEED) @ 560 V _{dc} BUS		T _{rtd}	lb-in	67.3	62.5	55.4	45.7	34.5	28.9		
			Nm	7.61	7.06	6.26	5.16	3.90	3.27		
RATED SPEED @ 560 V _{dc} BUS		N _{rtd}	rpm	1500	2500	3500	4500	5500	6000		
RATED POWER @ 560 V _{dc} BUS		P _{rtd}	Hp	1.60	2.48	3.08	3.26	3.01	2.76		
			kW	1.20	1.85	2.30	2.43	2.25	2.06		
RATED TORQUE (SPEED) @ 640 V _{dc} BUS		T _{rtd}	lb-in	64.4	58.9	51.1	39.9	28.7	28.9		
			Nm	7.28	6.66	5.77	4.51	3.25	3.27		
RATED SPEED @ 640 V _{dc} BUS		N _{rtd}	rpm	2000	3000	4000	5000	6000	6000		
RATED POWER @ 640 V _{dc} BUS		P _{rtd}	Hp	2.04	2.80	3.24	3.17	2.74	2.76		
			kW	1.52	2.09	2.42	2.36	2.04	2.06		
TORQUE CONSTANT	±10%	K _t	lb-in/Arms	24.7	15.8	12.7	10.3	8.2	6.6	5.8	
			Nm/Arms	2.79	1.79	1.44	1.16	0.93	0.75	0.66	
BACK EMF CONSTANT	±10%	K _e	V _{rms} /krpm	179.4	115.3	92.7	74.9	60.1	48.3	42.4	
RESISTANCE (LINE-LINE)	±10%	R _m	Ohms	8.96	3.70	2.35	1.57	0.96	0.61	0.49	
INDUCTANCE (LINE-LINE)		L	mH	44.7	18.5	11.9	7.8	5	3.24	2.5	

REV NO.	REVISION	DATE	REVISION NOTICE	CHG'D BY	CHK'D BY
52	Rm WAS 8.59,3.47,0.93,0.48,0.56	08/24/05	90327	PMH	AJN
53	UPDATE Ip/Ip TO 5X	02/22/08	90614	SRL	AJN
54	ADD "I" WINDING	06/04/08	90640	DWM	AJN
55	ADD "H" & "L" WINDING DATA	09/08/08	90672	PMH	AJN

	SYMBOL	UNITS	VALUE
INERTIA (INCLUDING RESOLVER FEEDBACK)	J _m	lb-in-S ²	5.51x10 ⁻³
		kgcm ²	6.22
OPTIONAL BRAKE INERTIA (ADDITIONAL)	J _m	lb-in-S ²	0.153X10 ⁻³
		kgcm ²	0.173
WEIGHT	W	lb	12.8
		kg	5.8
STATIC FRICTION	T _f	lb-in	0.35
		Nm	0.04
VISCOUS DAMPING	K _{dv}	lb-in/krpm	0.37
		Nm/krpm	0.042
THERMAL TIME CONSTANT	TCT	mins	24
THERMAL RESISTANCE	R _{thw-a}	*C/W	0.56
POLE PAIRS			5
HEATSINK SIZE	12" x 12" x 1/2" ALUMINUM PLATE		

NOTES:

- 1 MOTOR WINDING AT TEMPERATURE RISE, ΔT = 100°C, AT 40°C AMBIENT WITH STANDARD HEATSINK.
- 2 ALL DATA REFERENCED TO SINSUSOIDAL COMMUTATION.
- 3 ADD BRAKE INERTIA IF APPLICABLE FOR TOTAL INERTIA.
- 4 STANDARD HEATSINK.
- 5 MAY BE LIMITED AT SOME VALUES OF V_{bus}.
- 6 MEASURED AT 25°C.
- 7 BRAKE MOTOR OPTION REDUCES CONTINUOUS TORQUE RATINGS BY 0.26 Nm.
- 8 COMMUTATING ENCODER OPTION REDUCES CONTINUOUS TORQUE RATINGS BY 0.34 Nm.
- 9 BRAKE PLUS COMMUTATING ENCODER MOTOR OPTION REDUCES CONTINUOUS TORQUE RATINGS BY 0.76 Nm.
- 10 MOTORS WITH SHAFT SEAL: REDUCE T_{rtd} BY 0.13 Nm, REDUCE P_{rtd} BY 0.13 x N_{rtd} x π/30 (WATTS), AND INCREASE T_f BY 0.13 Nm.