

Motor Winding	TT-2950						TT-2952					TT-2953					TT-2954			
	F	C	B	A	H	D	C	B	A	F	U	D	A	K	B	G	C	H	D	
<b>Basic Motor Constants</b>																				
Power, P (hp)	0.7	1.0	1.0	1.0	1.0	1.0	1.1	1.2	1.2	1.4	/	1.4	1.6	1.5	2.0	2.0	1.5	/	2.4	
Power, P (W)	522	746	746	746	820	746	820	895	895	1044	/	1044	1193	1119	1492	1492	1119	/	1790	
Max Speed, Nmax (rpm)	3,000	4,500	5,000	5,000	5,000	5,000	2,000	2,500	3,000	4,000	5,000	1,400	2,000	2,400	3,000	3,600	1,500	2,000	2,300	
Cont. Torque Mo (lb-ft)	1.5	1.5	1.5	1.5	1.5	1.5	3.0	3.0	3.0	3.0	2.6	6.2	6.0	6.0	5.8	5.8	8.2	7.4	7.6	
Cont. Torque Mo (Nm)	2.0	2.0	2.0	2.0	2.3	2.0	4.1	4.1	4.1	4.1	3.5	8.4	8.1	8.1	7.9	7.9	11.1	10.0	10.3	
Peak Torque, Mmax (lb-ft)	13.0	12.0	11.0	9.5	8.0	6.0	25.0	22.0	20.0	15.0	11.0	40.0	30.0	25.0	22.0	17.0	39.1	33.3	27.5	
Peak Torque, Mmax (Nm)	17.6	16.3	14.9	12.9	11.12	8.1	33.9	29.8	27.1	20.3	14.9	53	40.7	34	29.8	23	52.9	45.1	37.2	
Current @ Cont. Torque, Io (A)	5.86	8.33	9.74	11.72	17.40	19.50	8.04	9.38	11.30	16.10	19.70	11.40	15.80	18.50	21.40	26.70	15.10	18.10	22.40	
Current @ Peak Torque, Ip (A)	70	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
Max Terminal Voltage, Vt (V)	115	115	115	115	115	115	115	115	115	115	95	115	115	115	115	115	115	115	115	
Back EMF Const, Ke (V/krpm)	36.4	25.5	21.9	18.2	14.5	10.9	53.0	45.4	37.8	26.4	18.7	77.1	54.0	46.2	38.5	30.8	77.1	57.8	48.3	
Torque Const., Kt (lb-ft/A)	0.256	0.180	0.154	0.128	0.102	0.077	0.373	0.320	0.266	0.186	0.132	0.543	0.380	0.325	0.271	0.217	0.543	0.407	0.340	
Torque Const., Kt (Nm/A)	0.347	0.244	0.209	0.174	0.139	0.104	0.506	0.434	0.361	0.252	0.132	0.736	0.515	0.441	0.368	0.294	0.736	0.552	0.46	
DC Resistance, R (Ω)	1.28	0.712	0.484	0.321	0.205	0.121	1	0.68	0.452	0.25	0.129	0.707	0.393	0.267	0.199	0.112	0.481	0.34	0.212	
Inductance, L (mH)	3.68	1.8	1.3	0.92	0.59	0.32	3.2	2.5	1.6	0.78	0.4	3.27	1.6	1.2	0.81	0.52	3.1	1.6	1.2	

Weight, M (lbs)	16.5						22					32					36		
Weight, M (kg)	7.5						10					14.5					16.5		
Inertia, Jm (lb-ft.sec <sup>2</sup> )	0.000695						0.001					0.00202					0.00253		
Inertia, Jm (kg.m <sup>2</sup> )	0.000942						0.0014					0.00274					0.00343		
Static Friction, Tf (lb-ft)	0.16						0.22					0.31					0.33		
Static Friction, Tf (Nm)	0.145						0.3					0.43					0.45		
Viscous Damping, F1 (lb.ft/krpm)	0.027						0.055					0.112					0.14		
Viscous Damping, F1 (Nm/krpm)	0.037						0.075					0.152					0.19		

Tachogenerator Option	TGF1810-147	TGF1810-147	TGF1810-147	TGF1810-147
Tachogenerator Model				
Voltage, KG (V/krpm)	12.5v / 20v / 7v	12.5v / 20v / 7v	12.5v / 20v / 7v	12.5v / 20v / 7v
Ripple (pk-pk/avg)	4%	4%	4%	4%
Inertia, JT (oz.in.sec <sup>2</sup> )	0.005	0.005	0.005	0.005
Inertia, JT (kg.cm <sup>2</sup> )	0.353	0.353	0.353	0.353
Weight, MT (oz)	16.5	16.5	16.5	16.5
Weight, MT (grams)	470	470	470	470

Encoder Option	Incremental (A quad B with index Z & complements)
Encoder Type	
Power Supply	5V DC ± 5%, 200mA max
Output	Line Driver, 20mA Max source/sink
Resolution (ppr)	1024 / 2048 / 4096
Frequency Response	200 kHz max

Brake Option	B1	B2	B3
Code			
Brake Open Voltage	115V a.c	90V d.c.	24V d.c
Power (Watts)	16	16	16
Brake Static Torque (lb.ft)	8.85	8.85	8.85
Brake Static Torque (Nm)	12	12	12
Weight (brake + housing) lbs	5.5	5.5	5.5
Weight (brake + housing) Kg	2.5	2.5	2.5