



NPC-B81HT and NPC-B82HT

Motor Constant Summary Table

Motor Test Voltage	24 Vdc	
Torque Constant: Kt	181.791	In.Oz./A
Voltage Constant: Ke	134.421	Volts/KRPM
Back EMF Constant: Kb	1.2836	Volts/rad/s
Polar Moment of Inertia: Jm	0.0304	In.Oz.s ²
Mechanical Time Constant: Tm	0.0232	milliseconds
Electrical Time Constant: Te	0.4944	milliseconds
Armature Resistance: Ra	0.0634	ohms
Terminal Resistance: Rt	0.178	ohms
Terminal Inductance: La	0.088	mH

Estimated Operating Data Using Constants

At Load Torque of	80	in-lbs
Load Speed	129.2	rpm
Load Current	8.77	amps
Load Power Out	122.2	watts
Load Horsepower	0.16	hp
Efficiency at Load	58.00%	0
Stall Torque	1506	in-lbs
Stall Current	134	amps
Peak Horsepower	0.81	hp
No-Load Speed	136.5	rpm
No-Load Current	1.73	amps