



## JOHNSON ELECTRIC INTERNATIONAL LTD.

Johnson Building,6-22, Dai Shun Street, Tai Po, Hong Kong. Excellence in *Micromotors* Since 1959 Date: 2010/01/27 Simulation at 25 C **Project No.:** 09DB002 Motor tested rapidly to prevent significant Winding : 0.21 - 71.0 temperature rise. At a constant voltage of 12.00 Volts With a circuit resistance 0.000 Ohms At No Load 8000 6 10 100 Speed : 6745 Rpm Current: 0.127 Amp 90 9 At stall (Extrapolated) 7000 Torque : 54.015 m-Nm 5 Current: 3.570 Amp Ν 80 8 At maximum efficiency Efficiency : 63.09 % 6000 8.562 m-Nm Torque : 7 70 Speed : 5675 Rpm 4 Current : 0.672 Amp Current (AMP). Power (Watt) Output : 5.091 Watts 5000 6 60 At maximum power Eff(%) Torque : 27.008 m-Nm Speed(rpm) Speed : 3371 Rpm 3 5 4000 50 Current : 1.848 Amp Eff 9.538 Watts Output : 40 4 Characteristics 3000 Torque Constant : 15.688 m-Nm/Amp 2 E.M.F Constant : 15.688 mV/rad/sec 3 30 Dy. Resistance : 3.362 Ohms Motor Regulation: 124.918 Rpm/m-Nm 2000 H81 At Torque Level: At Fan: 2 20 1 1000 Torque: 18.190 Torque: 20.000 m-Nm 1 10 4246 Rpm Speed: 4472 Speed: Current: 1.401 Amp Current: 1.286 Efficiency: 52.92 % Efficiency: 55.23 0 0 0 8.523 Output: 8.897 Watts Output: 10 20 30 50 0 40 60 COMPUTER PRINT-OUT NOMINAL MOTOR CURVES. Torque(m-Nm) Performance and charactertics are measured based on limited motor samples only. FORM : PIB-930701-1 Ref: 117501 Issued by CATD Simulation