Motor Performance Test Report

Project No: SAP2715A
Motor Type: DF-30P-2003
Customer Project: 12 [Vdc]
SOR/ISOR:
Motor Winding:
Test Voltage: 24C / 70%RH
Test Motor No: CCW
Remark: 2#

Note to Measurement
1. Rotating direction is viewed from output shaft unless specified.
2. Series Resistance = mOhm.
3. DUT cool down for >5 minutes before any measurement.
4. Testing Mode: #3: Ramp Up & Down within 8s - up to rated load.

Performance Curve

Motor Characteristics

Free Load
meas. Current 3.81 [A]  Speed 21020 [rpm]

Max Efficiency
Torque 0.1 [Nm]  Eff 71.4 [%]
Speed 16866 [rpm]  Po 190.6 [W]
Current 22.24 [A]  Pi 266.9 [W]

Max Power
Torque 0.4 [Nm]  Eff 47.6 [%]
Speed 9875 [rpm]  Po 382.2 [W]
Current 66.96 [A]  Pi 803.5 [W]

Stall (extrapolated)
Torque 0.7 [Nm]  Current 130.12 [A]

Rated Load Point
Torque 0.11 [Nm]  Eff 71.4 [%]
Speed 17078 [rpm]  Po 178.8 [W]
Current 20.89 [A]  Pi 250.6 [W]

Motor Constant
Torque Constant 0.01 [Nm/A]
Regulation 26713.69 [Rpm/Nm]
Dynamic Resistance 0.092 [ohm]

Curve Fitted Data
Linear Fitting R -> Speed-Torque: 0.9924  Current-Torque: 0.9997  Curve Fitting Range: from 0[Nm] to 0.145[Nm]

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Job Number: E180409  Tested by: LONGSC  Date: 5/10/2018  Reviewed by:  Date: