



JOHNSON ELECTRIC INDUSTRIAL MANUFACTORY LTD.

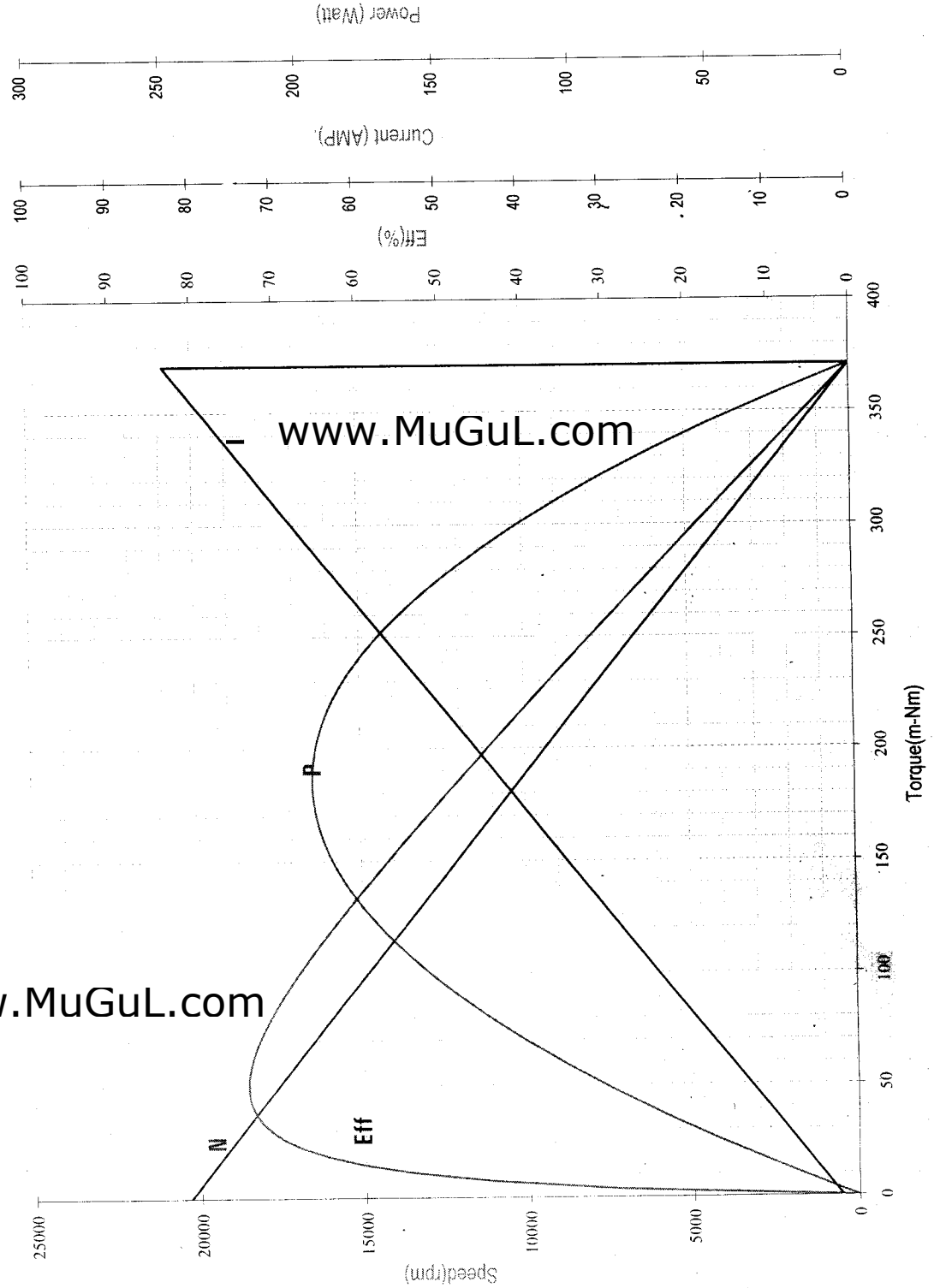
Johnson Building 6-22, Dai Shun Street, Tai Po, Hong Kong.

Excellence in *Micromotors* Since 1959

Date : 2004/06/15

SOF NO :
Project No.:

www.MuGuL.com



Performance (In an ambient temperature of 25 -30 C)
Motor tested rapidly to prevent significant temperature rise.

At a constant voltage of **9.60** Volts
With a circuit resistance **0.000** Ohms

At No Load

Speed : 20323 Rpm
Current: 1.983 Amp

At stall (Extrapolated)

Torque : 370.645 m-Nm
Current: 83.310 Amp

At maximum efficiency

Efficiency : 74.05 %
Torque : 49.544 m-Nm
Speed : 17606 Rpm
Current : 12.854 Amp
Output : 91.382 Watts

At maximum power

Torque : 185.323 m-Nm
Speed : 10161 Rpm
Current : 42.647 Amp
Output : 197.280 Watts

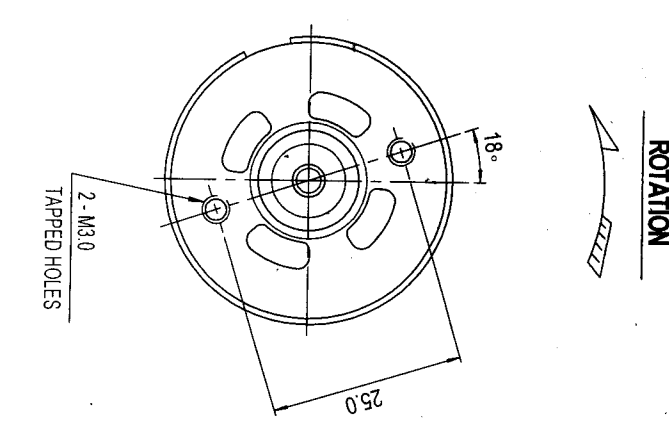
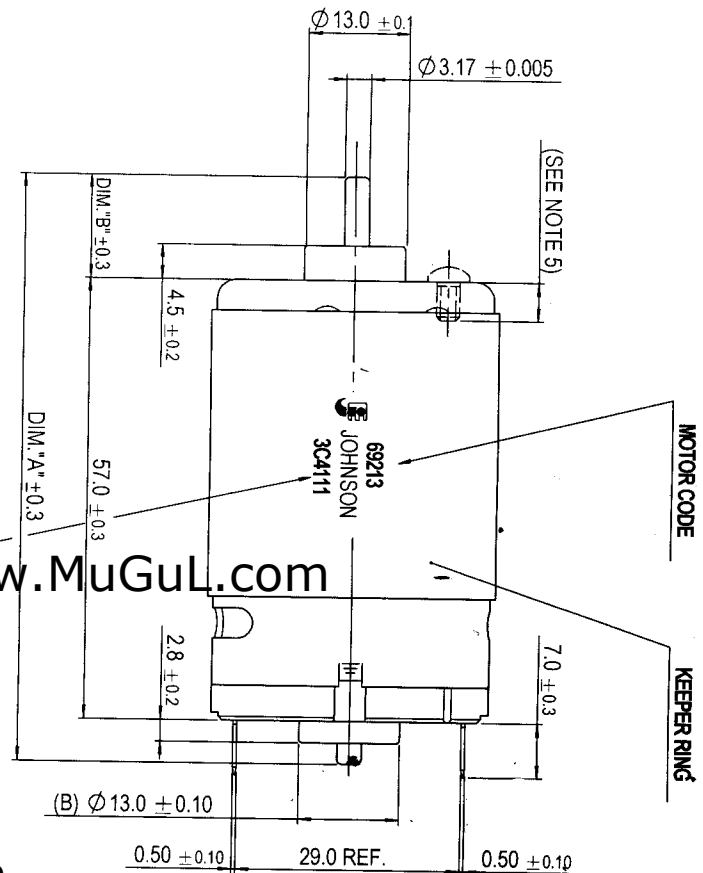
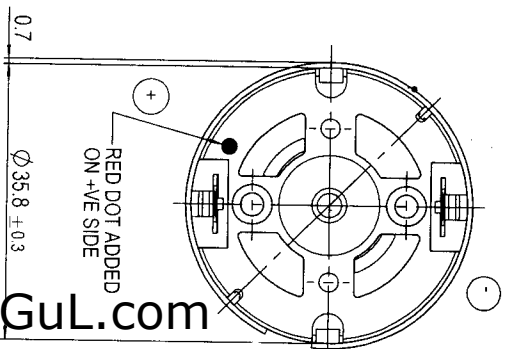
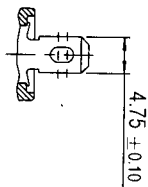
Characteristics

Torque Constant : 4.557 m-Nm/Amp
E.M.F. Constant : 4.557 mV/rad/sec
Dy. Resistance : 0.115 Ohms
Motor Regulation: 54.831 Rpm/m-Nm

At Torque Level:

Torque: m-Nm

COMPUTER PRINT-OUT NOMINAL MOTOR CURVES.
Performance and characteristics are measured based on typical motor samples only.



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- NOTES:-
1. LENGTH OF SHAFT, DIM. "A" 76.0 mm.
 2. FRONT EXTENSION, DIM. "B" 135 mm. MEASURED WITH SHAFT PUSHED AGAINST PLASTIC END CAP.
 3. DIRECTION OF ROTATION : ANTI-CLOCKWISE WHEN VIEWING MOTOR OUTPUT END WITH POSITIVE VOLTAGE APPLIED TO POSITIVE TERMINAL.
 4. END PLAY : 0.50 mm MAX..
 5. TAPPED HOLES CAN ACCEPT MAX. MALE USABLE SCREW LENGTH OF 3.0 mm.

DIRECT PRINT MOTOR CODE & DATE CODE ONTO KEEPER RING.
DATE CODE FORMAT AS ESDC-038

69213-9999EP	A	63706-50000
PART NO.	ALT.	PACKAGING

ALL DIMENSIONS ARE IN MILLIMETERS
DO NOT SCALE DRAWING

B	RED DOT ADDED ON +VE SIDE & TOLERANCE CHANGED.	CY XIA	20/27/10
A	FIRST ISSUE (01N3022).	CHWU	02/07/04
ALT. REF.	DESCRIPTION	BY	DATE
MATERIAL	FINISH		
TOLERANCES		A3	
1 DEC PLACE ± 0.15			
3 DEC PLACES ±			
ANGULAR ± 2'			

MOTOR OUTLINE

(NC 613 LM)

JOHNSON ELECTRIC ENGINEERING LTD.
A JOHNSON ELECTRIC GROUP COMPANY.
JOHNSON BUILDING, TAI PO, HONGKONG.
69213-99900

The assembler incorporating this motor into an apparatus, has to ensure that his apparatus meets the appropriate local, national or international standards, directives and specification for EMC. Johnson Electric is prepared to assist the assembler in solving potential EMC problems.

JOHNSON ELECTRIC GROUP OF COMPANIES ("JOHNSON ELECTRIC")
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