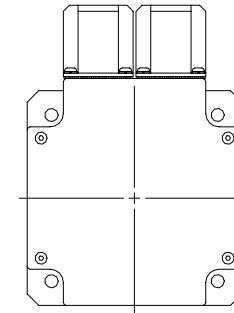
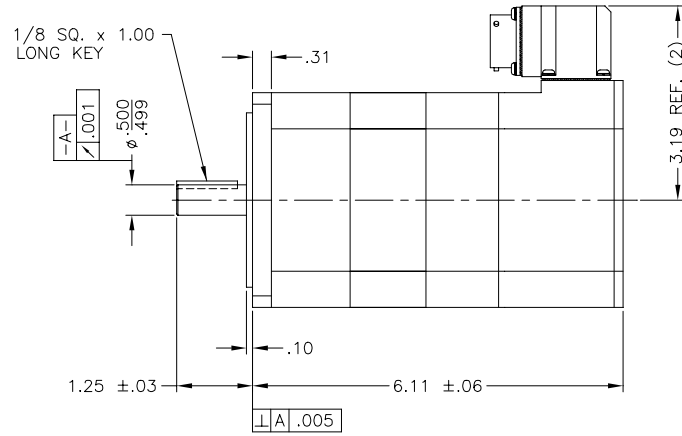
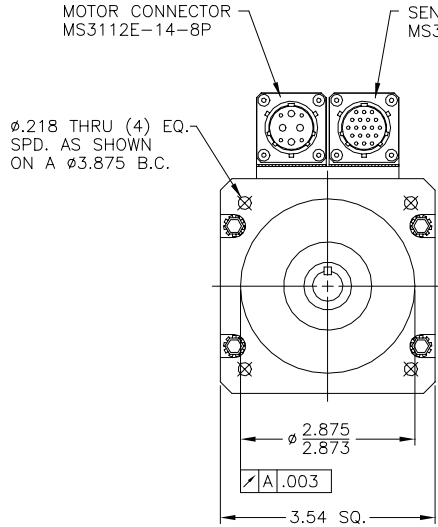
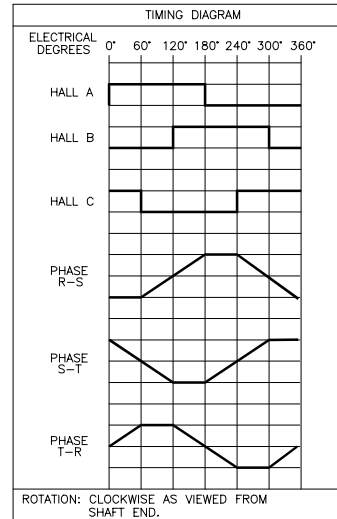


| REVISIONS | | | |
|-----------|-------------|----------|------|
| REV | DESCRIPTION | DATE | APPD |
| P1 | PRELIMINARY | 10-29-02 | |

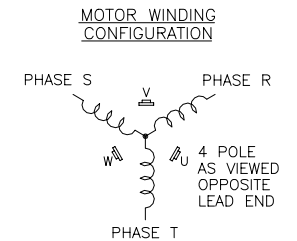


| MOTOR PARAMETERS @25°C | | | |
|-----------------------------------------|------|------------------------|--------|
| | TOL. | UNITS | VALUE |
| MAX. OPERATING SPEED (S _{nl}) | MAX. | R.P.M. | 6000 |
| CONTINUOUS TORQUE (T _c) | MAX. | IN-LB | 17 |
| PEAK TORQUE (T _p) | MAX. | IN-LB | 85 |
| TORQUE SENSITIVITY (K _t) | ±10% | IN-LB/AMPS | 1.69 |
| BACK EMF CONSTANT (K _e) | ±10% | V/K R.P.M. | 20 |
| D.C. RESISTANCE (R _t) | ±10% | OHMS | 1.1 |
| INDUCTANCE (L) | ±30% | mH | 2.6 |
| ROTOR INERTIA (J _a) | NOM. | IN-LB-SEC ² | 0.0010 |
| FRICTION TORQUE (T _f) | NOM. | IN-LB | 0.47 |
| DAMPING TORQUE (T _d) | NOM. | IN-LB/KRPM | 0.1 |
| WINDING TEMPERATURE | MAX. | °C | 155 |
| WEIGHT | NOM. | LBS | 8 |



| MOTOR CONNECTOR PINOUT (MS3112E-14-8P) | |
|----------------------------------------|-------------|
| PIN | FUNCTION |
| 1 | PHASE R |
| 2 | PHASE S |
| 3 | PHASE T |
| 4 | CASE GROUND |

| SENSOR CONNECTOR PINOUT (MS3112E-14-19P) | |
|------------------------------------------|----------------|
| PIN | FUNCTION |
| A | THERMOSTAT |
| B | THERMOSTAT |
| C | HALL B |
| D | NO CONNECTION |
| E | NO CONNECTION |
| F | NO CONNECTION |
| G | NO CONNECTION |
| H | NO CONNECTION |
| J | HALL GROUND |
| K | NO CONNECTION |
| L | +5-15 VDC HALL |
| M | HALL A |
| N | NO CONNECTION |
| P | NO CONNECTION |
| R | HALL C |
| S | NO CONNECTION |
| T | NO CONNECTION |
| U | NO CONNECTION |
| V | NO CONNECTION |



NOTE: THIS DRAWING HAS BEEN CREATED BY AUTOCAD. MANUAL REVISIONS ARE NOT ALLOWED.

| | | | |
|---------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------------------|------------------------------------|
| DRAWN 2-8-02 JFK | CHECKED 2-8-02 JFK | APPROVED 2-8-02 JFK | MCG MOTION CONTROL GROUP |
| TITLE BRUSHLESS D.C. MOTOR | | | |
| TOLERANCES ON DECIMALS FRACTIONS ±1/64 XX ±.010 ANGLES ±1/2° XXX ±.005 UNLESS OTHERWISE SPECIFIED DIMENSION ARE IN INCHES | | SIZE D | NUMBER AB34000 |
| SCALE 1:1 | | SHEET 1 of 1 | |

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