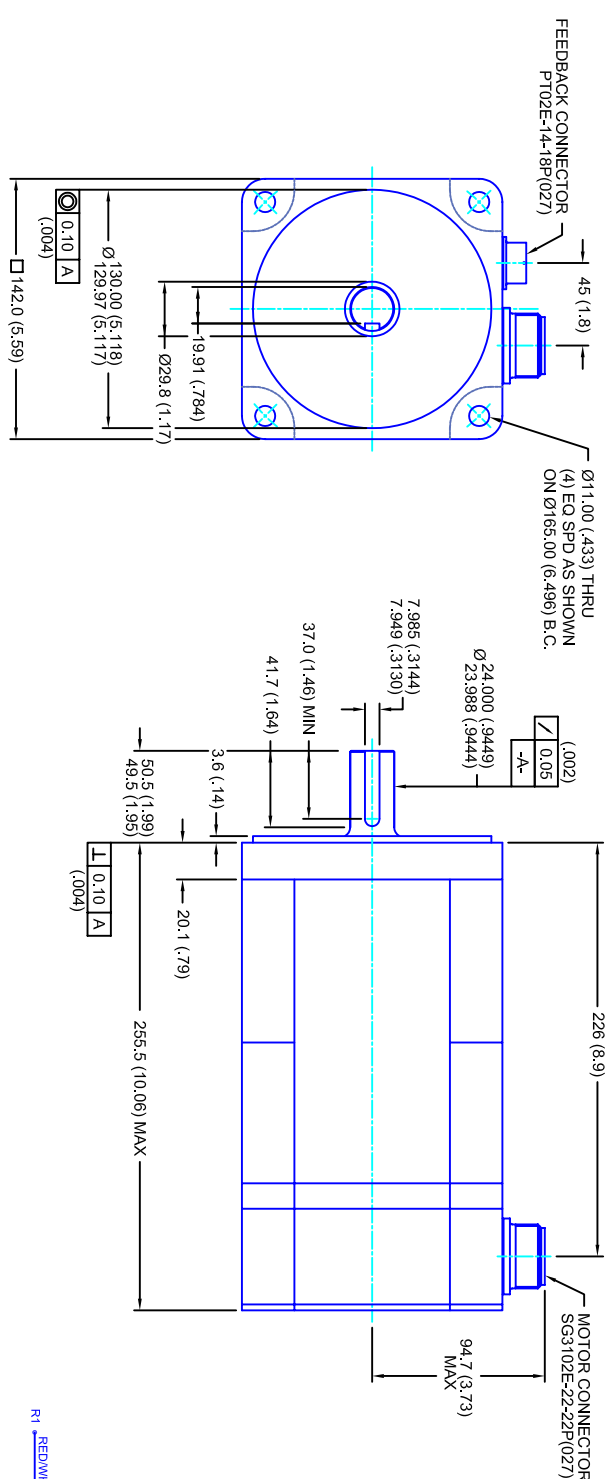


| REVISIONS | | | |
|-----------|-----------------|---------|------|
| REV | DESCRIPTION | DATE | APPD |
| 1 | RELEASE DRAWING | 12/7/05 | |



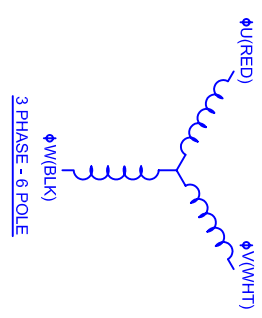
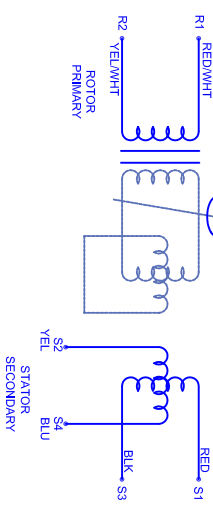
- NOTES:**
1. MILLIMETERS (INCHES)
 2. AXIAL LOAD: 23 KG [50 LBS] MAX
 3. RADIAL LOAD: 68 KG [150 LBS] MAX @ 25.4MM [1.00] FROM FACE
 4. MOTOR SEALED TO IP65
 5. MOTOR SHAFT: 416 STAINLESS STEEL
 6. MOTOR FINISH: BLACK MATT FINISH
 7. MOTOR WEIGHT: 13 KG [33 LBS]

ELECTRICAL DATA

| MOTOR PARAMETERS | UNITS/MEASURE | VALUES |
|-------------------------------------|--|---------------|
| VOLTAGE | VOLTS-AC | 230 |
| AMP TYPE | - | SINE |
| HORSEPOWER | Hp | 4.4 |
| KILOWATTS | KW | 3.3 |
| MAX OPERATING SPEED | RPM | 2700 |
| SPEED @ RATED TORQUE | RPM | 2400 |
| *CONTINUOUS RATED TORQUE @ 2400 RPM | IN-LBS[INm] | 115[13.0] |
| *CONTINUOUS STALL TORQUE | IN-LBS[INm] | 130[14.7] |
| *CONTINUOUS LINE CURRENT | AMPS[RMS/Φ] | 11.7 |
| PEAK TORQUE | IN-LBS[INm] | 390[44.1] |
| PEAK CURRENT | AMPS[RMS/Φ] | 35.1 |
| MAX THEORETICAL ACCEL. | RAD/SEC ² | 35,135 |
| TORQUE SENSITIVITY | KI [N-BS/AMP/RMS/Φ][IN-AMP/RMS/Φ] | 11.1-[1.26] |
| BACK EMF (LINE TO LINE) | Vrms/Krpm | 70 |
| D.C. RESISTANCE (P-P) | OHMS | .54 |
| INDUCTANCE (P-P) | MILLIHENRIES | 3.5 |
| ROTOR INERTIA | IN-LBS-SEC ² [KG-M ²] | .0111[0.0125] |
| STATIC FRICTION | TT | 2.4[0.27] |

CONNECTION CHART

| PT02E-14-18P(027) | | | | SG3102E-22-22P(027) | | | |
|-----------------------|---------------|------------|--|---------------------|---------------|------------|--|
| REST/THERM WIRE LEADS | WIRE FUNCTION | WIRE COLOR | | MOTOR WIRE LEADS | WIRE FUNCTION | WIRE COLOR | |
| A | - | - | | A | Φ U | RED | |
| B | - | - | | B | Φ V | WHT | |
| C | - | - | | C | Φ W | BLK | |
| D | RES SHLD | WHT/BLK | | D | PE GND | GRN/YEL | |
| E | REF | RED/WHT | | | | | |
| F | SIN GND | YEL | | | | | |
| G | COS GND | BLK | | | | | |
| H | SIN | BLU | | | | | |
| J | - | - | | | | | |
| K | - | - | | | | | |
| L | - | - | | | | | |
| M | - | - | | | | | |
| N | THERM | WHT | | | | | |
| P | - | - | | | | | |
| R | REF GND | YEL/WHT | | | | | |
| S | COS | RED | | | | | |
| T | - | - | | | | | |
| U | THERM | WHT | | | | | |



TOLERANCES UNLESS SPECIFIED

BORER: = H12 ✓
 SURFACE FINISH: = 63 Ra ✓
 DECIMAL .xxx ±.12 (005)
 DECIMAL .xx ±.25 (010)
 DECIMAL .x ±.51 (020)
 ANGLE ° ±.03 (016)
 DIM (INCHES) ±.005

REMOVE ALL BURRS, BREAK SHARP EDGES, ZAP PERK (010)

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CUSTOMER: - DRAWING NO. **142MM - 1 STK**
 DATE: 2/5/04
 SCALE: 1/2:1
 DRAWING NO. **CM1421QZ0MKRCS**
 DRAWN: DFLA SHEET: 1 OF 1
 REV. 1

CUSTOM MOTORS INC

230V/KE=70METRES/CONN