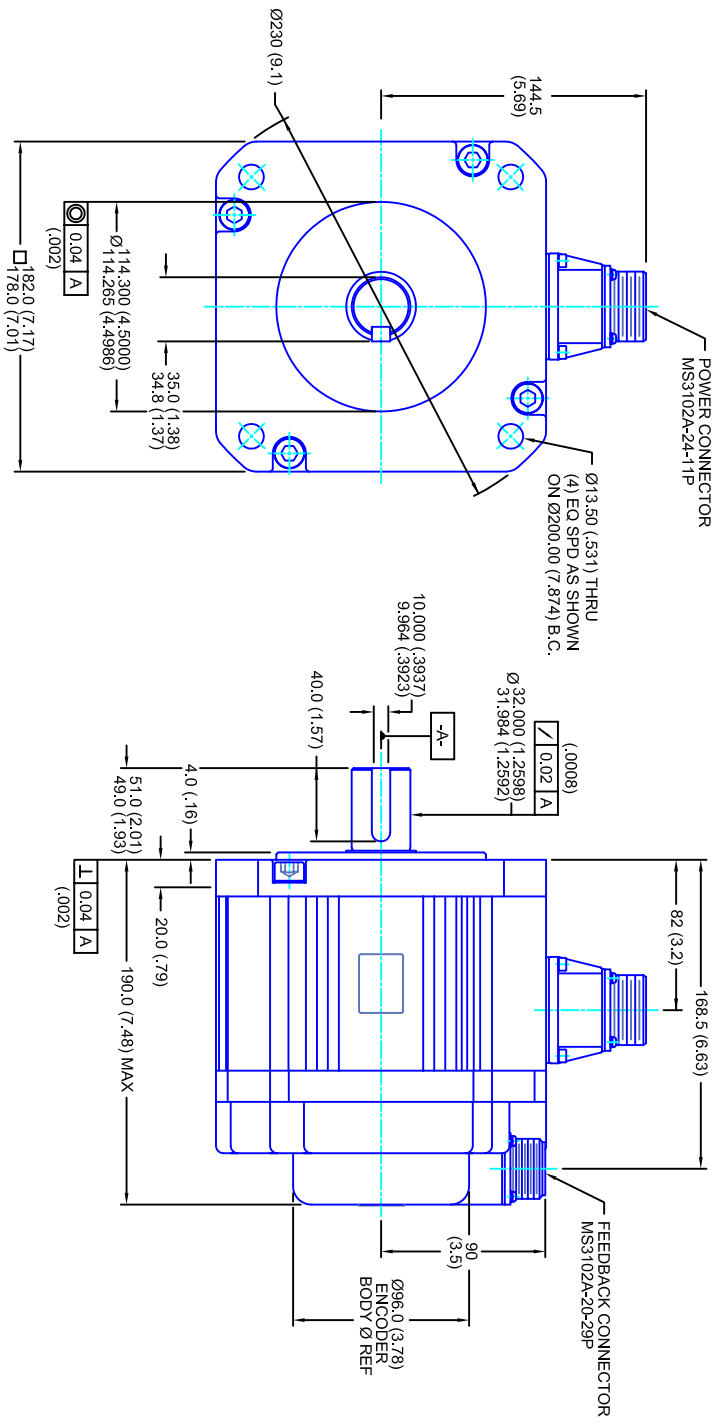


| REVISIONS | | | |
|-----------|------------------------|----------|------|
| REV | DESCRIPTION | DATE | APPD |
| 1 | QUOTE DRAWING | 11/24/03 | |
| 2 | UPDATES PER TAMMA DATA | 9/20/04 | |



MOTOR NOTES:

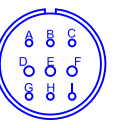
- MILLIMETERS (INCHES)
- AXIAL LOAD: 40 KG [88 LBS] MAX
- RADIAL LOAD: 80 KG [176 LBS] MAX @ 20MM [7/9] FROM FACE
- MOTOR SEALED TO IP65; EXCEPT THE PART WITH CONN & OIL SEAL
- MOTOR SHAFT: SCM440H STEEL
- OIL SEAL: $\phi 38 (1.50)$ PROTRUDES FROM FEC 3.0 (.12)
- MOTOR FINISH: SEMI-GLOSS BLACK
- MOTOR WEIGHT: 19 KG [33 LBS]

ELECTRICAL DATA

| MOTOR PARAMETERS | UNITS/MEASURE | VALUES |
|-------------------------------------|----------------------------------------------|---------------|
| VOLTAGE | VOLTS-AC | 460 |
| AMP TYPE | - | SINE |
| HORSEPOWER | HP | 5.4 |
| KILOWATTS | KW | 4.0 |
| MAX OPERATING SPEED | RPM | 3000 |
| SPEED @ RATED TORQUE | RPM | 2000 |
| *CONTINUOUS RATED TORQUE @ 2000 RPM | IN-LBS(IN) / N-M | 169.0(19.1) |
| *CONTINUOUS LINE CURRENT | AMPS(RMS) (A) | 11.9 |
| PEAK TORQUE | IN-LBS(IN) / N-M | 422.0(47.7) |
| PEAK CURRENT | AMPS(RMS) (A) | 28.9 |
| MAX THEORETICAL ACCEL. | RAD/SEC ² | 16,169 |
| TORQUE SENSITIVITY | KI [M-HS/AMP/RMS] (N/M/AMP/RMS) (N) | 14.2(1.6) |
| BACK EMF (LINE TO LINE) | Vrms/Krpm | 89 |
| D.C. RESISTANCE (P-P) | OHMS | 1.3 |
| INDUCTANCE (P-P) | MILLIHENRIES | 14 |
| ROTOR INERTIA | IN-LBS-SEC ² [KG-M ²] | .026(1.00295) |
| STATIC FRICTION | TT | 8.7(.98) |

ENCODER INFO:

5V - 2048L COMMUTATING



CONNECTION CHART

MSS3102A-20-29P

| FEEDBACK WIRE LEADS | | |
|---------------------|---------------|------------|
| PIN | WIRE FUNCTION | WIRE COLOR |
| A | CH A | BLU |
| B | CH A | BLU/BLK |
| C | CH B | GRN |
| D | CH B | GRN/BLK |
| E | - | - |
| F | CH Z | YEL |
| G | CH Z | YEL/BLK |
| H | CH U | BRN |
| J | CH U | BRN/BLK |
| K | CH V | GRY |
| L | CH V | GRY/BLK |
| M | CH W | WHT |
| N | CH W | WHT |
| P | CASE GND | - |
| R | GND | BLK |
| S | +VDC | RED |
| T | CH WA | WHT/BLK |

MSS3102A-24-11P

| MOTOR WIRE LEADS | | |
|------------------|---------------|------------|
| PIN | WIRE FUNCTION | WIRE COLOR |
| A | - | - |
| B | - | - |
| C | THERM | WHT |
| D | ϕ U | RED |
| E | ϕ V | WHT |
| F | ϕ W | BLK |
| G | PE GND | GRN/YEL |
| H | - | - |
| I | THERM | WHT |

TOLERANCES UNLESS SPECIFIED
 SURFACE FINISH: = 63 Ra ✓
 BORE: = H12 ✓
 DECIMAL .xxx = ±.12 (.005)
 DECIMAL .xx = ±.25 (.010)
 DECIMAL .x = ±.51 (.020)
 DECIMAL . = ±.10 (.016)
 ANGLE (MM/INCHES) = 0.89

REMOVE ALL BURRS, BREAK SHARP EDGES, AND DEBURR ALL SURFACES TO SPECIFIED TOLERANCES.
 FINISH: CM1802R89MK2048CT

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 SCALE: 1/2:1
 DATE: 11/24/03
 DRAWING NO.: CM1802R89MK2048CT
 REV: 2



180MM - 2 STK
 460V/KE-89/MET/2048/CONN

