

SPECIFICATIONS:

| | |
|---|--|
| NUMBER OF PHASES: 4 | ROTOR INERTIA: 4400 g-cm ² (24.06 oz-in ²) NOM |
| STEPS PER REVOLUTION: 200 | DETENT TORQUE: N/A mNm (N/A oz-in) MIN |
| STEP ANGLE: 1.8° | INSULATION CLASS: B |
| STEP TO STEP ACCURACY: ±0.09° [1], [2] | BEARINGS: ABEC 3, DOUBLE SHIELDED |
| POSITIONAL ACCURACY: ±0.09° [1], [3] | TEMP. RISE: 80 °C MAX. [9] |
| HYSTERESIS: N/A% | OPERATING TEMP. RANGE: -20 TO +50 °C |
| SHAFT RUNOUT: 0.05 mm T.I.R. MAX | STORAGE TEMP. RANGE: -30 TO +70 °C |
| RADIAL PLAY: 0.02 mm MAX (.5KG RADIAL LOAD) | RELATIVE HUMIDITY RANGE: 15 TO 85 % |
| END PLAY: 0.08 mm MAX (.5KG AXIAL LOAD) | WEIGHT: 5.2kg (11.464 lb) |

HT34-697D-YAA

REVISIONS

| ECO NO. | REV | DESCRIPTION | DATE | APPROVED |
|---------|-----|-----------------|---------|----------|
| 7490 | A | INITIAL RELEASE | 9/15/16 | J.KORDIK |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | - |

| CONNECTION | [7] | [8] | [1] | [1] | | |
|-------------------|---------------|---------------------------------|--------------------------------|---------------------|-------------------------|----------------------------|
| | SPECIFICATION | RESISTANCE PER PHASE (ohm ±10%) | INDUCTANCE PER PHASE (mH ±20%) | RATED CURRENT (amp) | HOLDING TORQUE (Nm MIN) | HOLDING TORQUE (oz-in Min) |
| UNI-POLAR | | 2.4 | 11.2 | 3.6 | 10 | 1416 |
| BI-POLAR SERIES | | 4.45 | 44.8 | 2.55 | 13 | 1841 |
| BI-POLAR PARALLEL | | 1.375 | 11.2 | 5.1 | 13 | 1841 |

NOTES, UNLESS OTHERWISE SPECIFIED:

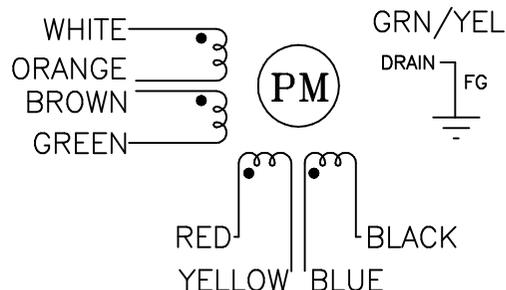
- [1] MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- [2] BETWEEN ANY TWO ADJACENT FULL STEP POSITIONS.
- [3] MAXIMUM ERROR IN 360°.
- 4. HIPOT 1150 VAC, 60 Hz FOR ONE MINUTE.
- [5] LEADS: 8, AWG 22, 7 STRAND MIN., UL AND CSA APPROVED, UL 2517.
- 6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- [7] AS MEASURED ACROSS EACH PHASE.
- [8] AS MEASURED ACROSS EACH PHASE USING AN A.C. INDUCTANCE BRIDGE AT 1 KHz.
- [9] AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED CURRENT APPLIED TO 2 PHASES; WITH MOTOR AT REST.
- [10] ENCODER P/N 970-1005.
ENCODER CABLE 3004-257 MUST BE PURCHASED SEPARATELY.
- 11. ROTOR & STATOR LAMINATED CONSTRUCTION.
- 12. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH THE CURRENT EU RoHS DIRECTIVE.
- [13] MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT, AMP P/N, 'MADE IN (COUNTRY OF ORIGIN)', AND DATE CODE.
- 14. HI TORQUE MOTOR DESIGN, MICROSTEP LAMINATION, INTENDED FOR USE WITH 120V DRIVES WHEN WINDINGS CONNECTED IN PARALLEL AND WITH 220V DRIVES WHEN WINDINGS CONNECTED IN SERIES.
- [15] GROUND LEAD: AWG 22, UL 2517 DRAIN WIRE TO BE CONNECTED TO INSIDE OF REAR ENDBELL.

LABEL DETAIL

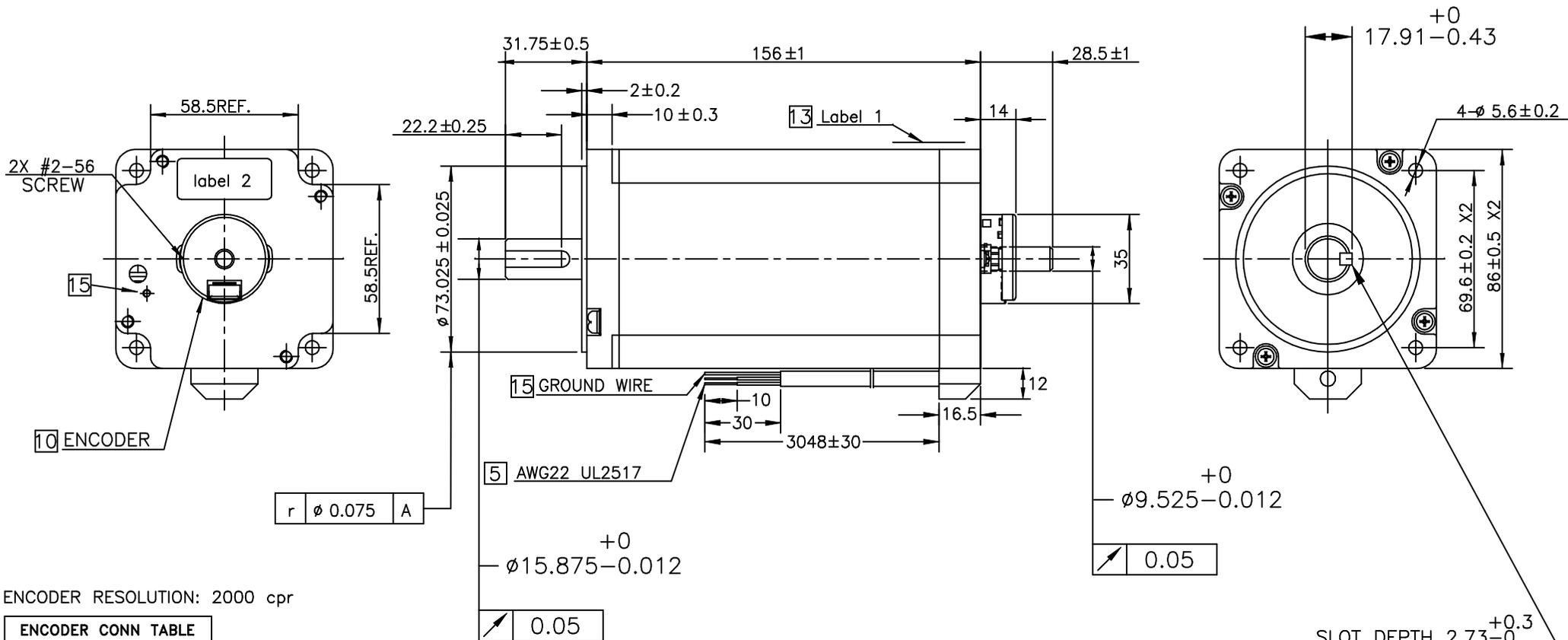


FULL STEP SWITCHING SEQUENCE
PARALLEL CONNECTION, FACING MOUNTING END

| STEP | WHITE | GREEN | RED | BLACK | CW | CCW |
|------|-------|-------|-----|-------|----|-----|
| 0 | + | - | + | - | ↓ | ↑ |
| 1 | - | + | + | - | ↓ | ↑ |
| 2 | - | + | - | + | ↓ | ↑ |
| 3 | + | - | - | + | ↓ | ↑ |
| 4 | + | - | + | - | ↓ | ↑ |



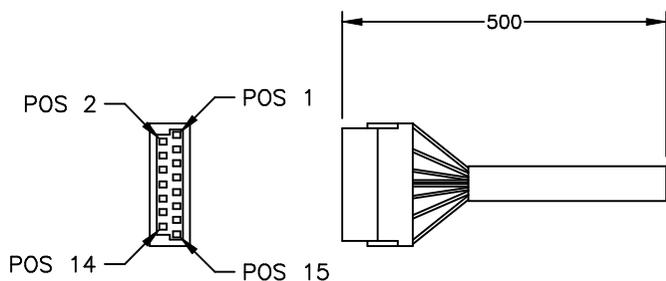
| | | | | | |
|-------------------|---------|-------------------------------|-------------------------------|--------------------------|----------|
| CONTRACT NO. - | | APPLIED MOTION PRODUCTS, INC. | | | |
| APPROVALS | DATE | STEP MOTOR OUTLINE | | | |
| DRAWN K.KESLER | 9/13/16 | | | | |
| CHECKED - | - | | | | |
| APPROVED - | - | | | | |
| APPROVED - | - | B | COMPUTER DATA BASE DRAWING | DWG NO. HT34-697D-YAA | REV A |
| SCALE: NONE | | | SHEET 1 OF 2 | | |



ENCODER RESOLUTION: 2000 cpr

| ENCODER CONN TABLE | | |
|--------------------|--------------|--------|
| PIN | LEAD COLOR | SIGNAL |
| 1 | YELLOW | CH A |
| 2 | YELLOW/WHITE | CH A- |
| 3 | BLUE | CH B |
| 4 | BLUE/WHITE | CH B- |
| 5 | ORANGE | INDEX |
| 6 | ORANGE/WHITE | INDEX- |
| 7 | -- | N/C |
| 8 | -- | N/C |
| 9 | -- | N/C |
| 10 | -- | N/C |
| 11 | -- | N/C |
| 12 | -- | N/C |
| 13 | RED | +Vcc |
| 14 | BLK | GND |
| 15 | -- | N/C |

ENCODER CABLE 3004-257 DETAIL - REF ONLY.



*ALL DIMENSIONS IN MM

| TOLERANCES | | FIRST ANGLE PROJECTION | | APPLIED MOTION PRODUCTS, INC. | | |
|--|--|------------------------|---------|-------------------------------|--------------------------|-----------------------------|
| DECIMALS: MM X.XX = ± 0.13 X.X = ± 0.25 X = ± 0.5 | | | | | | |
| ANGLES: MACH. = $\pm 0.5^\circ$ CHAM. = $\pm 5^\circ$ | | APPROVALS | DATE | | | <h3>STEP MOTOR OUTLINE</h3> |
| COMPUTER DATA BASE DRAWING | | DRAWN K.KESLER | 9/13/16 | B | DWG NO. HT34-697D-YAA | |
| | | CHECKED | - | SCALE: NONE | | SHEET 2 OF 2 |
| | | APPROVED | - | | | |

SLOT DEPTH $2.73 - 0$
MOTOR TO BE SHIPPED
WITH KEY TAPED TO SHAFT
2X $4.763 + 0.00 * 21$ LONG
 $- 0.05$