

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° | BEARINGS: ABEC 3, DOUBLE SHIELDED |
| POSITIONAL ACCURACY: ±0.09° | 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) |

[7] [8] [1] [1]

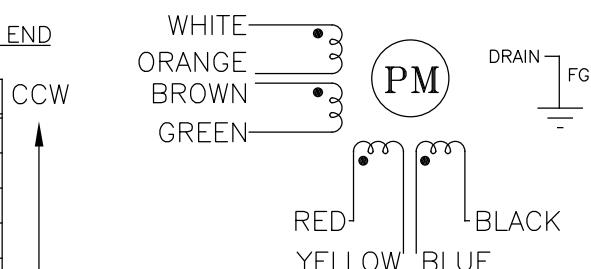
| SPECIFICATION CONNECTION | RESISTANCE PER PHASE (ohm ±10%) | INDUCTANCE PER PHASE (mH ±20%) | RATED CURRENT (amp) | HOLDING TORQUE (Nm MIN) | HOLDING TORQUE (oz-in Min) |
|--------------------------|---------------------------------|--------------------------------|---------------------|-------------------------|----------------------------|
| UNI-POLAR | 2.4 | 11.2 | 3.6 | 10 | 1416 |
| BI-POLAR SERIES | 4.8 | 44.8 | 2.55 | 13 | 1841 |
| BI-POLAR PARALLEL | 1.2 | 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] ADD "D" TO END OF PART NUMBER IF DOUBLE SHAFT IS REQUIRED. DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTIONS.
11. ROTOR & STATOR LAMINATED CONSTRUCTION.
12. THIS MOTOR IS 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.
- [16] ADDED #4-40 TAPPED HOLES TO BE INTERNALLY SEALED WITH TAPE TO PREVENT DUST AND DEBRIS.

FULL STEP SWITCHING SEQUENCE PARALLEL CONNECTION, FACING MOUNTING END

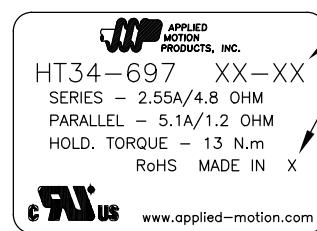
| STEP | WHITE | GREEN | RED | BLACK | CCW |
|------|-------|-------|-----|-------|-----|
| 0 | + | - | + | - | |
| 1 | - | + | + | - | |
| 2 | - | + | - | + | |
| 3 | + | - | - | + | |
| 4 | + | - | + | - | |



HT34-697

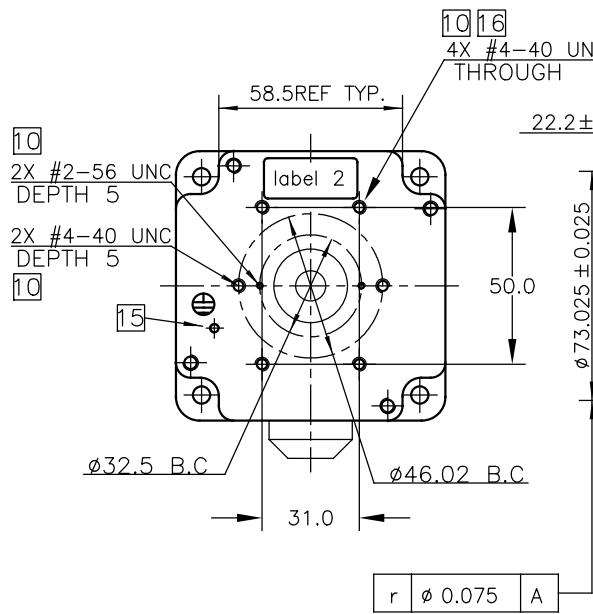
| REVISIONS | | | | |
|-----------|-----|---------------------|----------|----------|
| ECO NO. | REV | DESCRIPTION | DATE | APPROVED |
| 7345 | A | INITIAL RELEASE | 1/5/16 | J.KORDIK |
| 7376 | B | MANU. SPEC. CHANGES | 1/29/16 | J.KORDIK |
| 7490 | C | NOTE FIX | 9/15/16 | J.KORDIK |
| 7606 | D | ADD HOLES FOR COVER | 3/30/17 | J.KORDIK |
| 7767 | E | ADD UL TO LABEL | 11/27/17 | J.KORDIK |
| 8158 | F | RESISTANCE VALUES | 2/21/19 | J.KORDIK |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | - |
| - | - | - | - | - |

LABEL DETAIL

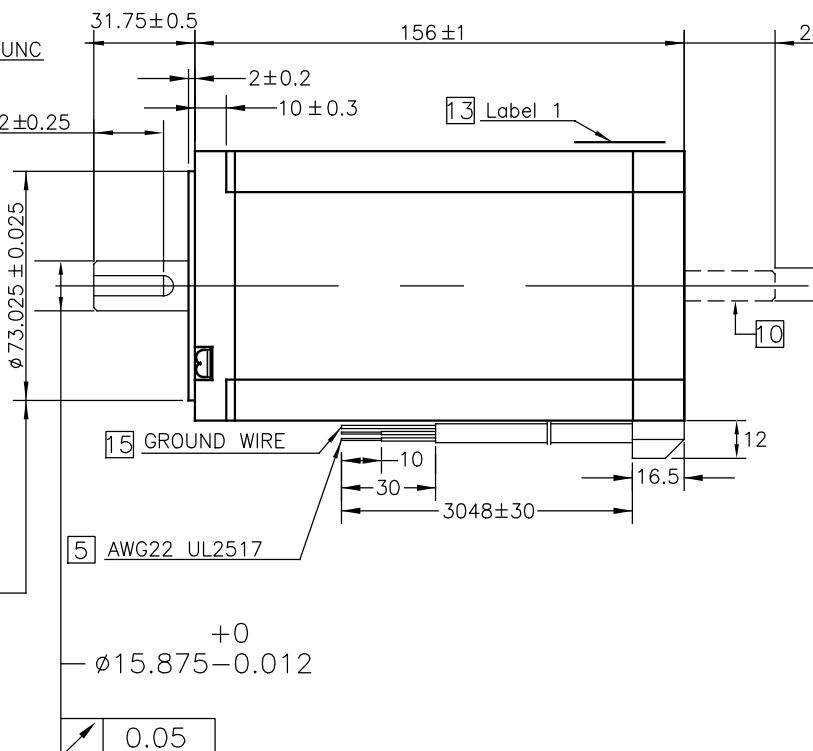


| CONTRACT NO. | | APPLIED MOTION PRODUCTS, INC. | | |
|----------------|---------|-------------------------------|-------------------------------|---------------------|
| APPROVALS | DATE | STEP MOTOR OUTLINE | | |
| DRAWN N.DEY | 11/8/17 | | | |
| CHECKED | - | B | COMPUTER DATA BASE DRAWING | DWG NO. HT34-697 |
| APPROVED | - | REV F | SCALE: NONE | SHEET 1 OF 2 |
| APPROVED | - | | | |

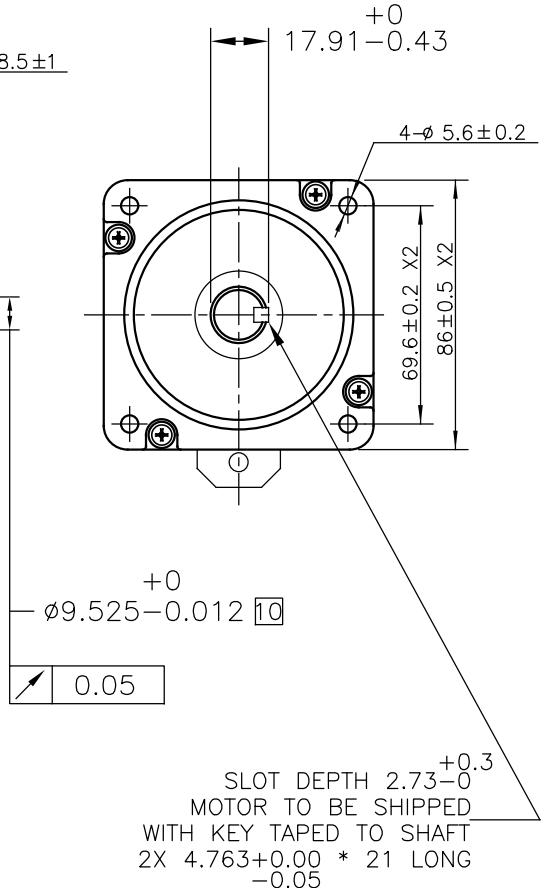
REAR VIEW



SIDE VIEW



FRONT VIEW



*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 | STEP MOTOR OUTLINE | | |
| | | DRAWN N.DEY | 11/8/17 | B | DWG NO. HT34-697 | REV F |
| | | CHECKED — | — | SCALE: NONE | | SHEET 2 OF 2 |
| COMPUTER DATA BASE DRAWING | | APPROVED — | — | | | |