

SPECIFICATIONS:

| | |
|--|---|
| STEPS PER REVOLUTION: 200 | ROTOR INERTIA: 460 G-CM ² (2.51 OZ-IN ²) NOM |
| STEP ANGLE: 1.8° | DETENT TORQUE: 714 G-CM (9.91 OZ-IN) MIN |
| STEP TO STEP ACCURACY: ±5 % [1], [2] | INSULATION CLASS: B |
| POSITIONAL ACCURACY: ±5 % [1], [3] | BEARINGS: ABEC 3, DOUBLE SHIELDED |
| HYSTERESIS: - % | WEIGHT: 1.0 KG (2.2 LB) |
| SHAFT RUNOUT: 0.05 T.I.R. | TEMP. RISE: 80 °C MAX. [8] |
| RADIAL PLAY: 0.02 MAX W/A .5KG RADIAL LOAD | OPERATING TEMP. RANGE: -20 TO +50 °C |
| END PLAY: 0.08 MAX W/A .5KG AXIAL LOAD | STORAGE TEMP. RANGE: -30 TO +70 °C |
| | RELATIVE HUMIDITY RANGE: 15 TO 85 % |

HT23-600

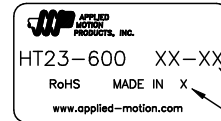
REVISIONS

| ECO NO. | REV | DESCRIPTION | DATE | APPROVED |
|---------|-----|---------------------------|---------|----------|
| 5976 | A | INITIAL RELEASE | 8/28/09 | J KORDIK |
| 6090 | B | STANDARDIZE ENCODER HOLES | 3/11/10 | J KORDIK |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

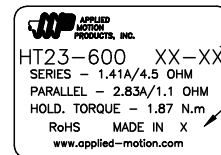
| CONNECTION | NUMBER OF PHASE | RESISTANCE PER PHASE OHM ±10% | INDUCTANCE PER PHASE mH ±20% | RATED CURRENT Amp | RATED VOLTAGE V | HOLDING TORQUE |
|-------------------|-----------------|-------------------------------|------------------------------|-------------------|-----------------|----------------|
| | | | | | | N.m Min [1] |
| BI-POLAR SERIES | 2 | 4.5 | 15.6 | 1.41 | 6.4 | 1.87 |
| BI-POLAR PARALLEL | 2 | 1.1 | 3.9 | 2.83 | 3.2 | 1.87 |
| UNI-POLAR | 4 | 2.3 | 3.9 | 2.00 | 4.6 | 1.32 |

NOTES, UNLESS OTHERWISE SPECIFIED:

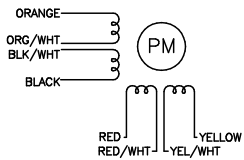
- [1] MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- [2] BETWEEN ANY TWO ADJACENT STEP POSITIONS.
- [3] MAXIMUM ERROR IN 360°.
4. HIPOT 500 VAC, 60 Hz FOR ONE MINUTE.
5. LEADS: 8, 22AWG, 7 STRAND MIN., UL AND CSA APPROVED, UL 3265, UL1430.
6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- [7] AS MEASURED USING AN A.C. INDUCTANCE BRIDGE, AT 1KHz.
- [8] AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED VOLTAGE APPLIED TO 2 PHASES; WITH MOTOR AT REST.
- [9] SHAFT OPTION: ADD "D" TO END OF PART NUMBER ONLY IF DOUBLE SHAFT REQUIRED. DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTIONS.
10. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".
- [1] MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT, 'MADE IN (COUNTRY OF ORIGIN)' AND DATE CODE.



LABEL DETAIL
BOTH OPTIONS ACCEPTABLE



WIRING DIAGRAM

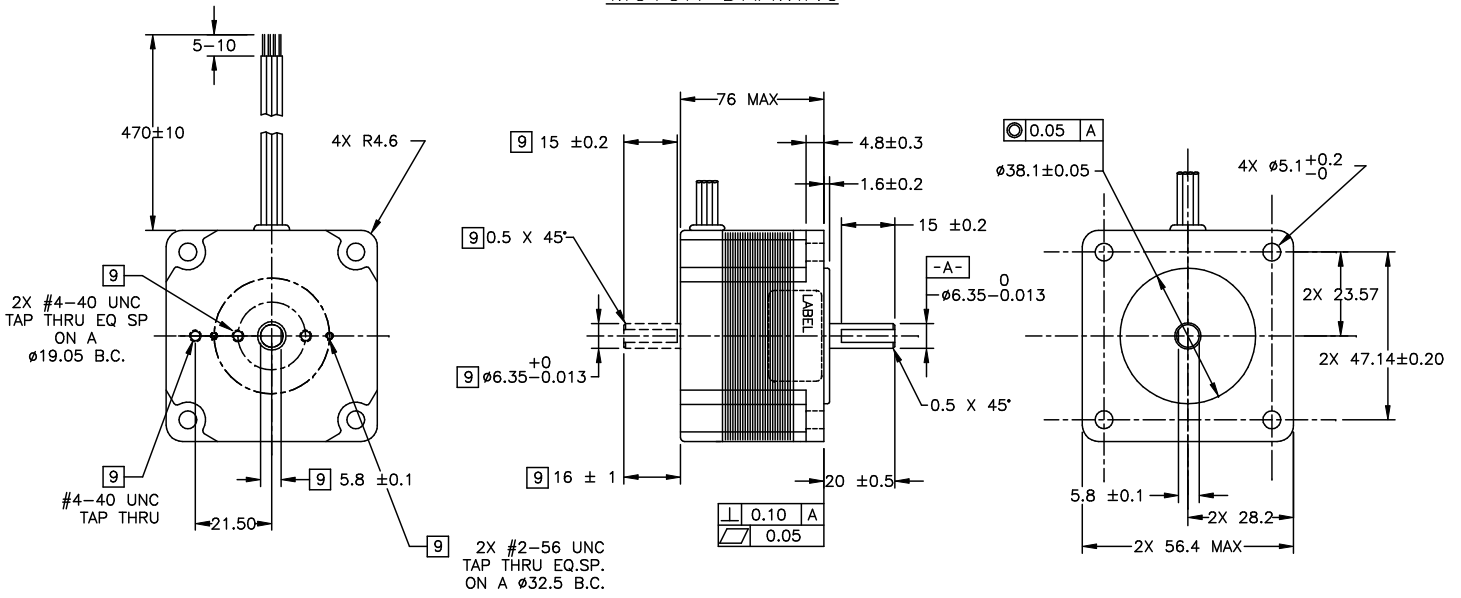


DRIVE SEQUENCE MODEL
BI-POLAR FULL STEP

| STEP | ORANGE & BLK/WHT | BLACK & ORG/WHT | RED & YEL/WHT | YELLOW & RED/WHT | |
|------|------------------|-----------------|---------------|------------------|---|
| 1 | + | - | + | - | CW (CLOCKWISE) AND CCW (COUNTER-CLOCKWISE) ROTATION WHEN SEEN FROM THE FLANGE SIDE OF THE MOTOR |
| 2 | - | + | + | - | |
| 3 | - | + | - | + | |
| 4 | + | - | - | + | |

| | | | | | | | |
|-------------------|---------|-------------------------------|----------------------------|--------------|----------|-----|---|
| CONTRACT NO. - | | APPLIED MOTION PRODUCTS, INC. | | | | | |
| APPROVALS | DATE | STEP MOTOR OUTLINE | | | | | |
| DRAWN R. JONEZ | 1/27/09 | | | | | | |
| CHECKED | | B | COMPUTER DATA BASE DRAWING | DWG NO. | HT23-600 | REV | B |
| APPROVED | | | SCALE: NONE | SHEET 1 OF 2 | | | |

MOTOR DRAWING



| | | | | |
|--|---|------------------------|--|--------------|
| TOLERANCES DECIMALS: MM (INCH) X.XXX = ± (.005) X.XX = ±0.13 (.010) X.X = ±0.25 (.020) ANGLES: MACH. = ±5° CHAM. = ±5° | THIRD ANGLE PROJECTION | | APPLIED MOTION PRODUCTS, INC. STEP MOTOR OUTLINE | |
| | APPROVALS DRAWN R. JONEZ CHECKED | DATE 8/17/09 | | |
| COMPUTER DATA BASE DRAWING | APPROVED | | SCALE: NONE | SHEET 2 OF 2 |