

## SPECIFICATIONS:

STEPS PER REVOLUTION: 200	ROTOR INERTIA: 57.0 G-CM <sup>2</sup> ( .31 OZ-IN <sup>2</sup> ) REF
STEP ANGLE: 1.8°	DETENT TORQUE: 152.9 G-CM ( 2.12 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: 280 G (9.8 OZ) APPROXIMATE
SHAFT RUNOUT: 0.03 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 %

[7]

SPECIFICATION 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
BI-POLAR SERIES	2	7.0	12.0	0.85	6.0	0.37
BI-POLAR PARALLEL	2	1.7	3.0	1.70	2.9	0.37
UNI-POLAR	4	3.5	3.0	1.20	4.2	0.29

HT17-271

## REVISIONS

ECO NO.	REV	DESCRIPTION	DATE	APPROVED
5976	A	INITIAL RELEASE	8/28/09	J KORDIK
6090	B	STANDARDIZE ENCODER HOLES	3/29/10	J KORDIK

## NOTES, UNLESS OTHERWISE SPECIFIED:

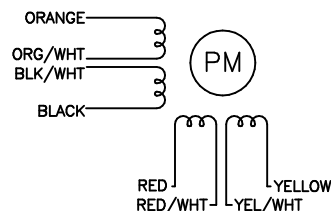
- [1] MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- [2] BETWEEN ANY TWO ADJACENT STEP POSITIONS.
- [3] MAXIMUM ERROR IN 360°.
4. HIPOT 500 VAC, 60 Hz FOR ONE MINUTE.
5. LEADS: 8, 26 AWG, 7 STRAND MIN., UL AND CSA APPROVED, UL 1430 OR UL 3265.
6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- [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: IF DOUBLE SHAFT REQUIRED ADD "D" TO END OF PART NUMBER, DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTIONS.
10. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".
- [11] MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT, 'MADE IN (COUNTRY OF ORIGIN)' AND DATE CODE.

## DRIVE SEQUENCE MODEL BI-POLAR FULL STEP

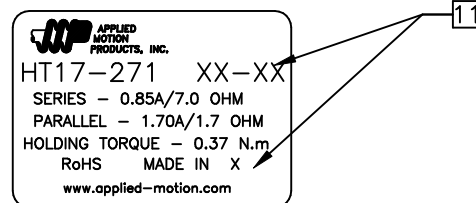
STEP	ORANGE & BLK/WHT	BLACK & ORG/WHT	RED & YEL/WHT	YELLOW & RED/WHT
1	+	-	+	-
2	-	+	+	-
3	-	+	-	+
4	+	-	-	+


CW (CLOCKWISE) AND CCW (COUNTER-CLOCKWISE) ROTATION  
WHEN SEEN FROM THE FLANGE SIDE OF THE MOTOR

## WIRING DIAGRAM

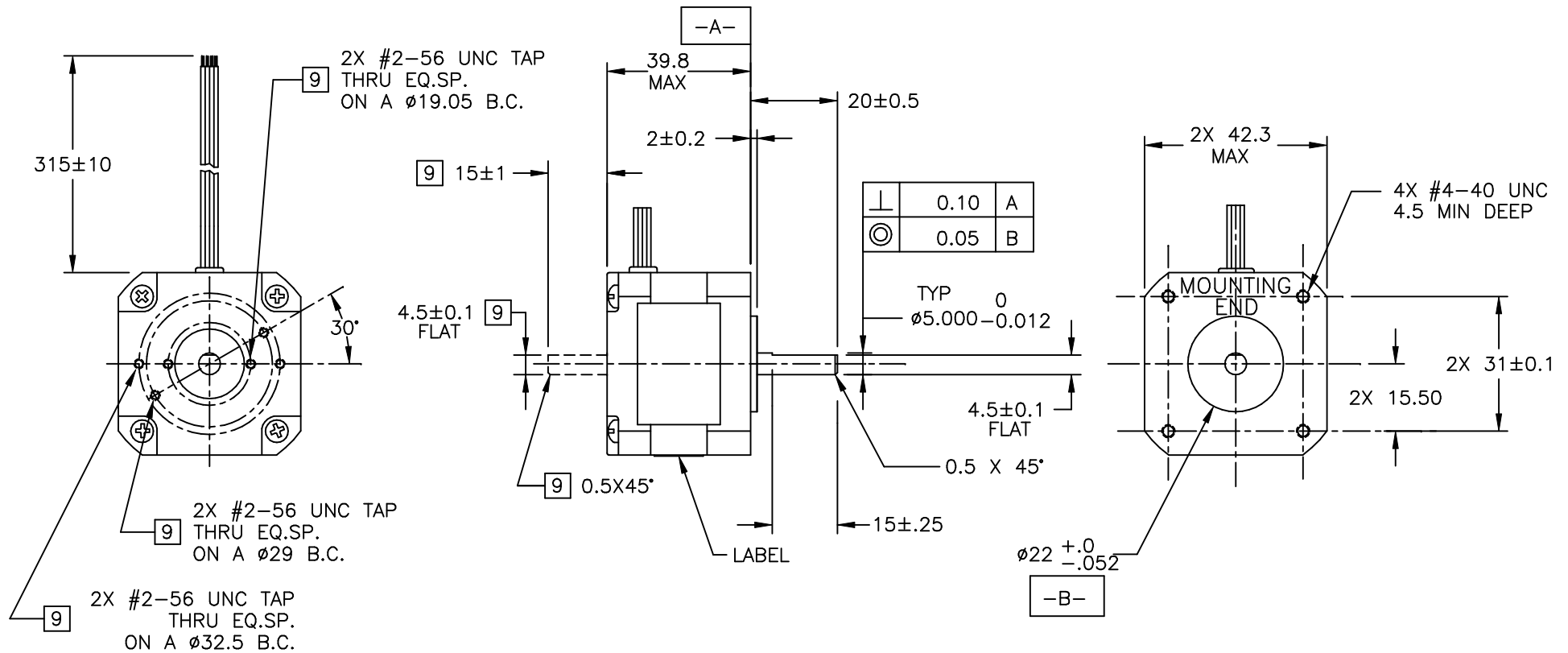



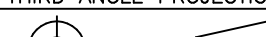
## LABEL DETAIL



CONTRACT NO. —		 APPLIED MOTION PRODUCTS, INC.			
APPROVALS	DATE	STEP MOTOR OUTLINE			
DRAWN R. JONEZ	8/19/09				
CHECKED					
APPROVED					
APPROVED		B	COMPUTER DATA BASE DRAWING	DWG NO. HT17-271	REV B
APPROVED		SCALE: NONE		SHEET 1 OF 2	

# MOTOR DRAWING



TOLERANCES		THIRD ANGLE PROJECTION		 APPLIED MOTION PRODUCTS, INC.	
DECIMALS: MM (INCH) X.XXX= ± (.005) X.XX = ±0.13 (.010) X.X = ±0.25 (.020) ANGLES: MACH. = ±.5° CHAM. = ±5°					
COMPUTER DATA BASE DRAWING		APPROVALS	DATE	STEP MOTOR OUTLINE	
		DRAWN R. JONEZ	8/18/09		
		CHECKED		B	DWG NO. HT17-271
		APPROVED		SCALE: NONE	
				SHEET 2 OF 2	