SPECIFICATIONS:

STEPS PER REVOLUTION: 200	ROTOR INERTIA: 38 G-CM ^{2} (0.21 OZ-IN^2) REF
STEP ANGLE: 1.8°	DETENT TORQUE: 122 G-CM (1.7 OZ-IN) MIN
STEP TO STEP ACCURACY: ±.09 DEGREES [1], [2]	INSULATION CLASS: B
POSITIONAL ACCURACY: ±5 % [1], [3]	BEARINGS: ABEC 3, DOUBLE SHIELDED
HYSTERESIS: – %	WEIGHT: 210 G (7.4 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 %

HT17–270

REVISIONS

ECO NO.	REV	DESCRIPTION	DATE	APPROVED
5976	A	INITIAL RELEASE	8/28/09	J KORDIK
6027	B	ROTOR INERTIA SPEC REVISED	12/14/09	J KORDIK
6090	C	STANDARDIZE ENCODER HOLES	3/29/10	J KORDIK
7446	D	REVISE NOTE 10	6/6/16	J KORDIK
8165	E	ROTOR INERTIA SPEC REVISED	2/28/19	J KORDIK
8250	F	ADD UL TO LABEL, REMOVE HOLES	6/5/19	J KORDIK

SPECIFICATION / CONNECTION	NUMBER OF PHASE	RESISTANCE PER PHASE OHM ±10%	INDUCTANCE PER PHASE mH ±20% [7]	RATED CURRENT Amp	RATED VOLTAGE V	HOLDING TORQUE N.m Min [1]
BI-POLAR SERIES	2	74	88.0	0.22	16.3	0.24
BI-POLAR PARALLEL	2	18.5	22.0	0.44	8.1	0.24
UNI-POLAR	4	37	22.0	0.31	11.5	0.17

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 3265, UL 1430.
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 IS MANUFACTURED IN COMPLIANCE WITH THE CURRENT EU RoHS DIRECTIVE.
[11] MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT, 'MADE IN (COUNTRY OF ORIGIN)' AND DATE CODE.

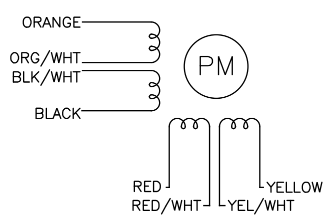
DRIVE SEQUENCE MODEL
BI-POLAR FULL STEP

CW ↓ / CCW ↑

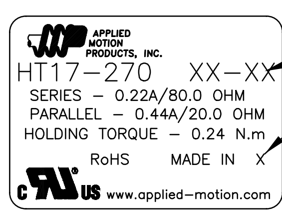
STEP	ORANGE & BLK/WHT	BLACK & ORG/WHT	RED & YEL/WHT	YELLOW & RED/WHT
1	+	–	+	–
2	–	+	+	–
3	–	+	–	+
4	+	–	–	+

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

WIRING DIAGRAM



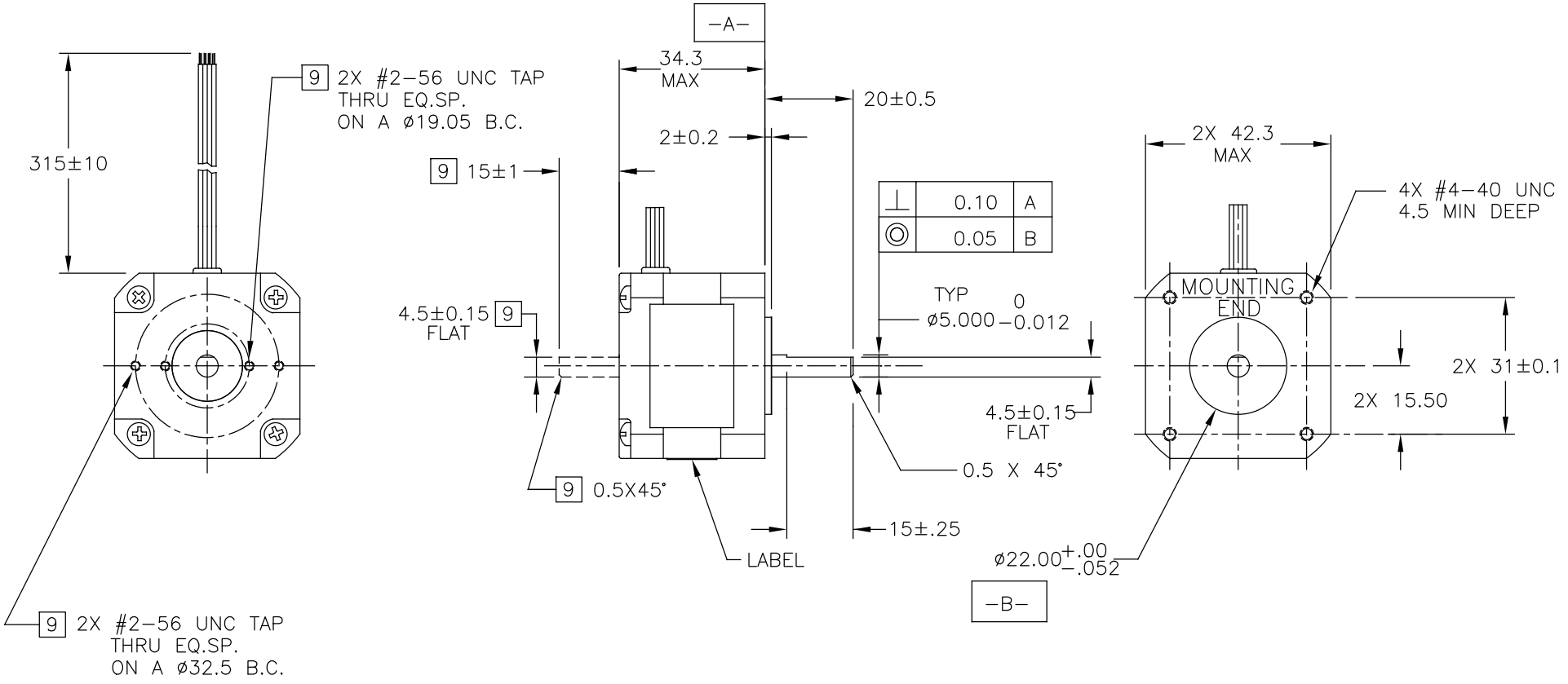
LABEL DETAIL



[11]

CONTRACT NO. –		APPLIED MOTION PRODUCTS, INC.	
APPROVALS	DATE	STEP MOTOR OUTLINE	
DRAWN R.JONEZ	8/20/09		
CHECKED			
APPROVED		B — COMPUTER DATA BASE DRAWING	DWG NO. HT17–270 — REV F
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°			STEP MOTOR OUTLINE	
	APPROVALS	DATE	B	DWG NO. HT17–270 REV F
	DRAWN R.JONEZ	8/20/09		
COMPUTER DATA BASE DRAWING	CHECKED		SCALE: NONE	SHEET 2 OF 2
	APPROVED			