

SPECIFICATIONS:	
STEPS PER REVOLUTION: 200	ROTOR INERTIA: 480 G-CM ² (2.62 OZ-IN ²) NOM
STEP ANGLE: 1.8°	DETENT TORQUE: N/AG-CM (N/A OZ-IN) MIN
STEP TO STEP ACCURACY: ±0.09 DEGREE	INSULATION CLASS: B
POSITIONAL ACCURACY: ±0.09 DEGREES	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.
RADIAL PLAY: 0.02 MAX W/0.45 KG RADIAL LOAD	OPERATING TEMP. RANGE: -20 TO +50 °C
END PLAY: 0.08 MAX W/ 1.0 KG AXIAL LOAD	STORAGE TEMP. RANGE: -40 TO +70 °C
	RELATIVE HUMIDITY RANGE: 5 TO 95 %

[7]		[8]				
SPECIFICATION	NUMBER OF PHASE	RESISTANCE PER PHASE OHM ±10%	INDUCTANCE PER PHASE mH ±20%	RATED CURRENT Amp	RATED VOLTAGE V	HOLDING TORQUE Nm Min
BI-POLAR SERIES	2	18	60.8	0.71	12.6	1.6
BI-POLAR PARALLEL	2	4.5	15.2	1.41	6.3	1.6
UNI-POLAR	4	9.0	15.2	1.00	9.0	1.3

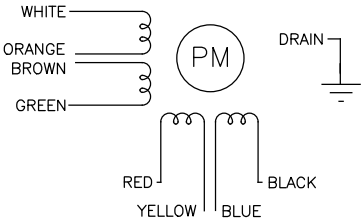
NOTES, UNLESS OTHERWISE SPECIFIED:

- [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, 24AWG, 7 STRAND MIN.,UL AND CSA APPROVED, UL 1430 OR UL 3265. CABLE, 8 COND. W/DRAIN. CABLE 666-2107
6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- [7] MEASUREMENTS MADE WITHOUT CABLE.
- [8] AS MEASURED ACROSS ANY WINDING USING AN A.C. INDUCTANCE BRIDGE, AT 1KHz. MEASUREMENTS MADE WITHOUT CABLE.
- [9] AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED VOLTAGE APPLIED TO 2 PHASES; WITH MOTOR AT REST.
10. HIGH TORQUE MOTOR DESIGN, MICROSTEP LAMINATION.
11. ROTOR & STATOR LAMINATED CONSTRUCTION.
- [12] DRAIN WIRE TO BE CONNECTED TO INSIDE OF REAR ENDBELL.
13. THIS MOTOR IS MANUFACTURED IN COMPLIANCE WITH THE CURRENT EU RoHS DIRECTIVE.
- [14] MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT, DATE CODE AND "MADE IN (COUNTRY OF ORIGIN)".
- [15] SHAFT OPTION: IF DOUBLE SHAFT REQUIRED ADD "D" TO END OF PART NUMBER. DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTION.

BIPOLAR, FULL STEP, 2 PHASE ON
SERIES CONNECTED

SWITCHING SEQUENCE FOR CW ROTATION
FACING MOUNTING END
WITH ORANGE WIRE CONNECTED TO BROWN,
YELLOW CONNECTED TO BLUE.

STEP	WHITE	GREEN	RED	BLACK
0	+	—	+	—
1	—	+	+	—
2	—	+	—	+
3	+	—	—	+
4	+	—	+	—

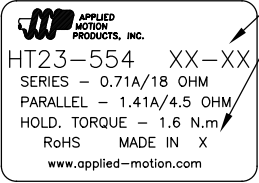


REVISIONS				
ECO NO.	REV	DESCRIPTION	DATE	APPROVED
5349	A	INITIAL RELEASE	11/7/06	J.Kordik
5462	B	REVISE NOTE 12, ADD LABEL	4/4/07	J.Kordik
5891	C	REMOVE D FROM PN, DASH SHFT OPTN	3/9/09	J.Kordik
6165	D	REMOVE CONN, BOOT	9/10/10	J.Kordik
6197	E	REVISE CABLE P/N	10/27/10	J.Amos
6203	F	REVISE SPECS	12/21/10	J.Amos
7445	G	REVISE NOTE 13	6/3/16	J.Kordik
8221	H	ADD ENCODER MOUNTING HOLES	5/3/19	J.Kordik

HT23-554

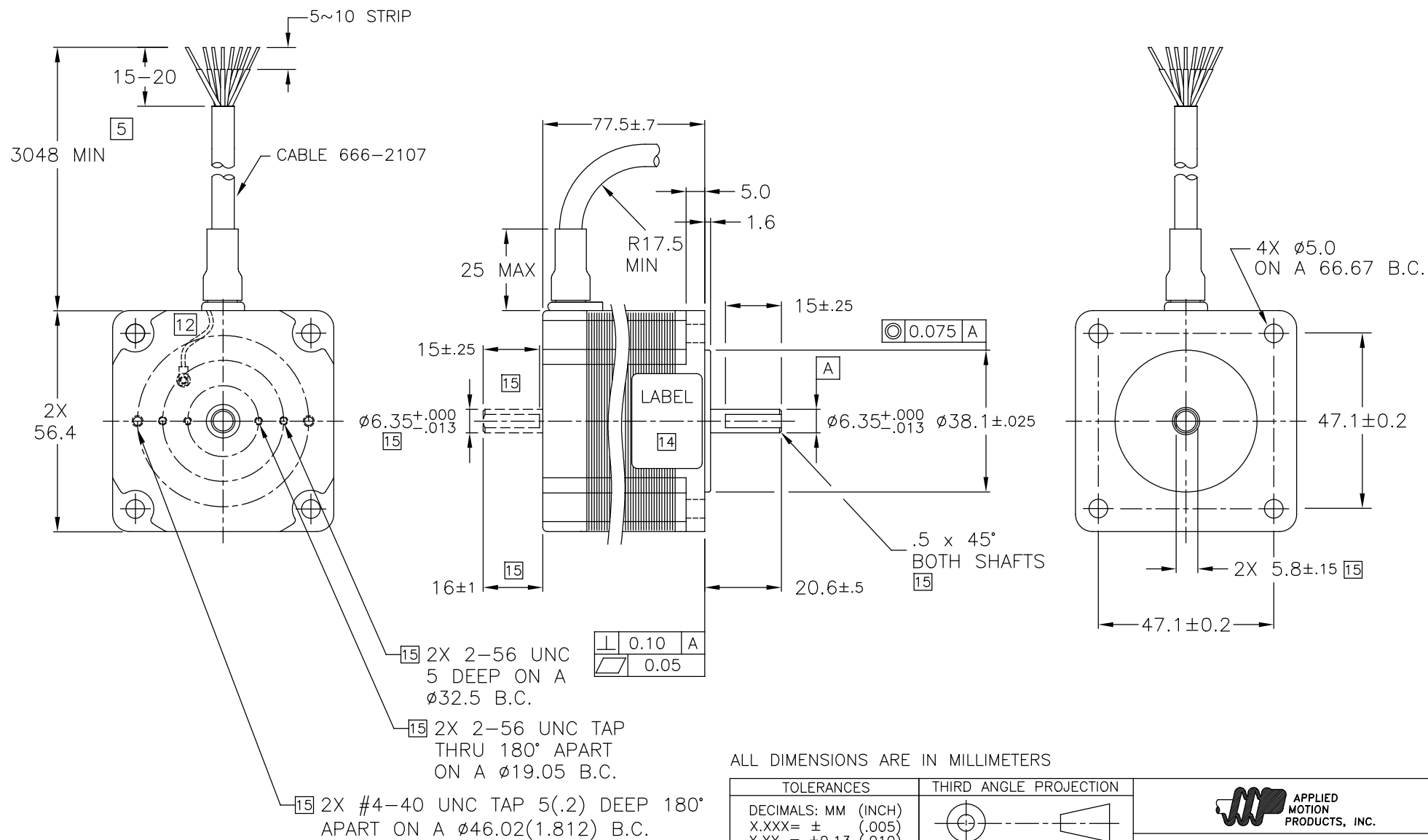


LABEL DETAIL
BOTH OPTIONS ACCEPTABLE



CONTRACT NO. —		 APPLIED MOTION PRODUCTS, INC.				
APPROVALS	DATE	STEP MOTOR OUTLINE				
DRAWN <i>R.JONEZ</i>	<i>11/7/06</i>					
CHECKED		B	COMPUTER DATA BASE DRAWING	DWG NO.	HT23-554	REV H
APPROVED						
APPROVED		SCALE: NONE		SHEET 1 OF 2		

SEE SHEET 1 FOR REVISIONS



ALL DIMENSIONS ARE IN MILLIMETERS

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.	
		APPROVALS		DATE	
		DRAWN <i>R.JONEZ</i>		<i>9/3/10</i>	
		CHECKED			
COMPUTER DATA BASE DRAWING		APPROVED			
		SCALE: NONE		SHEET 2 OF 2	