

**SPECIFICATIONS:**

STEPS PER REVOLUTION: 200	ROTOR INERTIA: 4000 G-CM <sup>2</sup> (21.9 OZ-IN <sup>2</sup> ) NOM
STEP ANGLE: 1.8°	HOLDING TORQUE: 66.0KG-CM ( 917 OZ-IN)MIN [1]
STEP TO STEP ACCURACY: ± 5 % [1, 2]	DETENT TORQUE: N/A G-CM ( N/A OZ-IN)
POSITIONAL ACCURACY: ± 5 % [1, 3]	
HYSTERESIS: %	INSULATION CLASS: B
WINDING RESISTANCE: 0.97 OHM ±10% AT 25° [7]	BEARINGS: ABEC 3, DOUBLE SHIELDED
WINDING INDUCTANCE: 5.5 mH ± 20% [8]	
PHASE VOLTAGE: 3.8 VDC	TEMP. RISE: 80°C MAX. [9]
PHASE CURRENT: 4.0 AMP (RATED) [12]	OPERATING TEMP. RANGE: -20 TO +50°C
	STORAGE TEMP. RANGE: -40 TO 70°C
	RELATIVE HUMIDITY RANGE: 5 TO 95 %
SHAFT RUNOUT: 0.05 T.I.R.	THERMAL RESISTANCE, WIND'G TO AMBIENT: 2°C/WATT
RADIAL PLAY: 0.02 MAX W/A .45KG RADIAL LOAD.	
END PLAY: 0.08 MAX W/A .45KG AXIAL LOAD.	WEIGHT: 3.93 KG (8.66 LB)

HT34-478

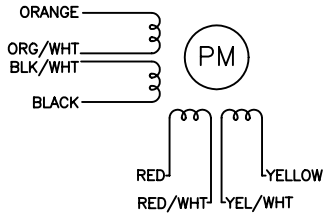
REVISIONS				
ECO NO.	REV	DESCRIPTION	DATE	APPROVED
4347	A	INITIAL RELEASE	7/24/01	<i>K. Kondik</i>
4372	B	CHG LEAD LENGTH WAS 305	12/17/01	<i>R. Hagelwood</i>
4374	C	CHG TO BIPOLAR PARALLEL	1/15/02	<i>R. Hagelwood</i>
5017	D	ADD 4-40 HOLES ON REAR	9/6/02	<i>R. Hagelwood</i>
5023	E	mod tol shft flats & lenght	12/12/02	<i>R. Hagelwood</i>
5235	F	ADD EU COMPLIANCE NOTES	8/25/05	<i>R. Hagelwood</i>

NOTES, UNLESS OTHERWISE SPECIFIED:

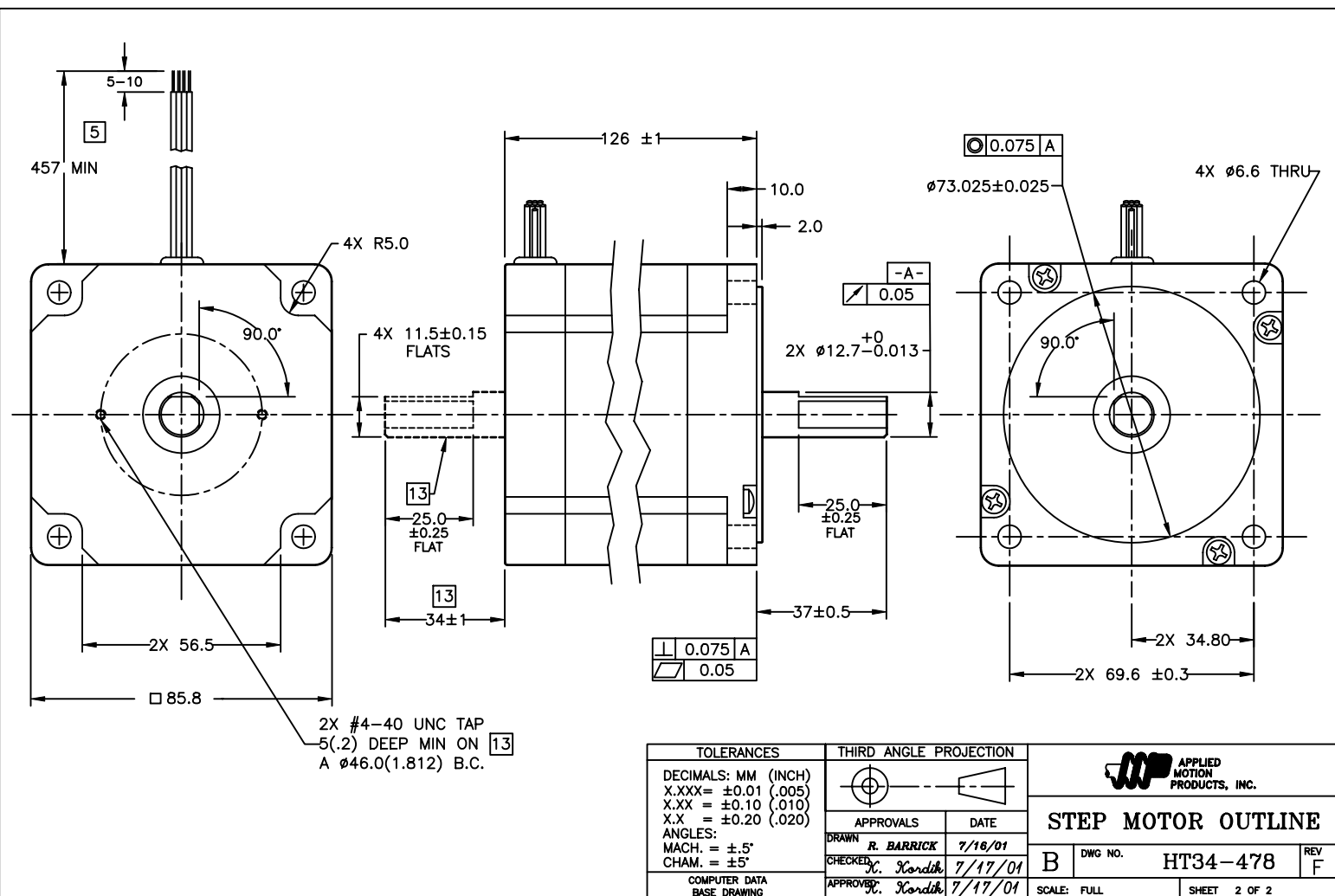
- [1] MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- [2] BETWEEN ANY TWO ADJACENT STEP POSITIONS.
- [3] MAXIMUM ERROR IN 360°.
4. HIPOT 500 VAC, 60 Hz FOR ONE MINUTE.
5. LEADS: 8 AWG 22,7 STRAND MIN. UL AND CSA APPROVED, UL 3266.
6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- [7] AS MEASURED ACROSS ANY WINDING.
- [8] AS MEASURED ACROSS ANY WINDING USING AN A.C. INDUCTANCE BRIDGE, AT 1KHz, 1 AMP.
- [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.
11. ROTOR & STATOR LAMINATED CONSTRUCTION.
- [12] UNIPOLAR RATING.
- [13] ADD "D" TO END OF PART NUMBER IF DOUBLE SHAFT IS REQUIRED. (BOLT PATTERN IS SUPPLIED WHEN DOUBLE SHAFT IS REQUESTED.)
14. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".
15. MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT.

**BIPOLAR, FULL STEP, 2 PHASE ON PARALLEL CONNECTED**  
SWITCHING SEQUENCE FOR CW ROTATION FACING MOUNTING END

STEP	ORANGE & BLK/WHT	BLACK & ORN/WHT	RED & YEL/WHT	YELLOW & RED/WHT
0	+	-	+	-
1	-	+	+	-
2	-	+	-	+
3	+	-	-	+
4	+	-	+	-



CONTRACT NO. CAT 36050T949D		APPLIED MOTION PRODUCTS, INC.	
APPROVALS	DATE	<b>STEP MOTOR OUTLINE</b>	
DRAWN <i>R. BARRICK</i>	7/16/01		
CHECKED <i>K. Kondik</i>	7/24/01		
APPROVED <i>K. Kondik</i>	7/24/01	B	COMPUTER DATA BASE DRAWING
APPROVED		DWG NO. <b>HT34-478</b>	REV <b>F</b>
SCALE: 1=1		SHEET 1 OF 2	



TOLERANCES		THIRD ANGLE PROJECTION		APPLIED MOTION PRODUCTS, INC.	
DECIMALS: MM (INCH) X.XXX = ±0.01 (.005) X.XX = ±0.10 (.010) X.X = ±0.20 (.020)				<b>STEP MOTOR OUTLINE</b>	
ANGLES: MACH. = ±5° CHAM. = ±5°		APPROVALS	DATE	B	DWG NO. <b>HT34-478</b>
COMPUTER DATA BASE DRAWING		DRAWN <i>R. BARRICK</i>	7/16/01	REV <b>F</b>	
		CHECKED <i>K. Kondik</i>	7/17/01	SCALE: FULL	SHEET 2 OF 2
		APPROVED <i>K. Kondik</i>	7/17/01		