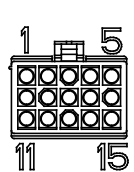


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE ECO 7159	3/16/15	J KORDIK
B	SPECS REVISED ECO 8316	8/27/19	L. LIU

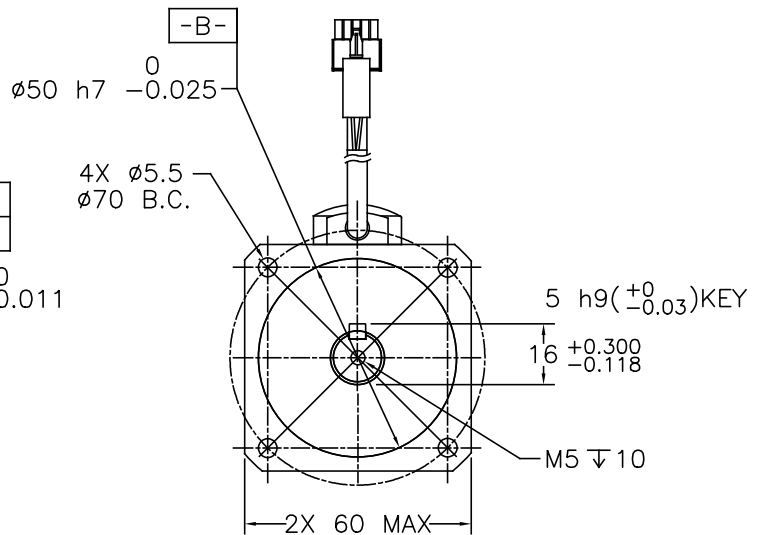
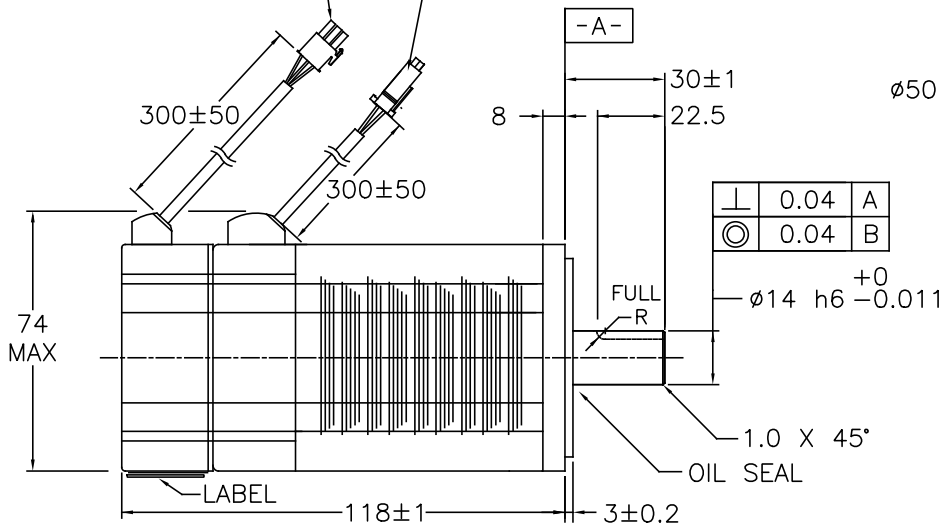
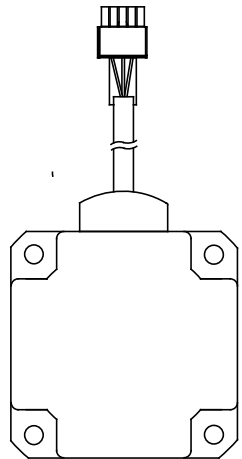
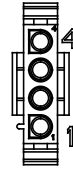


**ENCODER CONNECTOR**

CONNECTOR: AMP 172171-1  
770834-1 contacts (strip)  
VIEWING MATING END

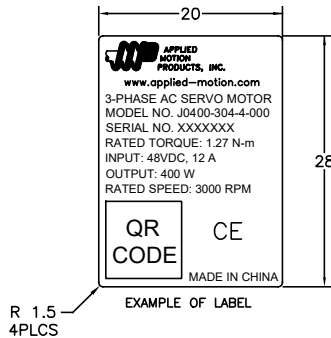
**MOTOR POWER CONNECTOR**

CONNECTOR: AMP 350779-1  
350536-1 contacts (strip)  
VIEWING MATING END



ENCODER CONNECTION TABLE		
PIN	LEAD COLOR	SIGNAL
1	RED	+5V
2	BLACK	GROUND
3	BROWN	U+
4	BROWN/BLACK	U-
5	GRAY	V+
6	GRAY/BLACK	V-
7	WHITE	W+
8	WHITE/BLACK	W-
9	BLUE/BLACK	A+
10	BLUE	A-
11	GREEN	B+
12	GREEN/BLACK	B-
13	YELLOW	Z+
14	YELLOW/BLACK	Z-
15	SHIELD	SHIELD

MOTOR CONNECTION TABLE		
PIN	LEAD COLOR	SIGNAL
1	RED	PHASE U
2	YELLOW	PHASE V
3	BLUE	PHASE W
4	YELLOW/GREEN	GROUND

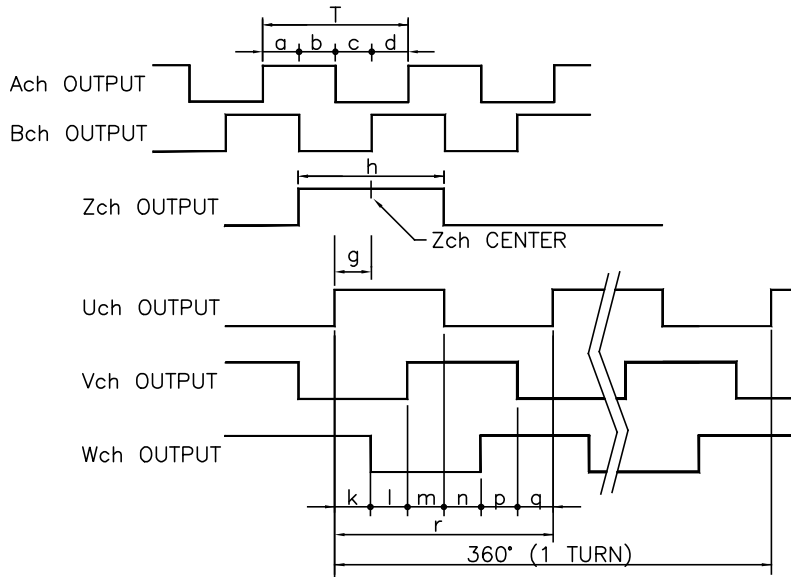


**NOTES: UNLESS OTHERWISE SPECIFIED**

1. A SHAFT SEAL IS SHIPPED WITH MOTOR, BUT NOT INSTALLED.
2. TIMING LOGIC IS CCW AS VIEWED FROM FRONT SHAFT.
3. MOTOR IS IP65, EXCEPT SHAFT OPENING AND CABLE CONNECTOR.
4. INSTALL INDOORS, AWAY FROM DIRECT SUNLIGHT AND FLAMMABLE GASES.
5. 1000M MAX ALTITUDE.
6. SHAFT LOAD: (L<sub>10</sub> LIFE, 20000 HOURS, 2000 RPM).

TOLERANCES		THIRD ANGLE PROJECTION		APPLIED MOTION PRODUCTS, INC.		
DECIMALS: MM (INCH)				<p><b>AC SERVO MOTOR</b></p>		
X.XXX = ±0.01 (.005)						
X.XX = ±0.10 (.010)		APPROVALS	DATE	<p>B</p>	<p>DWG NO. J0400-304-4-000</p>	
X.X = ±0.20 (.020)		DRAWN R. JONEZ	3/4/15			REV B
ANGLES: MACH. = ±5° CHAM. = ±5°		CHECKED				SCALE: NONE
COMPUTER DATA BASE DRAWING		APPROVED				

### TIMING LOGIC / ENCODER SIGNALS



$$T = \frac{360 \text{ DEGREES}}{2500C/T}$$

$$a, b, c, d = T/4 \pm T/8$$

$$h = T \pm T/2$$

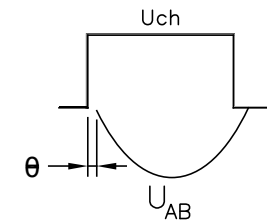
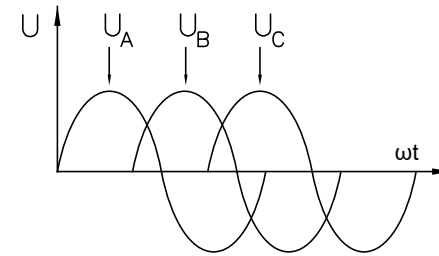
$$k / l / m / n / p / q$$

$$15^\circ \pm 1^\circ \text{ (MECHANICAL)}$$

$$r = 90^\circ \pm 1^\circ \text{ (MECHANICAL)}$$

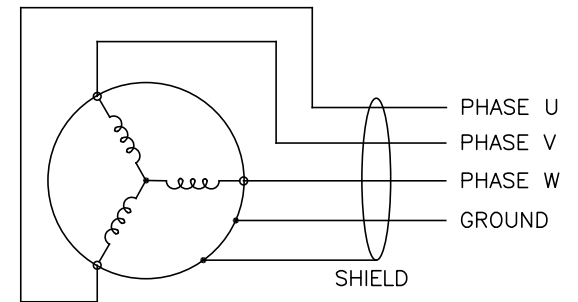
$$g = \pm 1^\circ \text{ (BETWEEN Zch CENTER AND Uch RISE)}$$

### MOTOR PHASES



$$\theta = \pm 10^\circ \text{ (ELECTRICAL)}$$


$U_A / U_B / U_C$  BACK EMF MEASURED FROM TERMINAL TO NEUTRAL



### AC SERVOMOTOR SPECIFICATION - PERMANENT MAGNET 8 POLES

INPUT POWER SUPPLY	VAC	48VDC
RATED OUTPUT	W	400
VOLTAGE CONSTANT	$V(\text{rms})/K(\text{rpm}) \pm 10\%$	6.3
RATED WINDING CURRENT	A (rms)	12
PEAK WINDING CURRENT	A (rms)	36
WINDING RESISTANCE	$V \pm 10\% @ 20^\circ\text{C}$	0.188 LINE-TO-LINE
WINDING INDUCTANCE	mH $\pm 20\%$	0.6 LINE-TO-LINE
RATED TORQUE	Nm(kgf-cm)	1.27(12.95)
PEAK TORQUE	Nm(kgf-cm)	3.4 (34.67)
TORQUE CONSTANT	Nm/A $\pm 10\%$	0.103
RATED SPEED	rpm/min	3000
MAXIMUM SPEED	rpm/min	6000
WEIGHT	KG (LBS)	1.4(3.1)
INSULATION CLASS		B 130°C
ENCODER RESOLUTION		2500 LINES/REV.
SHAFT LOAD - AXIAL	N(MAX)	70 N/15LB
SHAFT LOAD - RADIAL	N(MAX)	240 N/54LB
MOTOR RATING	REF NOTE 3	IP65
AMBIENT TEMPERATURE	OPERATING	0 TO 40°C
AMBIENT TEMPERATURE	STORAGE	-20 TO 80°C
AMBIENT HUMIDITY MAX		85%
INERTIA - WITH ENCODER	kg m <sup>2</sup>	0.000019

6  
6

CONTRACT NO.		 <b>APPLIED MOTION PRODUCTS, INC.</b>			
APPROVALS	DATE				
DRAWN <b>R.JONEZ</b>	<b>3/4/15</b>	<b>SERVO MOTOR SPECIFICATIONS</b>			
CHECKED					
APPROVED		B	FSCM NO.	DWG NO. <b>J0400-304-4-000</b>	REV B
APPROVED			SCALE: NONE	SHEET 2 OF 2	