

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE ECO 7065	10/20/14	J KORDIK
B	NEW PWR CONN ECO 7159	3/16/15	J KORDIK
C	REVISE SPEC PER ECO 7205	5/8/15	J Kordik
D	ADD UL TO LABEL PER ECO 7330	10/12/15	J KORDIK
E	SPECS REVISED PER ECO 7510	10/20/16	J KORDIK
F	SPECS REVISED PER ECO 7950	5/8/18	J KORDIK

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

BRAKE CONNECTION TABLE		
PIN	LEAD COLOR	SIGNAL
1	RED	BRAKE
2	BLACK	BRAKE

TOLERANCES	THIRD ANGLE PROJECTION
DECIMALS: MM (INCH) X.XXX = ±0.013 (.005) X.XX = ±0.25 (.01) X.X = ±2.5 (0.1) ANGLES: MACH. = ±5° CHAM. = ±5°	
COMPUTER DATA BASE DRAWING	APPROVALS DRAWN R.JONEZ CHECKED APPROVED

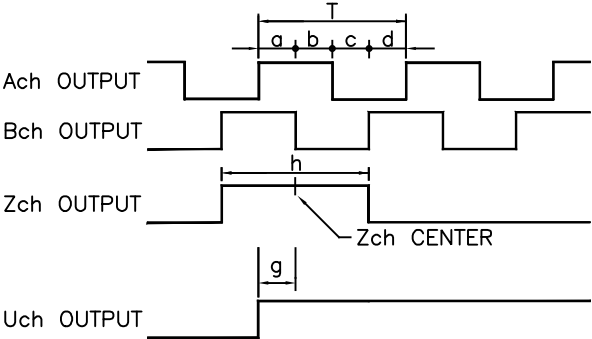
APPLIED MOTION PRODUCTS, INC.		
AC SERVO MOTOR WITH ENCODER AND BRAKE		
B	DWG NO. J0400-355-4-000	REV F
SCALE: NONE		SHEET 1 OF 2

- 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, FLAMMABLE AND CORROSIVE GASES.
 5. 1000M MAX ALTITUDE.
 6. BRAKE RELEASES WHILE ENERGIZED, DO NOT ENGAGE WHILE MOTOR IS ROTATING. BRAKE POWER IS NOT POLARITY SENSITIVE. THIS IS A HOLDING BRAKE.

AC SERVOMOTOR SPECIFICATION – PERMANENT MAGNET 8 POLES		
INPUT POWER SUPPLY	VAC	60VDC
RATED OUTPUT	W	400
VOLTAGE CONSTANT	V(rms)/K(rpm)±10%	19.3
RATED WINDING CURRENT	A (rms)	6.9
PEAK WINDING CURRENT	A (rms)	20.7
WINDING RESISTANCE	V ±10%@20°C	0.57 LINE-TO-LINE
WINDING INDUCTANCE	mH ±20%	2 LINE-TO-LINE
RATED TORQUE	Nm(kgf-cm)	1.27(12.95)
PEAK TORQUE	Nm(kgf-cm)	3.8(38.75)
TORQUE CONSTANT	Nm/A(rms) ±10%	0.184
RATED SPEED	rpm	3000
MAXIMUM SPEED	rpm	6000
WEIGHT W/ ENCODER & BRAKE	kg(lb)	1.9(4.2)
INSULATION CLASS		B 130°C
ENCODER RESOLUTION		2500 LINES/REV.
SHAFT LOAD – AXIAL	N MAX(lb)	70(15)
SHAFT LOAD – RADIAL	N MAX(lb)	240(54)
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	kgm ²	0.326X10 ⁻⁴

[6] BRAKE SPECIFICATIONS:	
RATED VOLTAGE	24VDC
RATED CURRENT	0.414A max @24VDC
RELEASE VOLTAGE	18.5 VDC MAX (at 20°C)
STATIC FRICTION TORQUE	2 Nm
ENGAGE TIME	AT NOMINAL AIR GAP (@20°C) <25ms (NEW) FULL RANGE MAX AIR GAP <100ms (WORST COND)
RELEASE TIME	WITHOUT DIODE: <25ms (E-STOP) WITH DIODE: <200ms (NORMAL STOP)

TIMING LOGIC / ENCODER SIGNALS

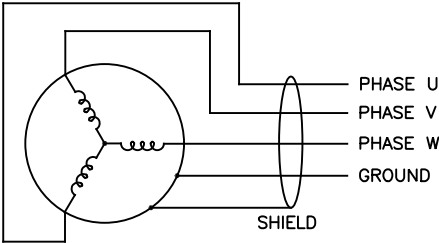
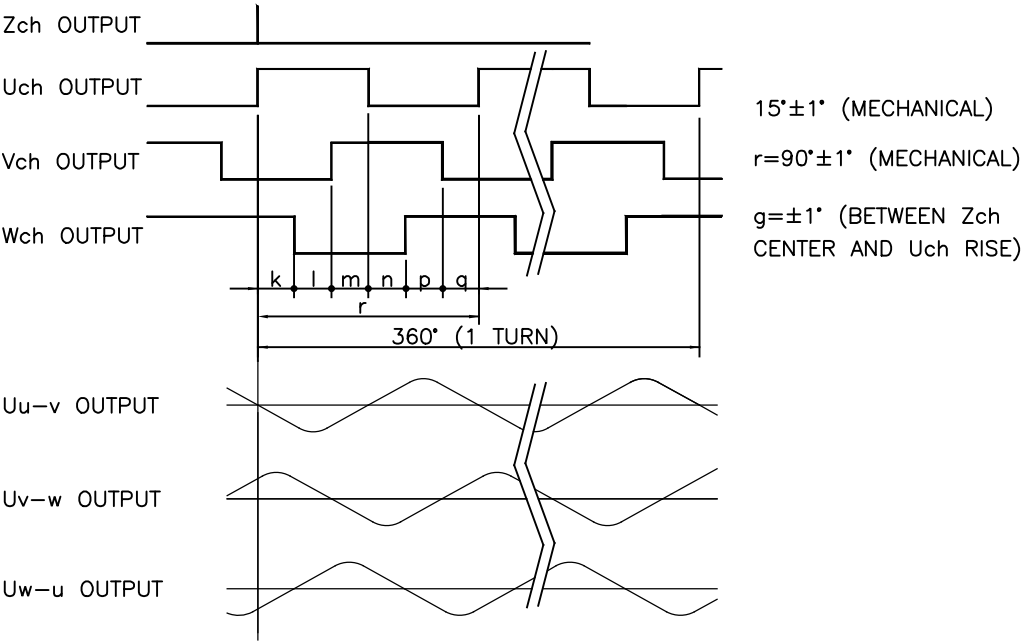



$$T = \frac{360 \text{ DEGREES}}{2500C/T}$$

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

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

TIMING LOGIC / ENCODER SIGNALS
 (NOT TO SAME SCALE AS OTHER DETAIL)



CONTRACT NO.		 APPLIED MOTION PRODUCTS, INC.			
APPROVALS	DATE	SERVO MOTOR SPECIFICATIONS			
DRAWN <i>R.JONEZ</i>	<i>9/17/14</i>				
CHECKED		B	FSCM NO.	DWG NO. J0400-355-4-000	REV F
APPROVED					
APPROVED					SCALE: NONE