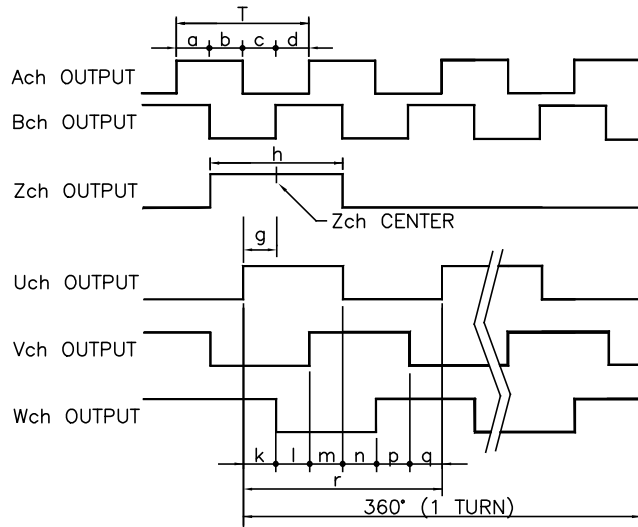




# TIMING LOGIC / ENCODER SIGNALS



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

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

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

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

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

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

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

360° (1 TURN)

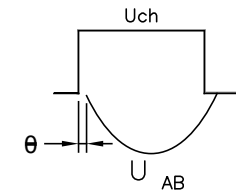
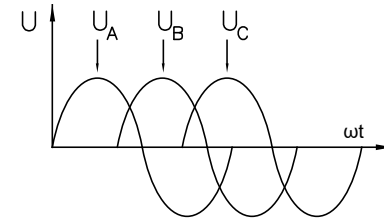
## AC SERVOMOTOR SPECIFICATION – PERMANENT MAGNET 8 POLES

INPUT POWER SUPPLY	VAC	48
RATED OUTPUT	W	750
VOLTAGE CONSTANT	$V(\text{rms})/K(\text{rpm}) \pm 10\%$	6.8
RATED WINDING CURRENT	A (rms)	22.5
PEAK WINDING CURRENT	A (rms)	56.5
WINDING RESISTANCE	$V \pm 10\% @ 20^\circ\text{C}$	0.06 LINE-TO-LINE
WINDING INDUCTANCE	mH $\pm 20\%$	0.25 LINE-TO-LINE
RATED TORQUE	Nm(kgf-cm)	2.4(24.47)
PEAK TORQUE	Nm(kgf-cm)	6.0(61.18)
TORQUE CONSTANT	$\text{Nm}/\text{A}(\text{rms}) \pm 10\%$	0.11
RATED SPEED	rpm	3000
MAXIMUM SPEED	rpm	3600
WEIGHT W/ ENCODER & BRAKE	kg (lbs)	2.6(5.8)
INSULATION CLASS		B 130°C
ENCODER RESOLUTION		2500 LINES/REV.
SHAFT LOAD – AXIAL	N(lbs)(MAX)	90(20)
SHAFT LOAD – RADIAL	N(lbs)(MAX)	240N/(54)LB
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	$\text{kg} \cdot \text{m}^2$	0.000089

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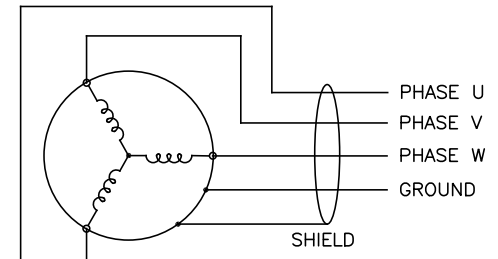
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## MOTOR PHASES



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

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



## BRAKE SPECIFICATIONS:

RATED VOLTAGE	24VDC
RATED CURRENT	0.61A
RELEASE VOLTAGE	18.5 VDC MAX (at 20°C)
STATIC FRICTION TORQUE	4.5 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)

CONTRACT NO.



APPLIED  
MOTION  
PRODUCTS, INC.

APPROVALS

DATE

DRAWN

R. JONEZ

8/26/19

CHECKED

APPROVED

APPROVED

## SERVO MOTOR SPECIFICATIONS

B

FSCM NO.

DWG NO.

J0750-354-5-000

REV

A

SCALE: NONE

SHEET 2 OF 2