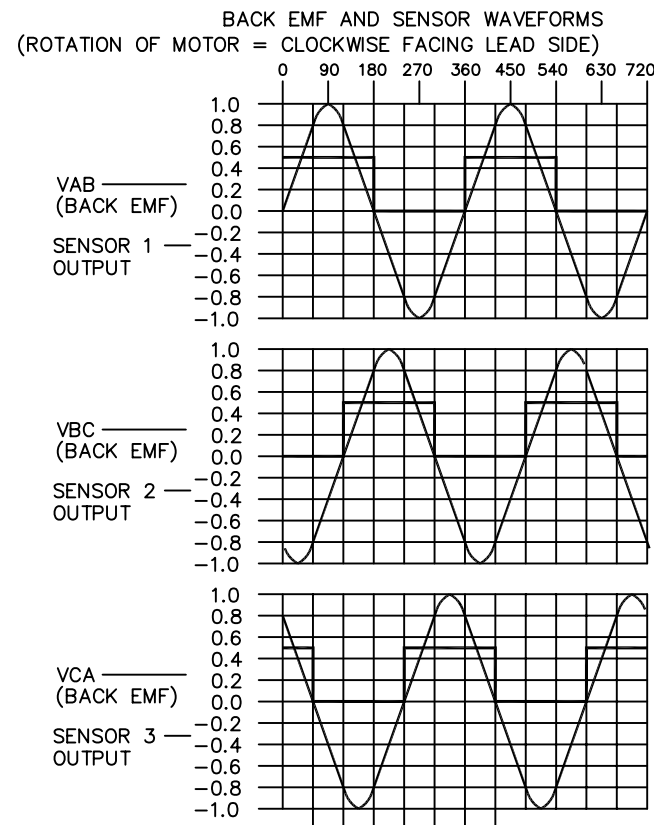


WINDING CONSTANTS	UNITS	TOL	SYM	WDG A
DC RESISTANCE	OHMS	±12.5%	R	0.30
VOLTAGE @ T <sub>P</sub>	VOLTS	NOMINAL	V <sub>P</sub>	5.90
CURRENT @ T <sub>P</sub>	AMPERES	NOMINAL	I <sub>P</sub>	19.7
TORQUE SENSITIVITY	OZ IN/AMP	±10%	K <sub>T</sub>	6.1
BACK EMF CONSTANT	VOLTS/(RAD/SEC)	±10%	K <sub>B</sub>	0.043
INDUCTANCE	MILLIHENRY	±30%	L	0.58

MOTOR PARAMETERS	UNITS	SYM	NOM. VALUE
PEAK TORQUE *	OZ IN	T <sub>P</sub>	120.0
CONTINUOUS STALL TORQUE **	OZ IN	T <sub>CS</sub>	50.0
MOTOR CONSTANT	OZ IN/√WATT	K <sub>M</sub>	11.1
ELECTRICAL TIME CONSTANT	MILLISECOND	τ <sub>E</sub>	1.93
MECHANICAL TIME CONSTANT	MILLISECOND	τ <sub>M</sub>	8.8
POWER I <sup>2</sup> R @ T <sub>P</sub>	WATTS	P <sub>P</sub>	116.1
DAMPING FACTOR (ZERO IMPEDANCE)	OZ IN/(RAD/SEC)	F <sub>O</sub>	0.876
BREAKAWAY TORQUE	OZ IN	T <sub>F</sub>	3.0
ROTOR INERTIA	OZ IN SEC <sup>2</sup>	J <sub>M</sub>	7.7x10 <sup>-3</sup>
THEO. NO-LOAD SPEED @ 24 VDC	RPM	S <sub>M</sub>	18,000
SPEED @ 10 OZ-IN & 24 VDC	RPM	S <sub>L</sub>	9,000
THEO ACC @ T <sub>P</sub>	RAD/SEC <sup>2</sup>	α <sub>T</sub>	1.6x10 <sup>4</sup>
THERMAL RESISTANCE ***	°C/WATT	θ <sub>TH</sub>	3.2
MAX ALLOWABLE WINDING TEMP	°C	TEMP	125
NUMBER OF PHASES/WINDING TYPE			3/Y
NUMBER OF POLES			6
WEIGHT	OZ	W <sub>T</sub>	30.4

\* 10 SEC @ 25°C AMBIENT TEMP  
 \*\* 25°C AMBIENT, 125° WINDING TEMP  
 \*\*\* WITH 12 X 12 X .25 THICK AL HEAT SINK

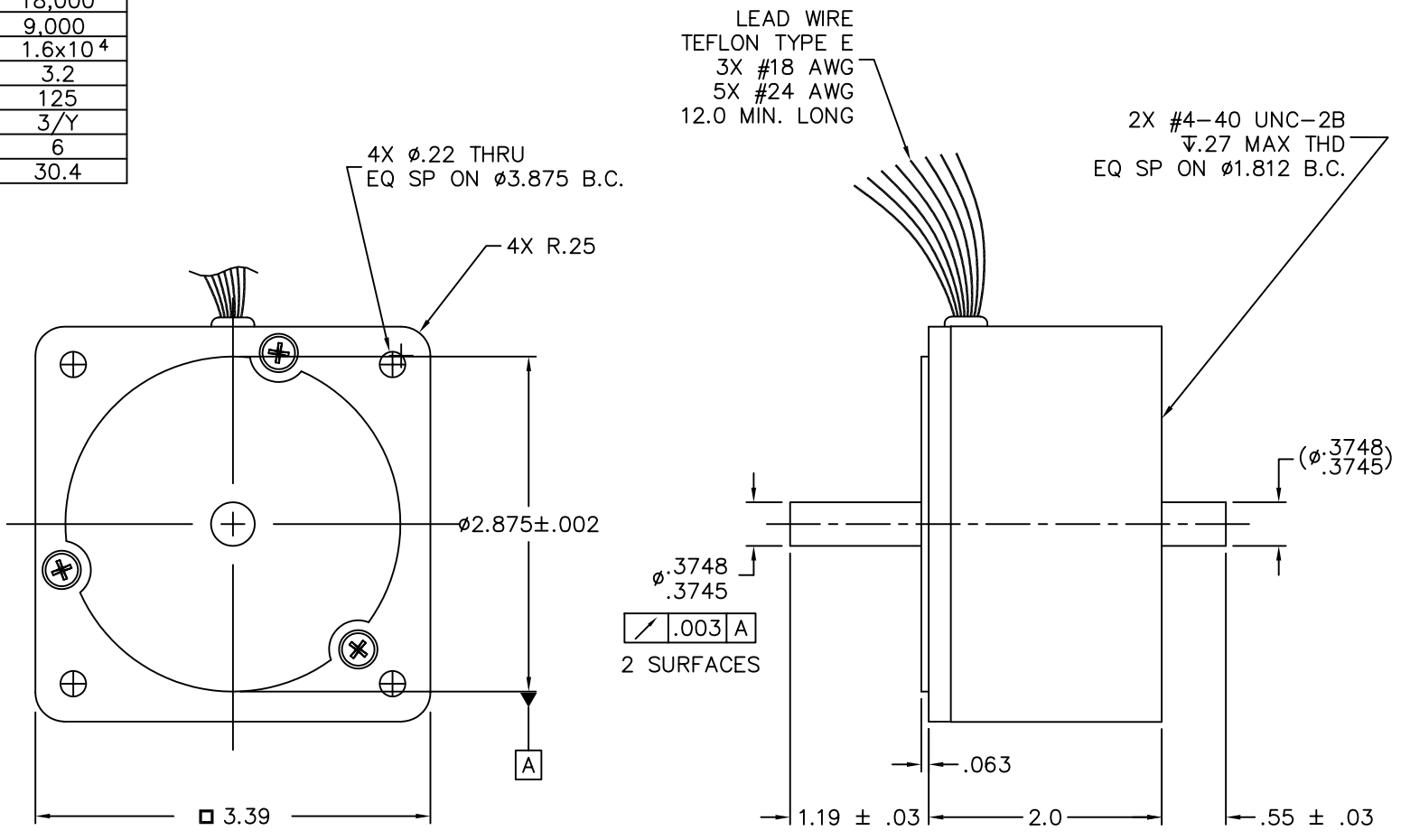


MOTOR LEADS	A	B	C	1	2	3	4	5	6
A	RED	+	+	-	-				
B	BLK	-	-	+	+				
C	GRN			-	-	+	+		
1	BRN	1	1	0	0	0	0	1	
2	BLU	0	1	1	1	0	0	0	
3	ORG	0	0	0	1	1	1	1	
Vcc+	YEL								
GND	GRY								

NOTES: UNLESS OTHERWISE SPECIFIED

- INTERPRET DIMENSIONING AND TOLERANCING IAW ASME Y14.5M-1994.
- INTERPRET DRAWING IAW ASME Y14.100.

LTR	ECO NO.	DESCRIPTION	DRN	APP'D	DATE
D	060302	RoHS CONVERSION, MATCH AVANTE REV	ASK	SH	06/14/06
E	070564	ADD WAVEFORM	SLM	BD	09/18/07
F	070595	CORRECT ROTATION DIRECTION	SLM	BD	09/28/07



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THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED:  
 -ALL DIMENSIONS ARE IN INCHES  
 -BREAK SHARP EDGES .015 MAX.  
 -SURFACE ROUGHNESS √63  
 -DIMENSIONS APPLY AFTER FINISH  
 -MAX FILLET R .010

TOLERANCES:  
 DECIMALS ANGULAR  
 .X ± .03 ±0° 30'  
 .XX ± .01  
 .XXX ± .005  
 DO NOT SCALE DRAWING

**BEI KIMCO MAGNETICS DIVISION**  
 VISTA, CA 92081

BRUSHLESS DC MOTOR

DRAWN S.McGHEE	DATE 09/10/98	TITLE BRUSHLESS DC MOTOR
MECH CHECK A.KCOMT	DATE 06/14/06	
APPD H.PHAM	DATE 12/17/98	
FILE NO. M:\TOPLEVEL\DIN	SIZE C	FSCM NO. 55789
	DWG NO. DIN34-20-CDYA	REV F
	SCALE 1/1	SHEET 1 OF 1



DIN34-20-CDYA