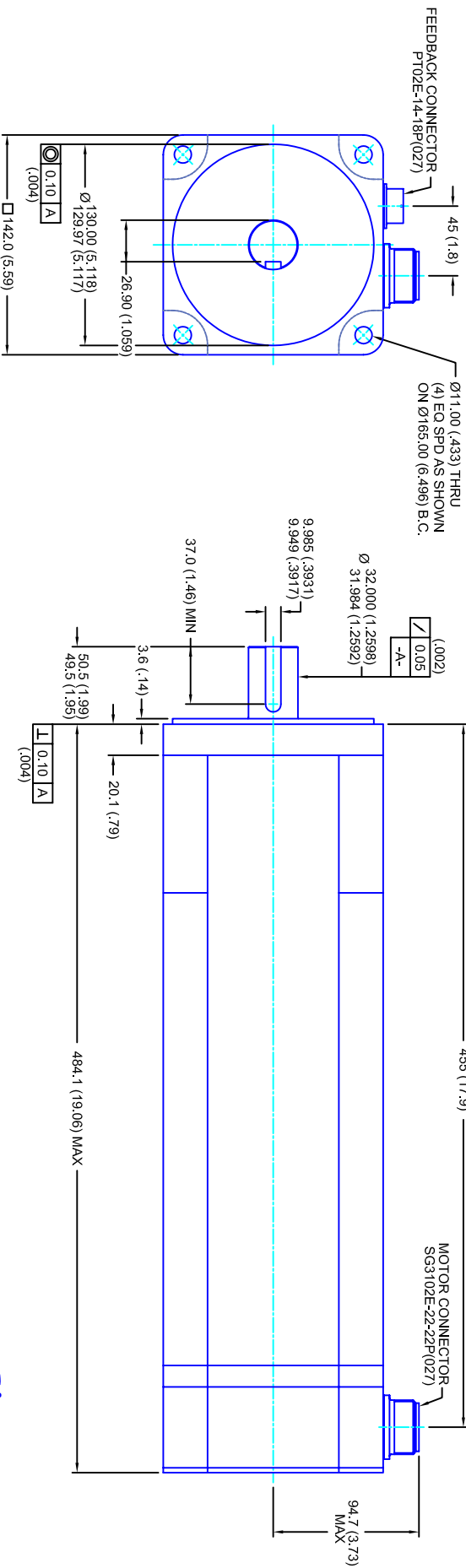


REVISIONS			
REV	DESCRIPTION	DATE	APPD
1	QUOTE DRAWING	6/17/04	



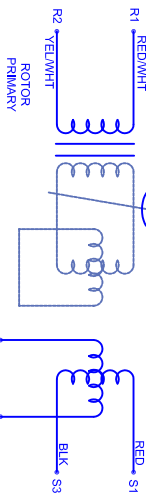
- NOTES:**
1. MILLIMETERS (INCHES)
  2. AXIAL LOAD: 23 KG [ 50 LBS ] MAX
  3. RADIAL LOAD: 68 KG [ 150 LBS ] MAX @ 25.4MM [ 1.00] FROM FACE
  4. MOTOR SEALED TO IP65
  5. MOTOR SHAFT: 416 STAINLESS STEEL
  6. MOTOR FINISH: BLACK MATT FINISH
  7. MOTOR WEIGHT: 38.6 KG [ 85 LBS ]

ELECTRICAL DATA		VALUES
MOTOR PARAMETERS	UNITS/MEASURE	
VOLTAGE	VOLTS-AC	230
AMP TYPE		SINE
HORSEPOWER	Hp	10.2
KILOWATTS	KW	7.6
MAX OPERATING SPEED	RPM	2400
SPEED @ RATED TORQUE	RPM	2100
*CONTINUOUS STALL TORQUE @ 2100 RPM	IN-LBS(IN)	306(134.6)
*CONTINUOUS STALL TORQUE	IN-LBS(IN)	360(160.7)
*CONTINUOUS LINE CURRENT	AMPS(RMS/Φ)	28.3
PEAK TORQUE	IN-LBS(IN)	1081(122.1)
PEAK CURRENT	AMPS(RMS/Φ)	85.1
MAX THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	29.216
TORQUE SENSITIVITY	KI [N-LBS/AMP/RMS/Φ]/(MM/AMP/IN/Φ)	12.7(1.44)
BACK EMF (LINE TO LINE)	Vrms/Krpm	80
D.C. RESISTANCE (P-P)	OHMS	.12
INDUCTANCE (P-P)	MILLIHENRIES	1.1
ROTOR INERTIA	IN-LBS-SEC <sup>2</sup> [KG-M <sup>2</sup> ]	.0370(.00418)
STATIC FRICTION	TT	4.2(0.47)

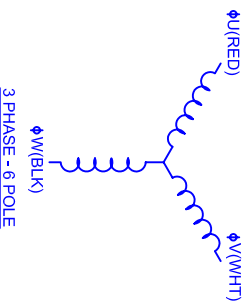
**CONNECTION CHART**

PT02E-14-18P(027)			
REST/THERM WIRE LEADS	WIRE FUNCTION	WIRE COLOR	
A	-	-	
B	-	-	
C	-	-	
D	RES SHLD	WHT/BLK	
E	REF	RED/WHT	
F	SIN GND	YEL	
G	COS GND	BLK	
H	SIN	BLU	
J	-	-	
K	-	-	
L	-	-	
M	-	-	
N	THERM	WHT	
P	-	-	
R	REF GND	YEL/WHT	
S	COS	RED	
T	-	-	
U	THERM	WHT	

SG3102E-22-22P(027)			
MOTOR WIRE LEADS	WIRE FUNCTION	WIRE COLOR	
A	ΦU	RED	
B	ΦV	WHT	
C	ΦW	BLK	
D	PE GND	GRN/YEL	



**SCHEMATIC FOR BRUSHLESS RESOLVER**



**CUSTOM MOTORS INC**

**142MM - 4 STK**  
**230V/KE=80/METRES/CONN**

TOLERANCES UNLESS SPECIFIED	
BORER:	= H12
DRILL:	= H12
DECIMAL .XXX	± .12 (.005)
DECIMAL .XX	± .25 (.010)
DECIMAL .X	± .51 (.020)
ANGLE	± .40 (.016)
ANGLE (MM (INCHES))	± .030
REMOVE ALL BURRS/BREAK SHARP EDGES AS SHOWN (0.10°)	
FINISH:	AS SHOWN
WATERFALL:	
SCALE	1/2:1
DATE	6/17/04
DRAWING NO.	CW1424Q80MKRCS
CUSTOMER:	-
DRAWN:	DFLA
SHEET:	1 OF 1
REV.	1

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON THE MOTOR. THERMOSTAT IN STATOR WILL OPEN IF STATOR TEMPERATURE EXCEEDS 155°C. THIS WILL GIVE YOU ~10% HEADROOM IN THE CONTINUOUS TORQUE RATING BEFORE THERMOSTAT OPENS. MOTOR MOUNTED ON A 305 X 305 X 12.7MM ALUMINUM HEATSINK.