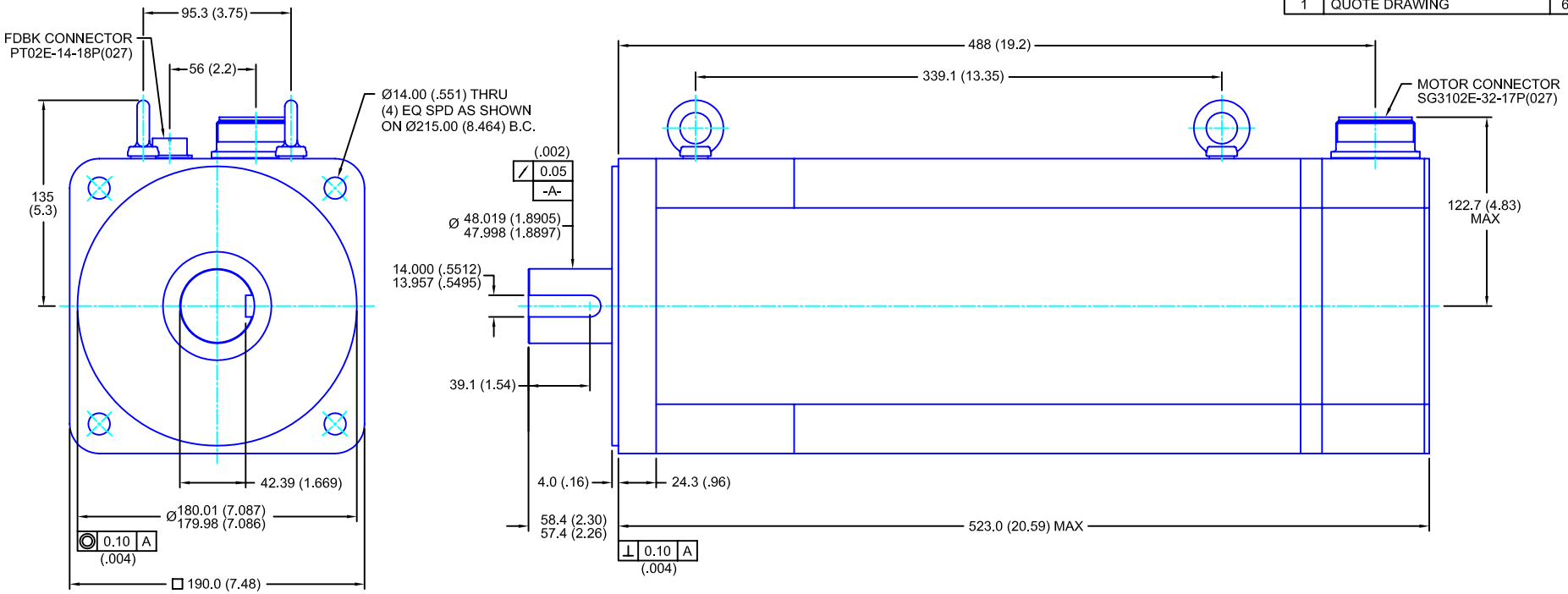
REVISIONS			
REV	DESCRIPTION	DATE	APP'D
1	QUOTE DRAWING	6/27/04	



NOTES:

1. MILLIMETERS (INCHES)
2. AXIAL LOAD: 45 KG [100 LBS] MAX
3. RADIAL LOAD: 113 KG [250 LBS] MAX @ 25.4MM [1.00] FROM FACE
4. MOTOR SEALED TO IP65
5. MOTOR SHAFT: G&P STEEL, GRADE 1144
6. MOTOR FINISH: BLACK MATT FINISH
7. MOTOR WEIGHT 73 KG [162 LBS]

ENCODER INFO:

5V - 4096L COMMUTATING

ELECTRICAL DATA			
MOTOR PARAMETERS		UNITS/MEASURE	VALUES
VOLTAGE		VOLTS-AC	460
AMP TYPE		-	SINE
HORSEPOWER		Hp	18.0
KILOWATTS		KW	13.4
MAX OPERATING SPEED		RPM	1500
SPEED @ RATED TORQUE		RPM	1200
*CONTINUOUS RATED TORQUE @ 1200 RPM		IN-LBS[Nm]	939[106.1]
*CONTINUOUS STALL TORQUE		IN-LBS[Nm]	1092[123.4]
CONTINUOUS LINE CURRENT		AMPS(RMS/ϕ)	21.2
PEAK TORQUE		IN-LBS[Nm]	3276[370.2]
PEAK CURRENT		AMPS(RMS/ϕ)	63.6
MAX THEORETICAL ACCEL.		RAD/SEC^2	23,450
TORQUE SENSITIVITY	Kt	IN-LBS/AMP(RMS/ϕ)[Nm/AMP(RMS/ϕ)]	51.5[5.82]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	324
D.C. RESISTANCE (P-P)	±10%	OHMS	.53
INDUCTANCE (P-P)	±10%	MILLIHENRIES	7.8
ROTOR INERTIA	Jm	IN-LBS-SEC^2[Kg-M^2]	.1397[.01579]
STATIC FRICTION	Tf	IN-LBS[Nm]	13.0[1.5]

*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 356 X 356 X 19MM ALUMINUM HEATSINK.

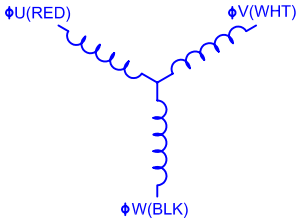
CONNECTION CHART

PT02E-14-18P(027)

ENC/THERM WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
A	THERM	WHT
B	CH A	BLU
C	CH A\	BLU/BLK
D	GND CABLE	SHLD
E	CH U	BRN
F	CH V	GRY
G	CH W	WHT
H	CH W\	WHT/BLK
J	-	-
K	+5VDC	RED
L	THERM	WHT
M	CH Z	YEL
N	CH B	GRN
P	CH B\	GRN/BLK
R	CH U\	BRN/BLK
S	CH V\	GRY/BLK
T	GND	BLK
U	CH Z\	YEL/BLK

SG3102E-32-17P(027)

MOTOR WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
A	ϕU	RED
B	ϕV	WHT
C	ϕW	BLK
D	PE GND	GRN/YEL



3 PHASE - 6 POLE

TOLERANCES UNLESS SPECIFIED
SURFACE FINISH: = 63 Ra ✓
BORE: = H12
SHAFT: = h12
DECIMAL .XXX ± .13 (.005)
DECIMAL .XX ± .25 (.010)
DECIMAL .X ± .51 (.020)
FRACTION ± .40 (.016)
ANGLES ± 0°30'
MM (INCHES)

REMOVE ALL BURRS. BREAK SHARP EDGES .25MM (.010") OR 45° CHAMFER

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CUSTOM MOTORS INC

190MM - 4 STK
460V/KE=324/MET/4096/CONN

FINISH:	CUSTOMER:		DRAWN: DFLA	SHEET: 1 OF 1
MATERIAL:	SCALE 1/2:1	DATE 5/14/04	DRAWING NO. CM1904R324MK4096CS	REV. 1