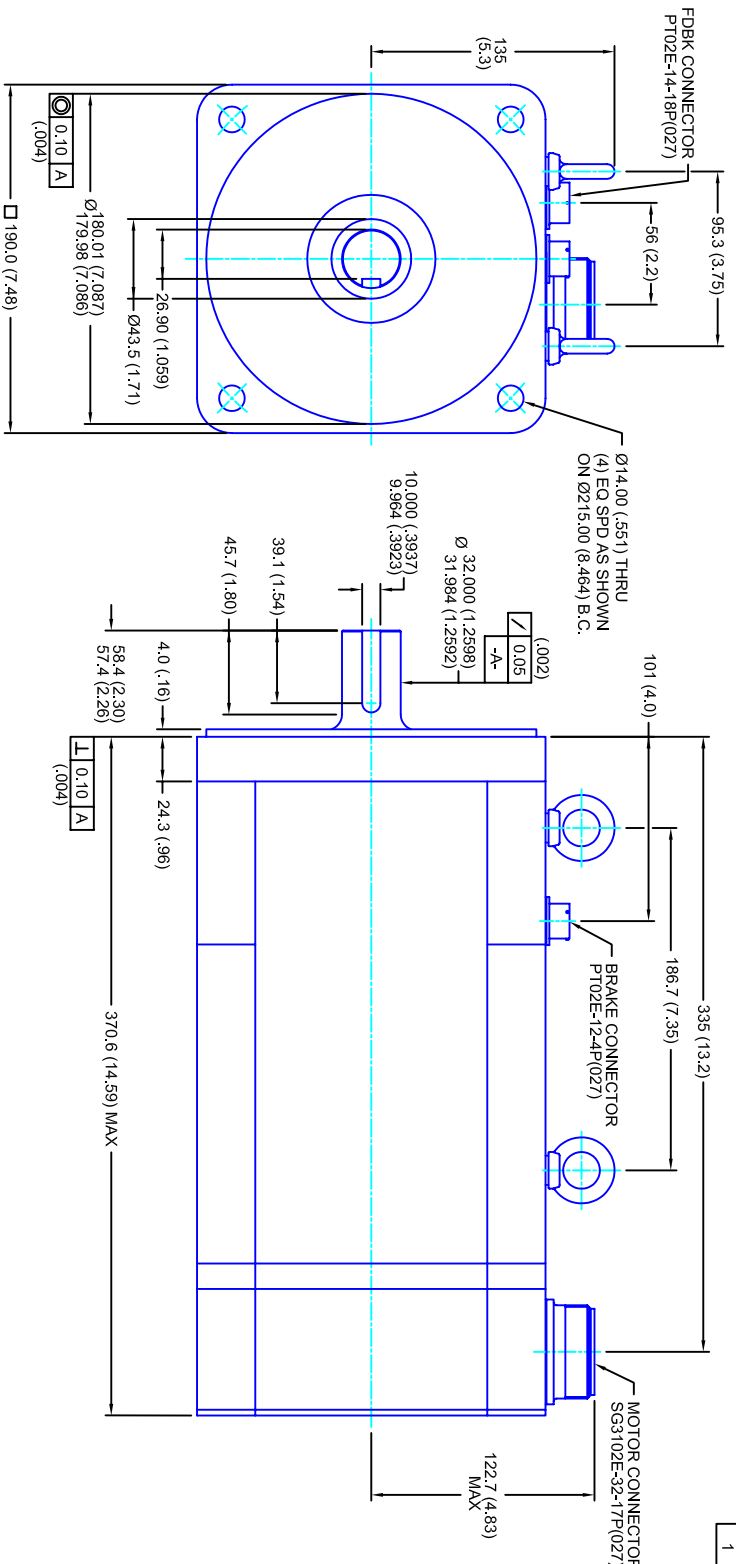


REVISIONS			
REV	DESCRIPTION	DATE	APPD
1	QUOTE DRAWING	6/25/04	



- 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: 40 KG [ 89 LBS ]

ELECTRICAL DATA		VALUES
MOTOR PARAMETERS	UNITS/MEASURE	
VOLTAGE	VOLTS-AC	230
AMP TYPE		SINE
HORSEPOWER	HP	13.1
KILOWATTS	KW	9.8
MAX OPERATING SPEED	RPM	3000
SPEED @ RATED TORQUE	RPM	2400
*CONTINUOUS RATED TORQUE @ 2400 RPM	IN-LBS(INM)	344[38.9]
*CONTINUOUS STALL TORQUE	IN-LBS(INM)	400[45.2]
*CONTINUOUS LINE CURRENT	AMPS(RMS/Φ)	31.5
PEAK TORQUE	IN-LBS(INM)	1200[135.6]
PEAK CURRENT	AMPS(RMS/Φ)	94.5
MAX THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	26.846
TORQUE SENSITIVITY	KI [N-MS/AMP/RMS/Φ][IN-AMP/RMS/Φ]	12.7[1.44]
BACK EMF (LINE TO LINE)	Vrms/Krpm	80
D.C. RESISTANCE (P-P)	OHMS	.25
INDUCTANCE (P-P)	MILLIHENRIES	2.3
ROTOR INERTIA	IN-LBS-SEC <sup>2</sup> [KG-M <sup>2</sup> ]	.0447[.00506] w/ Bk
STATIC FRICTION	TT	8.2[.93]

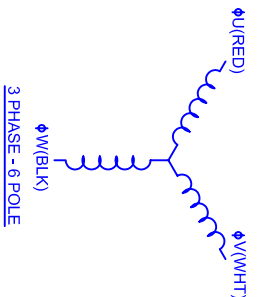
\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON THE MOTOR. THERMOSTAT IN STATOR WILL OPEN IF STATOR TEMPERATURE EXCEEDS 155°C. THIS WILL GIVE YOU ~10% HEADROOM IN THE CONTINUOUS TORQUE RATING BEFORE THERMOSTAT OPENS. MOTOR MOUNTED ON A 356 X 356 X 19MM ALUMINUM HEATSINK.

**ENCODER INFO:**  
5V - 2048L COMMUTATING

**BRAKE INFO:**  
INPUT VOLTAGE: 24 VDC  
HOLDING FORCE: 122 Nm [ 90 FT-LBS ] MAX  
CURRENT DRAW: 2.51 AMPS  
RELEASING TIME: 100 ms  
INERTIA: .00150 IN-LBS-SEC<sup>2</sup>

**CONNECTION CHART**

PT02E-14-18P(027)				SG3102E-32-17P(027)			
ENC/TERM	WIRE	WIRE LEADS	WIRE COLOR	MOTOR WIRE LEADS	WIRE COLOR	WIRE FUNCTION	WIRE COLOR
A	THRM	WHT	WHT	A	Φ U	RED	RED
B	CH A	BLU	BLU	B	Φ V	WHT	WHT
C	CH AI	BLU/BLK	BLU/BLK	C	Φ W	BLK	BLK
D	GND CABLE	SHLD	SHLD	D	PE GND	GRN/YEL	GRN/YEL
E	CH U	BRN	BRN				
F	CH V	GRY	GRY				
G	CH W	WHT	WHT				
H	CH WI	WHT/BLK	WHT/BLK				
J	+5VDC	RED	RED				
K	THRM	WHT	WHT				
L	CH Z	YEL	YEL				
M	CH B	GRN	GRN				
N	CH BI	GRN/BLK	GRN/BLK				
P	CH BL	GRN/BLK	GRN/BLK				
R	CH UI	BRN/BLK	BRN/BLK				
S	CH VI	GRY/BLK	GRY/BLK				
T	GND	BLK	BLK				
U	CH ZI	YEL/BLK	YEL/BLK				



**CUSTOM MOTORS INC**  
190MM - 1 STK  
230V/KE=80/MET/2048/CONN/BRK

SCALE	DATE	DRAWING NO.	DRAWN: DFLA	SHEET: 1 OF 1	REV.
1/2:1	6/21/04	CM1901Q80MK2048CSB			1

**TOLERANCES UNLESS SPECIFIED**  
BORE: = H7 ✓  
DECIMAL .xxx = .12 (.005)  
DECIMAL .xx = .25 (.010)  
DECIMAL .x = .51 (.020)  
ANGLE: = .030  
REMOVE ALL BURRS/BREAK SHARP EDGES AS SHOWN (0.10°)  
FINISH: -  
MATERIAL:

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