

MOTOR DATA @ 230 VAC (TRAP)		
MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	.22
	KW RATED	.16
MAX. OPERATING SPEED	N. MAX RPM	5000
SPEED @ RATED TORQUE	RPM	4000
* CONTINUOUS RATED TORQUE @ 4000 RPM	IN-LBS[Nm]	3.4(.38)
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	5.0(.56)
CONTINUOUS LINE CURRENT	AMPS	1.6
PEAK TORQUE	IN-LBS[Nm]	15.1(1.7)
PEAK CURRENT	AMPS	4.7
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	155,670
TORQUE SENSITIVITY	Kt IN-LBS/AMP[Nm/AMP]	3.2(.36)
BACK EMF (LINE TO LINE)	Vrms/Krpm	28.3
D.C. RESISTANCE (P-P)	OHMS	18.5
INDUCANCE (P-P)	MILLIHENRIES	26.4
ROTOR INERTIA	Jm IN-LBS-SEC <sup>2</sup> [Kg-M <sup>2</sup> ]	.000097(.0000109)
STATIC FRICTION	Tf IN-LBS[Nm]	.5(.06)

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 10" X 10" X 10" X 1/4" ALUMINUM HEATSINK. THERMOSTAT IN STATOR WINDINGS WILL OPEN IF WINDING TEMPERATURE EXCEEDS 155°C. THIS ALLOWS FOR AN APPROXIMATE +10% HEADROOM IN THE CONTINUOUS TORQUE RATING BEFORE THERMOSTAT OPENS.

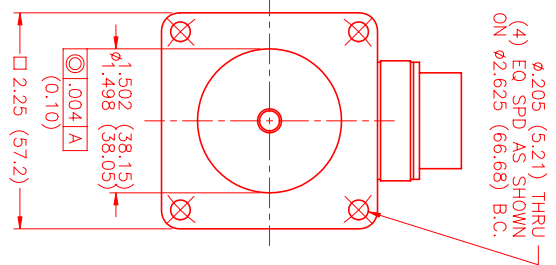
- MECHANICAL NOTES:**
- AXIAL LOAD: 15 LBS MAX
  - RADIAL LOAD: 20 LBS MAX @ 1" FROM FACE
  - MOTOR SEALED TO IP65.
  - MOTOR WEIGHT: 2.6 LBS [ 1.2 Kg]
  - MOTOR FINISH: BLACK EPOXY
  - MOTOR OUTPUT SHAFT: STAINLESS STEEL
  - INCHES (MILLIMETERS)

**ENCODER: (290-00056)**  
OH35-2000P4-L6-SV

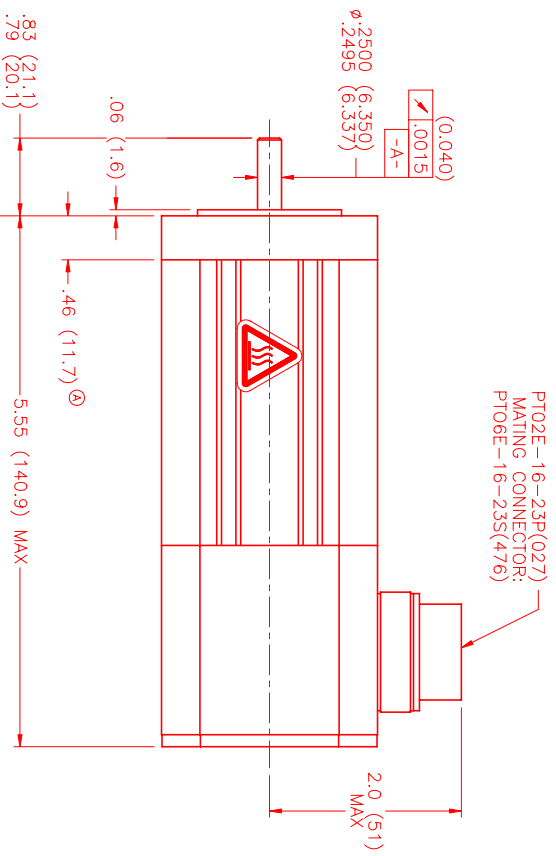
**CONNECTION CHART**  
MOTOR/ENCODER/THERM CONNECTOR:  
PT02E-16-23P(027)  
(270-00219)

MOTOR WIRE LEADS	WIRE COLOR
A	φR RED
B	φS BLACK
C	φT BLUE
D	PE GND GRN/YEL

ENC/THERM WIRE LEADS	WIRE FUNCTION	WIRE COLOR
PIN T	GROUND	BLACK
E	+5VDC	RED
F	CH A	BLUE
U	CH A \	BLUE/BLK
G	CH B	GREEN
V	CH B \	GRN/BLK
H	CH Z	YELLOW
W	CH Z \	YEL/BLK
J	CH U	BROWN
K	CH U \	BRN/BLK
X	CH V	GRAY
L	CH V \	GRAY/BLK
Y	CH W	WHITE
M	CH W \	WHT/BLK
N	GND/CABLE	SHLD
S	THERM	BLACK
R	THERM	BLACK
P	-	-
Z	-	-



φ.205 (5.21) THRU  
(4) EQ SPD AS SHOWN  
ON φ2.625 (66.68) B.C.

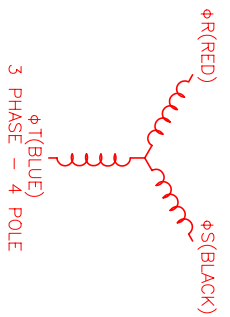


PT02E-16-23P(027)  
MATING CONNECTOR:  
PT06E-16-23S(476)

MOTOR & HALL POSITION CHART

HALL LEADS	BROWN	GRAY	WHITE
MOTOR LEADS	BLACK respect to RED	RED respect to BLUE	BLUE respect to BLACK

\*MOTOR ROTATION C/W (COUNTER CLOCKWISE) ON THE FACE OF THE MOTOR (LOOKING AT THE FACE OF THE MOTOR)  
WAVE REPRESENTING STATOR OUTPUT  
WAVE REPRESENTING HALL SENSOR



NO. PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED		
DESIGN: MYS # 205		
DATE: 8/26/99		
CHECKED: MYS		
APPROVED: MYS		
SCALE: 1:1		

**MTS** Automation Division  
MPS Systems Corporation