

### MOTOR DATA @ 230 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	.82
KILOWATTS	KW RATED	.62
MAX. OPERATING SPEED	N MAX	5000
SPEED @ RATED TORQUE	N RATED	4000
* CONTINUOUS RATED TORQUE @ 4000 RPM	IN-LBS [Nm]	13.0 [1.47]
* CONTINUOUS STALL TORQUE	IN-LBS [Nm]	16.0 [1.81]
CONTINUOUS LINE CURRENT	AMPS (RMS/Φ)	2.7
PEAK TORQUE	IN-LBS [Nm]	58.8 [6.64]
PEAK CURRENT	AMPS (RMS/Φ)	9.9
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	95.610
TORQUE SENSITIVITY	Kt [N-LBS/AMPS (RMS/Φ)]	5.9 [.67]
BACK EMF (LINE TO LINE)	Vrms/Krpm	37.6
D.C. RESISTANCE (P-P)	OHMS	3.9
INDUCTANCE (P-P)	MILLIHENRIES	10.4
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> ] [Kg-M <sup>2</sup> ]	.000615 [0.000693]
STATIC FRICTION	Tf [IN-LBS] [Nm]	.4 [0.05]

\*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: 25 LBS MAX
- RADIAL LOAD: 40 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 6.6 LBS. [ 3.0 Kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- INCHES (MILLIMETERS)

#### ENCODER: (290-00084)

OH48-5000P6-L6-5V

#### CONNECTION CHART

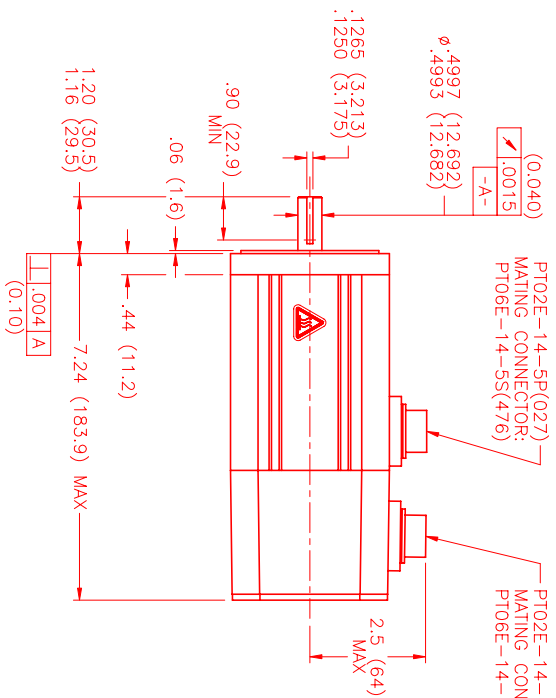
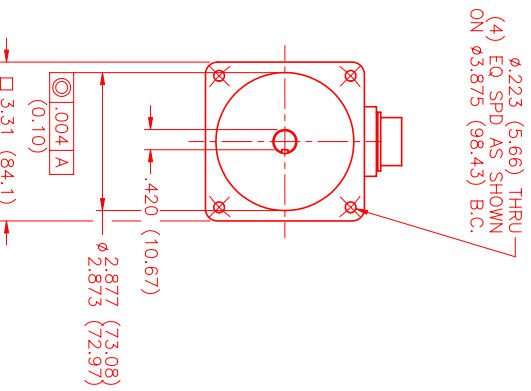
MOTOR CONNECTOR:  
PT02E-14-5P(027)  
(270-00026)

PIN	WIRE FUNCTION	WIRE COLOR
A	ΦR	RED
B	ΦS	BLACK
C	ΦT	BLUE
D	PE GND	GRN/YEL
E	-	-

#### ENCODER/THERM CONNECTOR:

PT02E-14-18P(027)  
(270-00024)

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



PT02E-14-5P(027)  
MATING CONNECTOR:  
PT06E-14-5S(476)

PT02E-14-18P(027)  
MATING CONNECTOR:  
PT06E-14-18S(476)

#### MOTOR & HALL POSITION CHART

VIEW	HALL LEADS	BROWN	GRAY	WHITE
ON THE OSCILLOSCOPE	MOTOR LEADS	BLACK respect to RED	RED respect to BLUE	BLUE respect to BLACK
		AAAA	AAAA	AAAA

\*MOTOR ROTATION CCW (COUNTER CLOCKWISE) (LOOKING AT THE FACE OF THE MOTOR)



REV: 1	DESCRIPTION: PRELIMINARY	DATE: 2/7/00	APPD: MVS
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NO.:	PART NUMBER:	DESCRIPTION:	QTY:
UNLESS SPECIFIED			
DECIMAL: .001			
FRACTIONAL: 1/32			
DATE: 2/7/00			
DESIGNED BY: MVS			
CHECKED:			
APPROVED:			

MTS  
Automation Division

MPM891ASG6JQ1N