

**MOTOR DATA @ 230 VAC (TRAP)**

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	4.6
KILOWATTS	KW RATED	3.4
MAX. OPERATING SPEED	N MAX RPM	4200
SPEED @ RATED TORQUE	N RATED RPM	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM	IN-LBS[Nm]	96.8[10.9]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	116.2[13.1]
CONTINUOUS LINE CURRENT	AMPS	18.7
PEAK TORQUE	IN-LBS[Nm]	406.7[45.7]
PEAK CURRENT	AMPS	65.6
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	42,811
TORQUE SENSITIVITY	Kt IN-LBS/AMPI Nm/AMP	6.2[0.71]
BACK EMF (LINE TO LINE)	Vrms/Krpm	55.0
D.C. RESISTANCE (P-P)	OHMS	0.27
INDUCTANCE (P-P)	MILLIHENRIES	2.0
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> ] Kg-M <sup>2</sup>	0.0095[0.00107]
STATIC FRICTION	Tf [IN-LBS] [Nm]	1.8[0.2]

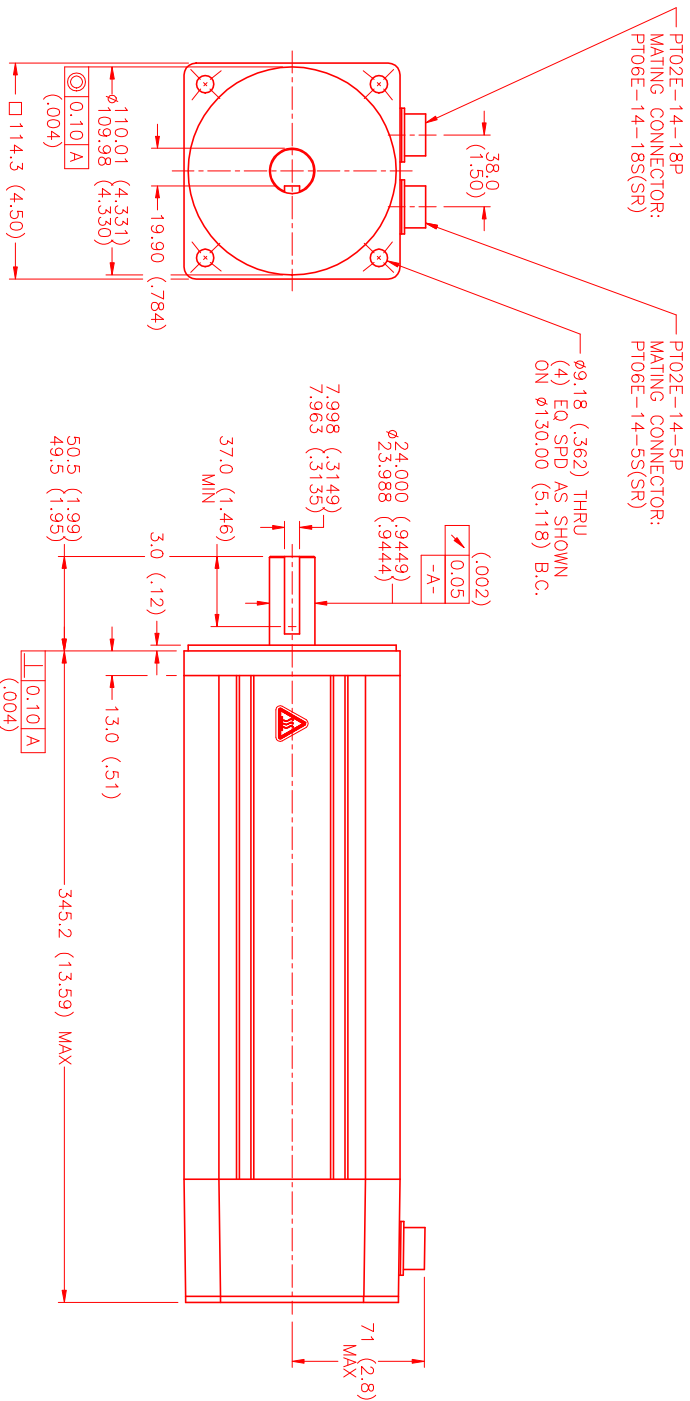
\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 12" X 12" X 1/2" ALUMINUM HEATSINK. THERMOSTAT IN STATOR WINDINGS WILL OPEN IF WINDING TEMPERATURE EXCEEDS 155°C. THIS ALLOWS FOR AN APPROXIMATE +10% HEADROOM IN THE CONTINUOUS TORQUE RATING BEFORE THERMOSTAT OPENS.

**MECHANICAL NOTES:**

- AXIAL PLAY: 50 LB MAX LOAD
- RADIAL PLAY: 100 LB MAX LOAD
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 35.2 LBS. [16.0 kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)

**ENCODER: (290-00107)**

OIH48-4096P6-L6-5V



**CONNECTION CHART**  
ENCODER/THERM CONNECTOR:  
PT02E-14-18P  
(270-00024)

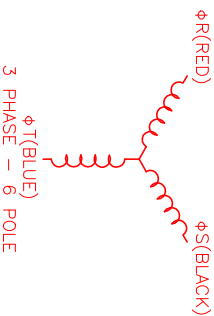
ENC/THERM	WIRE	WIRE COLOR	LEADS
PIN	FUNCTION	COLOR	LEADS
T	GROUND	BLACK	
K	+5VDC	RED	
B	CH A	BLUE	
C	CH A \	BLUE/BLK	
N	CH B	GREEN	
P	CH B \	GREEN/BLK	
M	CH Z	YELLOW	
U	CH Z \	YEL/BLK	
E	CH U	BROWN	
R	CH U \	BROWN/BLK	
F	CH V	GRAY	
S	CH V \	GRAY/BLK	
G	CH W	WHITE	
H	CH W \	WHITE/BLK	
D	GND/CABLE	SHIELD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

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

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

REV.	DESCRIPTION	DATE	APPD.
1	PRELIMINARY	1/27/00	LIN

DATE: 1/19/02/230/ME/14096/CONN DRAWING NUMBER: MPM1143ATG74Z1N



**MOTOR & HALL POSITION CHART**

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



NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DETAILS: 30x & 20x			
SECTIONAL: 3x & 20x			
ASSEMBLY: 1x & 20x			
ANGLE: 1/2"			
FORM: MS			
DATE: 8/29/98			
DESIGNED:			
CHECKED:			
APPROVED:			
DRAWING NUMBER: MPM1143ATG74Z1N			
SCALE: 1/2:1			

**MTS** MTS Systems Corporation  
Automation Division