

⊙ MOTOR DATA @ 460 VAC (SINE)

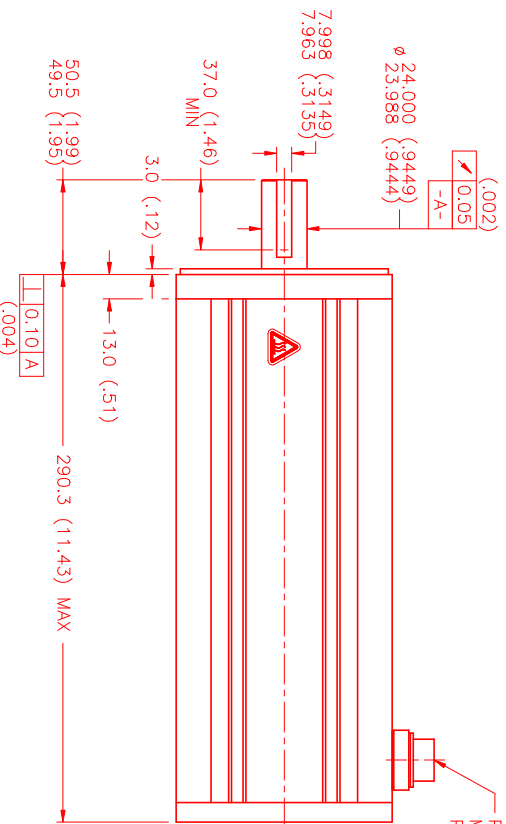
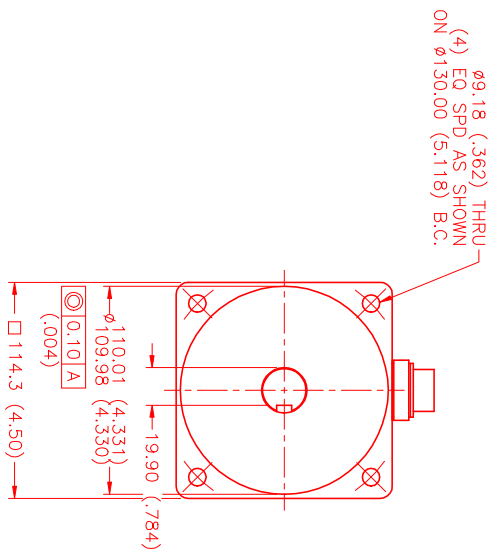
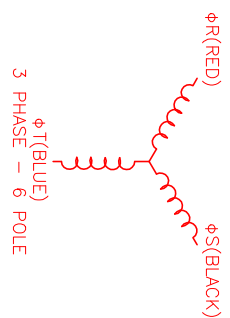
MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	4.6
KILOWATTS	KW	3.4
MAX. OPERATING SPEED	N MAX	4200
SPEED @ RATED TORQUE	RPM	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM	IN-LBS [Nm]	96.8 [10.9]
CONTINUOUS LINE CURRENT	AMPS (RMS/φ)	116.2 [13.1]
PEAK CURRENT	IN-LBS [Nm]	6.6
MAX. THEORETICAL ACCEL.	AMPS (RMS/φ)	406.7 [45.7]
TORQUE SENSITIVITY	IN-LBS [Nm]	23.2
BACK EMF (LINE TO LINE)	RAD/SEC <sup>2</sup>	42.811
D.C. RESISTANCE (P-P)	Ω	17.5 [1.98]
INDUCTANCE (P-P)	Vrms/krpm	110.0
ROTOR INERTIA	OHMS	.95
STATIC FRICTION	MILLIHENRIES	7.8
	Jm [IN-LBS-SEC <sup>2</sup> ] [Kg-M <sup>2</sup> ]	.0095 [0.0107]
	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:**
1. AXIAL LOAD: 50 LBS MAX
  2. RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
  3. MOTOR SEALED TO IP65.
  4. MOTOR WEIGHT: 33.6 LBS. [ 15.2 kg]
  5. MOTOR FINISH: BLACK EPOXY
  6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
  7. INCHES (MILLIMETERS)

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

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



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

REV#		DESCRIPTION	DATE	APPD.
1	PRELIMINARY	1/15/02	LIN	
2	UPDATE - TYP0	1/16/02	LIN	
3	E.C.O. -	2023	4/3/02	AJS

NO. 1	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DECIMAL: 1/16 & 3/32			
FRACTIONS: 1/2, 3/4, 1, 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24, 30, 36, 48, 60, 72, 96, 120, 144, 180, 240, 360			
ANGLE: 1/2°			
SCALE: 1/2"			
DATE: 1/15/02			
DRAWN: LIN			
CHECKED:			
APPROVED:			
DATE: 1/15/02			
TITLE: "C" / SINE / 460 / MET / CONN			
MATERIAL:			
QUANTITY:			
SCALE: 1/2:1			



MTS Systems Corporation  
Automation Division