

MOTOR DATA @ 460 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	3.3
KILOWATTS	KW	2.5
MAX. OPERATING SPEED	N MAX	4200
SPEED @ RATED TORQUE	RPM	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM	N-RATED RPM	69.1 [7.8]
CONTINUOUS STALL TORQUE	N-LBS [Nm]	83.0 [9.3]
CONTINUOUS LINE CURRENT	AMPS (RMS/Φ)	4.7
PEAK CURRENT	N-LBS [Nm]	290.5 [32.7]
MAX. THEORETICAL ACCEL.	AMPS (RMS/Φ)	16.5
TORQUE SENSITIVITY	RAD/SEC ²	44.015
BACK EMF (LINE TO LINE)	Kt N-LBS/AMP (RMS/Φ) [Nm/AMP (RMS/Φ)]	17.5 [1.98]
D.C. RESISTANCE (P-P)	Vrms/Krpm	110.0
INDUCTANCE (P-P)	OHMS	1.8
ROTOR INERTIA	Jm [N-LBS-SEC ²] Kg-M ²	12.1
STATIC FRICTION	Tf [N-LBS] [Nm]	.0066 [0.0074]

*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: 26.8 LBS. [12.2 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. INCHES (MILLIMETERS)

CONNECTION CHART

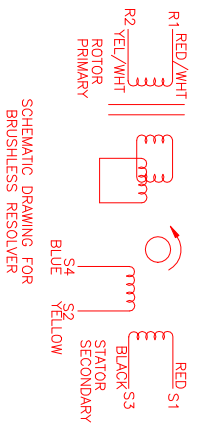
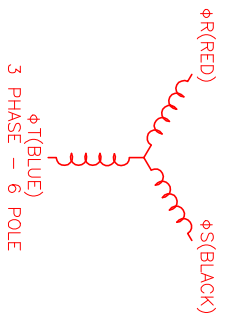
MOTOR CONNECTOR:
PT02E-14-5P(027)
(270-00026)

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

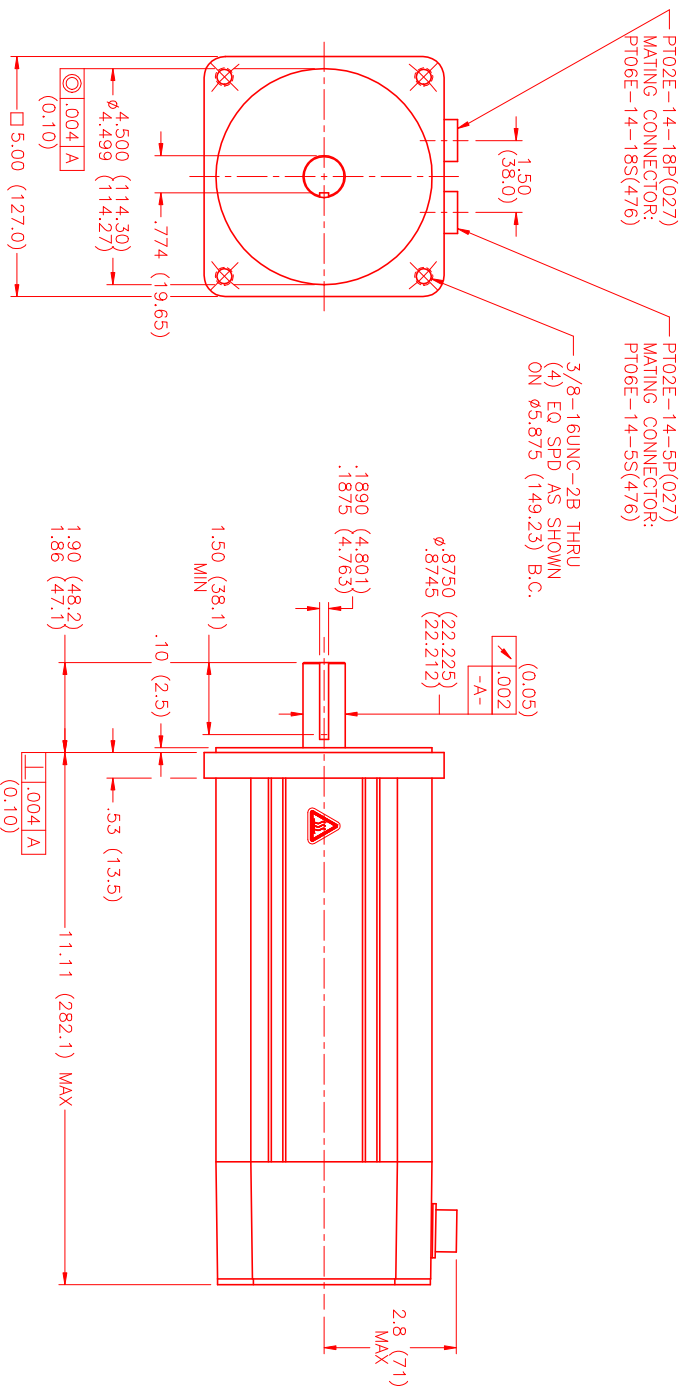
RESOLVER/THERM CONNECTOR:
PT02E-14-18P(027)
(270-00024)

RES./THERM WIRE LEADS	WIRE FUNCTION	WIRE COLOR
U	THERM	BLACK
N	THERM	BLACK
H	SIN	YELLOW
G	COS GND	BLACK
S	COS	RED
F	SIN GND	BLUE
R	REF GND	YEL/WHT
E	REF	RED/WHT
D	RES SHLD	GRN/YEL
P	GND	GRN/YEL
A	-	-
B	-	-
C	-	-
J	-	-
K	-	-
L	-	-
M	-	-
T	-	-

REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		2/24/00	LIN



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER



NO. PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED		
DATE: 03X 4 200	MTS Systems Corporation	
DESIGN: 3X 4 200	Automation Division	
SCALE: 1/2"		
APPROVED: MVS		
DATE: 8/00		
SCALE: 1/2"		
APPROVED:		