

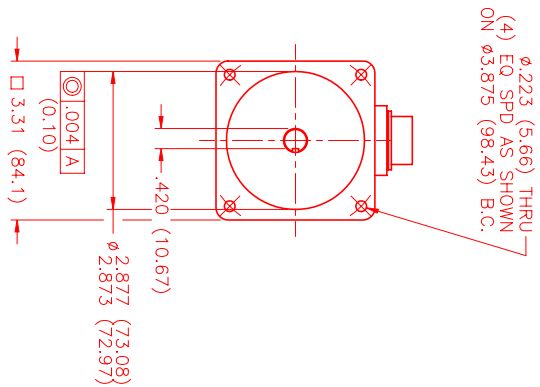
### MOTOR DATA @ 230 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	1.96
KILOWATTS	KW	1.46
MAX. OPERATING SPEED	N MAX RPM	4100
SPEED @ RATED TORQUE	N RATED RPM	3600
* CONTINUOUS RATED TORQUE @ 3600 RPM	IN-LBS [Nm]	34.4 [3.8]
* CONTINUOUS STALL TORQUE	IN-LBS [Nm]	39.0 [4.4]
CONTINUOUS LINE CURRENT	AMPS (RMS/Φ)	4.5
PEAK TORQUE	IN-LBS [Nm]	137.0 [15.5]
PEAK CURRENT	AMPS (RMS/Φ)	16.3
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	100,000
TORQUE SENSITIVITY	Kt [IN-LBS/AMP (RMS/Φ) / (Nm/AMP (RMS/Φ))]	8.8 [ .991]
BACK EMF (LINE TO LINE)	±10% Vrms/Krpm	55.0
D.C. RESISTANCE (P-P)	±10% OHMS	1.9
INDUCTANCE (P-P)	±10% MILLIHENRIES	7.5
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> / Kg-M <sup>2</sup> ]	.00137 [ .000154]
STATIC FRICTION	Tf [IN-LBS / Nm]	0.6 [ 0.07]

\*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:

1. AXIAL LOAD: 25 LBS MAX
2. RADIAL LOAD: 40 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 12.6 LBS. [ 5.7 kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. INCHES (MILLIMETERS)



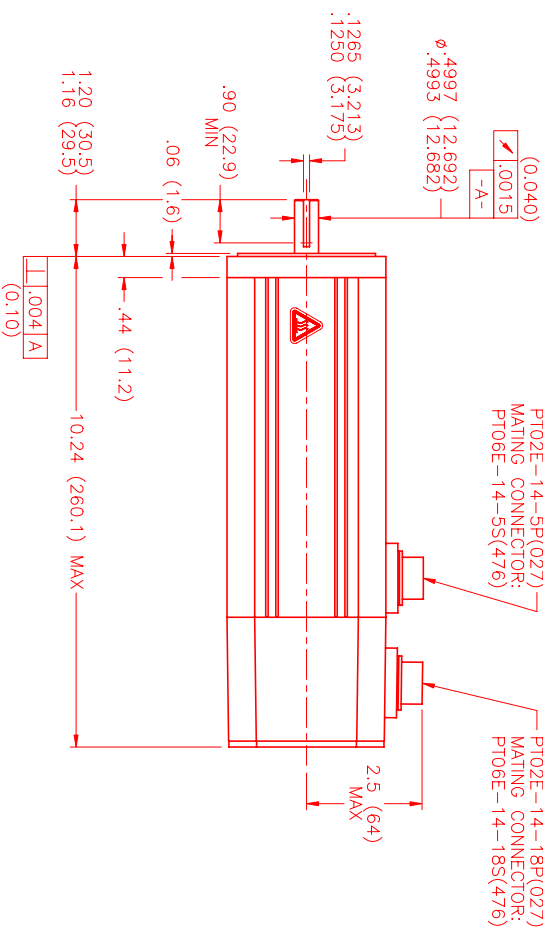
### CONNECTION CHART

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

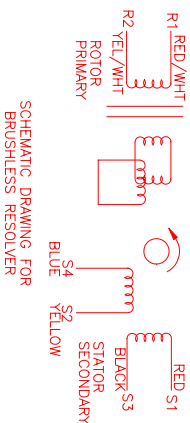
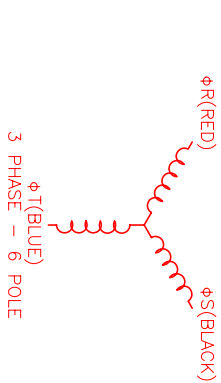
RESOLVER/THERM CONNECTOR:  
PT02E-14-18P(027)  
(270-00024)

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

RES/THERM WIRE	LEADS
PIN	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/WHI
E	REF RED/WHI
D	RES SHLD GRN/YEL
P	GND GRN/YEL
A	-
B	-
C	-
J	-
K	-
L	-
M	-
T	-



REV.	DESCRIPTION	DATE	APP'D.
PRELIMINARY		3/23/01	LIN



NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DECIMAL	ADD # 005		
FRACTIONAL	ADD # 020		
ANGLE	± 1/2°		
ISO	LIN		
DATE	3/23/01		
TITLE	"A"/SINE/230/ENG/RES/CONN		
CHECKED			
APPROVED			
DRAWING NUMBER	MPM893ASG6G1N	SCALE	1/2:1

**MTS** MTS Systems Corporation  
Automation Division