

MOTOR DATA @ 230 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	2.4
KILOWATTS	KW RATED	1.8
MAX. OPERATING SPEED	N MAX	2100
SPEED @ RATED TORQUE	RPM	1500
* CONTINUOUS RATED TORQUE @ 1500 RPM	IN-LBS [Nm]	104.0 [11.7]
* CONTINUOUS STALL TORQUE	IN-LBS [Nm]	116.2 [13.1]
CONTINUOUS LINE CURRENT	AMPS (RMS/Φ)	6.6
PEAK CURRENT	IN-LBS [Nm]	406.7 [45.7]
MAX. THEORETICAL ACCEL.	AMPS (RMS/Φ)	23.2
TORQUE SENSITIVITY	RAD/SEC ²	41,081
BACK EMF (LINE TO LINE)	Kt IN-LBS/AMPERE (Φ) [mV/AMPERE (Φ)]	17.5 [1.98]
D.C. RESISTANCE (P-P)	Vrms/krpm	110.0
INDUCTANCE (P-P)	OHMS	1.1
ROTOR INERTIA W/BRAKE	MILLIHENRIES	8.1
STATIC FRICTION	Jm [IN-LBS-SEC ²] Kg-M ²	.00991 [00112]
	Tf [IN-LBS] [Nm]	1.8 [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 LOAD: 50 LBS MAX
 - RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
 - MOTOR SEALED TO IP65.
 - MOTOR WEIGHT: 41 LBS. [18.6 kg]
 - MOTOR FINISH: BLACK EPOXY
 - MOTOR OUTPUT SHAFT: STAINLESS STEEL
 - MILLIMETERS (INCHES)

FAILSAFE BRAKE: (290-00006)
 MIN HOLDING TORQUE: 240 IN-LBS
 INPUT VOLTAGE: 24 VOLTS

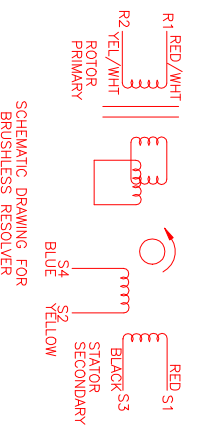
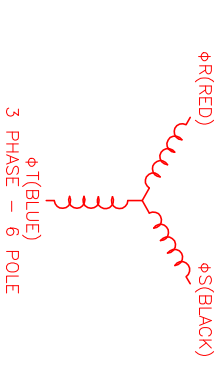
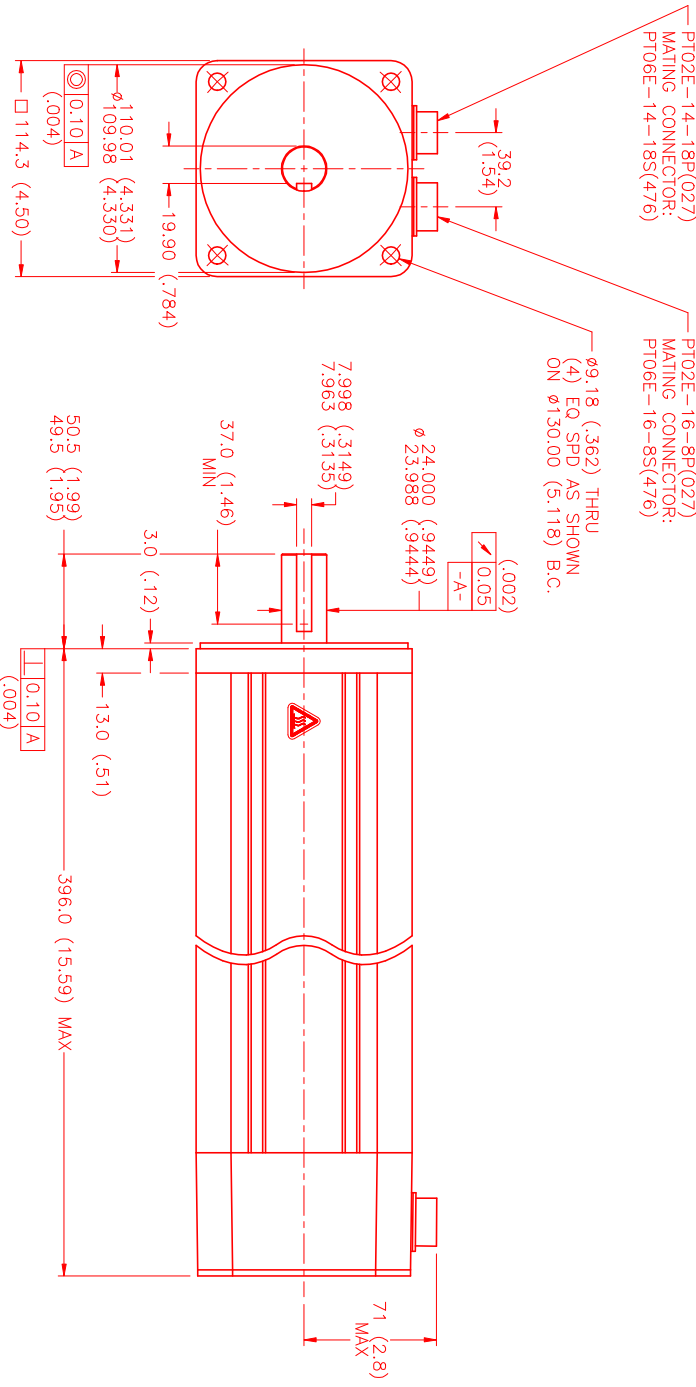
CONNECTION CHART

MOTOR/BRAKE CONNECTOR:
 PTO2E-16-8P(027)
 (270-00032)

RESOLVER/THERM CONNECTOR:
 PTO2E-14-18P(027)
 (270-00024)

MOTOR/BRAKE	WIRE LEADS
PIN	WIRE FUNCTION
A	ΦR
B	ΦS
C	ΦT
D	PE GND
E	BRK SHLD
F	BRK (+)
G	BRK (-)
H	-

RES/THERM	WIRE LEADS
PIN	WIRE FUNCTION
U	THERM
N	THERM
H	SIN
G	COS GND
S	COS
F	SIN GND
R	REF GND
E	REF
D	RES. SHLD
P	GND
A	-
B	-
C	-
J	-
K	-
L	-
M	-
T	-



NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DRINK: 400 # 400			
TECHNICAL: 4 # 400			
DATE: 12/7/00			
BY: MVS			
CHECKED:			
APPROVED:			
DATE: 12/7/00			
BY: MVS			
CHECKED:			
APPROVED:			
DATE: 12/7/00			
BY: MVS			
CHECKED:			
APPROVED:			

REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		12/7/00	MVS

TITLE: 8" / 230 / MET / RES / CONN / BRK
 NUMBER: MPM1143BSG7G1R
 DRAWING NUMBER: MPM1143BSG7G1R
 SCALE: 1/2:1
MTS Systems Corporation
 Automation Division
 TITLE: 8" / 230 / MET / RES / CONN / BRK
 MATERIAL: