

MOTOR DATA @ 460 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
MOTOR HORSEPOWER	HP RATED	2.1
	KW RATED	1.8
MAX OPERATING SPEED	N MAX	4200
SPEED @ RATED TORQUE	N RATED	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM	N-LBS[Nm]	45.0[5.1]
* CONTINUOUS STALL TORQUE	N-LBS[Nm]	54.0[6.1]
CONTINUOUS LINE CURRENT	AMPS[RMS/Φ]	3.1
PEAK TORQUE	10k	189.0[21.3]
PEAK CURRENT	AMPS[RMS/Φ]	10.8
MAX THEORETICAL ACCEL	RD/SEC ²	48,482
TORQUE SENSITIVITY	Kt [IN-LBS/AMP/0.05/Φ] [Nm/AMP/0.05/Φ]	17.5[1.98]
BACK EMF (LINE TO LINE)	Vrms/Krpm	110.0
D.C. RESISTANCE (P-P)	OHMS	3.2
INDUCTANCE (P-P)	MILLIHENRIES	24.0
ROTOR INERTIA W/ BRK	Jm [N-LBS-SEC ² /Kg-M ²]	.00391[.00044]
STATIC FRICTION	Tf [N-LBS[Nm]]	1.0[.11]

*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 LEADS: 50 LBS MAX
 - RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
 - MOTOR SEALED TO IP65
 - MOTOR WEIGHT: 23.1 LBS [10.5 kg]
 - MOTOR FINISH: BLACK EPOXY
 - MOTOR OUTPUT SHAFT: STAINLESS STEEL
 - MILLIMETERS (INCHES)

ENCODER: (290-D0023)
OH48-2048P6-L6-SV
FAILURE BRAKE
MIN HOLDING TORQUE: 240 IN-LBS
INPUT VOLTAGE: 24 VOLTS

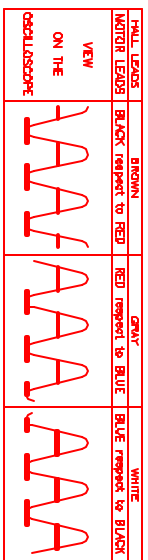
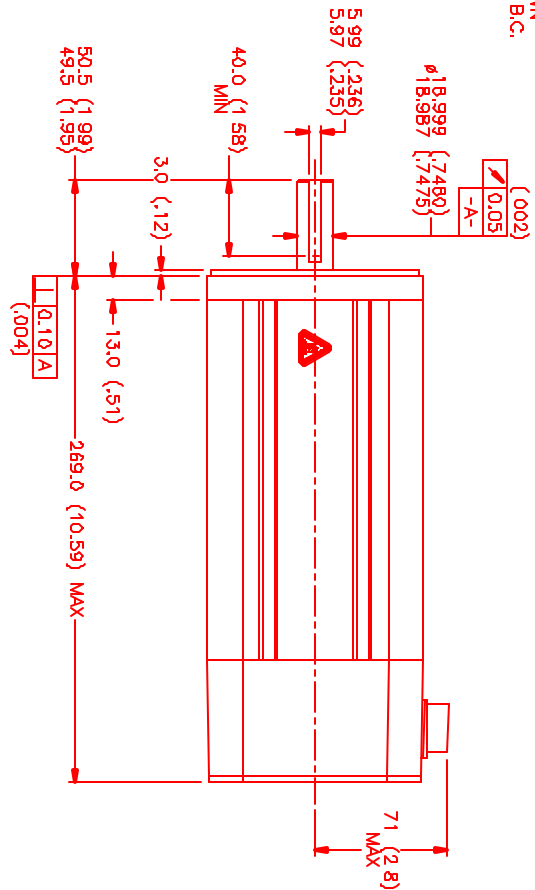
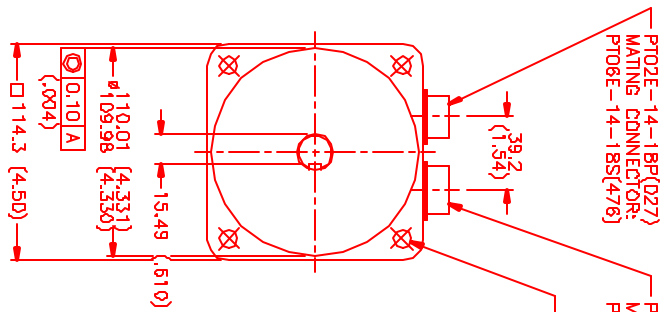
CONNECTION CHART

MOTOR/BRAKE CONNECTOR:
PT02E-16-BP(027)
(270-00032)

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

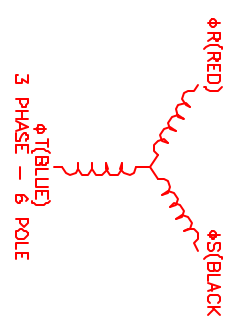
MOTOR/BRAKE	WIRE LEADS
PIN	WIRE FUNCTION
A	4R
B	4S
C	ΦT
D	PE GND
E	BRK SHLD
F	BRK (+)
G	BRK (-)
H	-

ENC/THERM	WIRE LEADS
PIN	WIRE FUNCTION
T	GROUND
K	+5VDC
B	CH A
C	CH A
N	CH B
P	CH B
M	CH Z
E	CH U
U	CH U
R	CH V
F	CH V
S	CH W
Q	CH W
H	CH W
D	GND/CABLE SHLD
A	THERM
L	THERM
J	GND



MOTOR & HALL POSITION CHART

WAVE REPRESENTING STATOR OUTPUT
WAVE REPRESENTING HALL SENSOR



NO.	PART NUMBER	DESCRIPTION	QTY.
1	MPS Systems Corporation Automation Division		
<p>DATE: 10/24/00 DRAWN: [Signature] CHECKED: [Signature] APPROVED: [Signature]</p>			
<p>TITLE: 1/2" / SINE / 460 / MET / 29048 / CONN / BRK</p>			
<p>PROJECT: [Signature]</p>			

REV.	DESCRIPTION	DATE	APP.
1	PRELIMINARY	10/10/00	LIN