

⊗ MOTOR DATA @ 460 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	4.6
KILOWATTS	KW	3.4
MAX. OPERATING SPEED	N MAX	4200
SPEED @ RATED TORQUE	N RATED	3000
* CONTINUOUS RATED TORQUE	N-LEBS [Nm]	96.81 [10.9]
CONTINUOUS LINE CURRENT	AMPS (RMS/Φ)	116.2 [13.1]
PEAK CURRENT	IN-LEBS [Nm]	6.6
MAX. THEORETICAL ACCEL.	AMPS (RMS/Φ)	406.7 [45.7]
TORQUE SENSITIVITY	RAD/SEC ²	23.2
BACK EMF (LINE TO LINE)	Kt M-LEBS/AMP (RMS/Φ) [Nm/AMP (RMS/Φ)]	42.811
D.C. RESISTANCE (P-P)	Vrms/Krpm	17.48 [1.97]
INDUCTANCE (P-P)	OHMS	110.0
ROTOR INERTIA	MILLIHENRIES	.95
STATIC FRICTION	Jm [N-LEBS-SEC ²] Kg-M ²	8.0
	Tf [N-LEBS]	0.0095 [0.001071]
		1.8 [0.2]

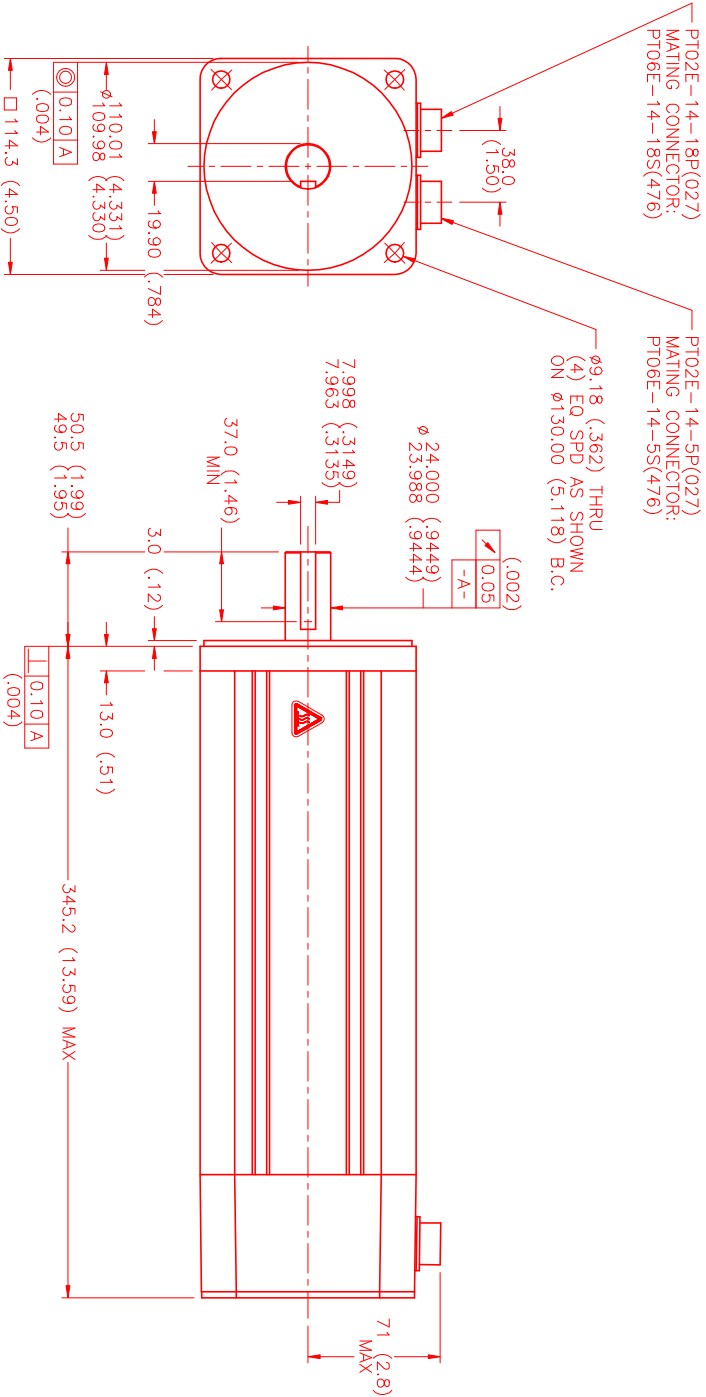
*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 12" X 12" X 1/2" ALUMINUM HEATSINK. THERMOSTAT IN STATOR WINDINGS WILL OPEN IF WINDING TEMPERATURE EXCEEDS 155°C. THIS ALLOWS FOR AN APPROXIMATE +10% HEADROOM IN THE CONTINUOUS TORQUE RATING BEFORE THERMOSTAT OPENS.

MECHANICAL NOTES:

- AXIAL LOAD: 50 LBS MAX
- RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 35.2 LBS. [16.0 kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)

ENCODER: (290-00073)

OH48-2048P6-L6-5V

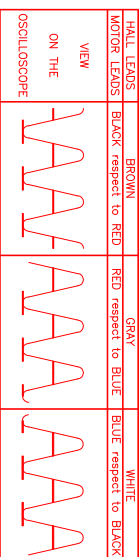


CONNECTION CHART
ENCODER/THERM CONNECTOR:
PT02E-14-18P(027)
(270-00024)

ENC/THERM	WIRE FUNCTION	WIRE COLOR
Pin	GROUND	BLACK
T	GROUND	BLACK
K	+5VDC	RED
B	CH A	BLUE
C	CH A \	BLUE/BLK
N	CH B	GREEN
P	CH B \	GRN/BLK
M	CH Z	YELLOW
U	CH Z \	YEL/BLK
E	CH U	BROWN
R	CH U \	BRN/BLK
F	CH V	GRAY
S	CH V \	GRAY/BLK
G	CH W	WHITE
H	CH W \	WHT/BLK
D	GND/CABLE	SHLD
A	THERM	BLACK
L	THERM	BLACK
J	GND	GRN/YEL

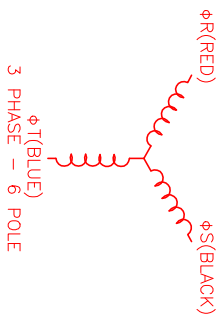
MOTOR CONNECTOR:
PT02E-14-5P(027)
(270-00026)

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



MOTOR & HALL POSITION CHART
MOTOR ROTATION CCW (COUNTER CLOCKWISE)
(LOOKING AT THE FACE OF THE MOTOR)

WAVE REPRESENTING STATOR OUTPUT
WAVE REPRESENTING HALL SENSOR



3 PHASE - 6 POLE

NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DESIGN: 2004-000			
REVISION: 1			
DATE: 11/28/01			
DESIGNED: MS			
CHECKED:			
DATE: 11/28/01			
TITLE: "C"/SINE/460/MET/T2048/CONN			
APPROVED:			
DESIGNED: MPM1143CSU7JY1N			
SCALE: 1/2:1			

MTS Systems Corporation
Automation Division

REV.	DESCRIPTION	DATE	APPD.
1	PRELIMINARY	11/28/01	MS
A	E.C.O. - 2023	4/3/02	AJS

MTS: "C"/SINE/460/MET/T2048/CONN DRAWING NUMBER: MPM1143CSU7JY1N