TITLE "C"/CONN/ENG/T4096	DRAWING NUMBER MPM1143CTJ6JZ1N

REVISIONS

REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	9/14/98	MS
A	E.C.O. - 2023	4/3/02	AJS

@ MOTOR DATA @ 460 VAC

MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	4.6
KILOWATTS	KW RATED	KW	3.4
MAX. OPERATING SPEED	N MAX	RPM	4200
SPEED @ RATED TORQUE	N RATED	RPM	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM		IN-LBS[Nm]	96.8[10.9]
* CONTINUOUS STALL TORQUE		IN-LBS[Nm]	116.2[13.1]
CONTINUOUS LINE CURRENT		AMPS	9 4
PEAK TORQUE	Tpk	IN-LBS[Nm]	406.7[45.7]
PEAK CURRENT		AMPS	32.8
MAX. THEORETICAL ACCEL		RAD/SEC²	54,959
TORQUE SENSITIVITY	Kt	IN-LBS/AMP[Nm/AMP]	12.4[1.42]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	110.0
D.C. RESISTANCE (P-P)	±10%	OHMS	.95
INDUCTANCE (P-P)	±10%	MILLIHENRIES	8.0
ROTOR INERTIA	Jm	IN-LBS-SEC²[Kg-M²]	0.0095[0.00107]
STATIC FRICTION	Tf	IN-LBS[Nm]	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:
1. AXIAL LOAD: 50 LBS MAX
2. RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 35 4 LBS. [16.1 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. INCHES (MILLIMETERS)

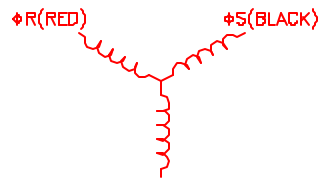
ENCODER. (290-00107)
DIH48-4096P6-L6-5V

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

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

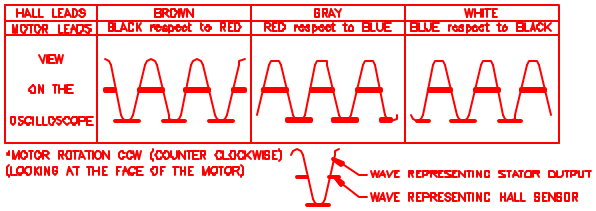
MOTOR CONNECTOR:
PT02E-14-5P(027)
(270-00026)

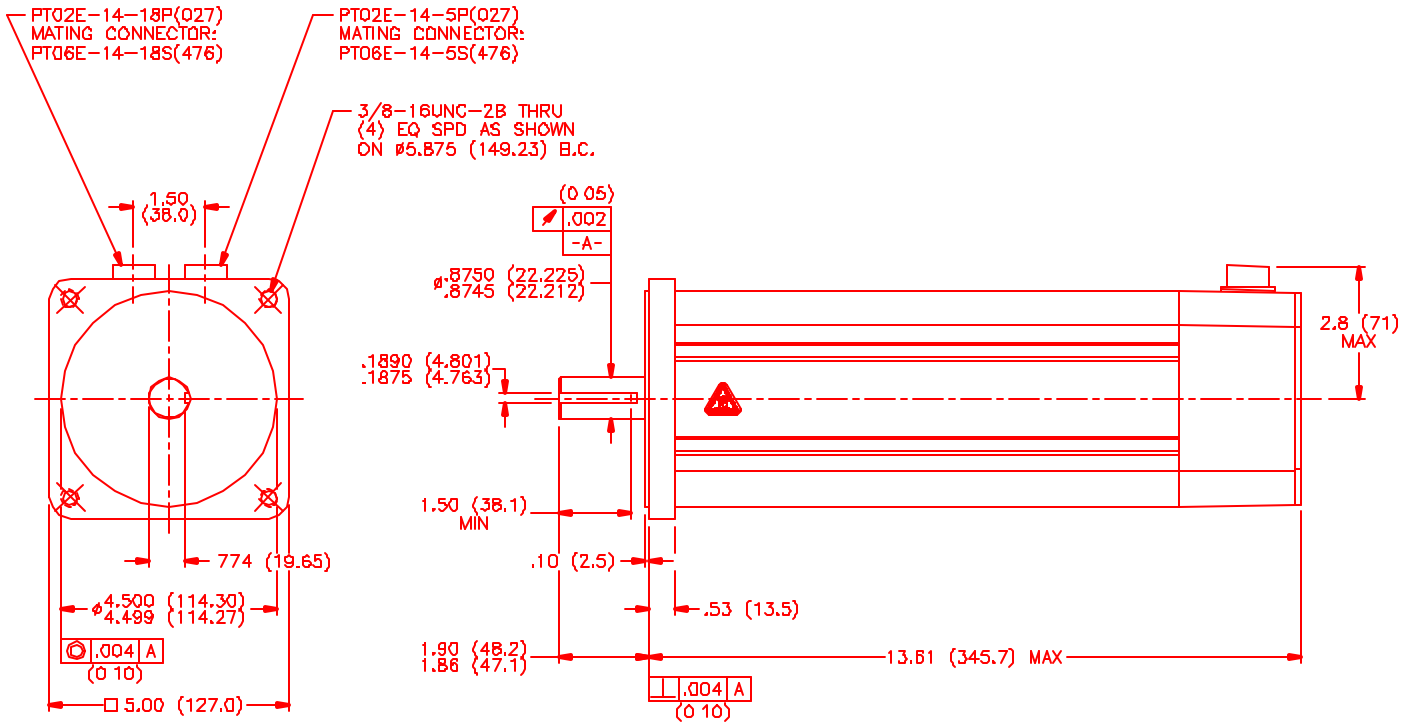
MOTOR WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
A	ΦR	RED
B	ΦS	BLACK
C	ΦT	BLUE
D	PE GND	GRN/YEL
E	-	-



3 PHASE - 6 POLE

MOTOR & HALL POSITION CHART





NO.	PART NUMBER	DESCRIPTION	QTY.

TOLERANCES UNLESS SPECIFIED
DECIMAL .XXX ± .005
DECIMAL .XX ± .010
DECIMAL .X ± .030
FRACTION ± 1/64
ANGLE ± 1/2°

MTS Systems Corporation
Automation Division

DRAWN MS	TITLE "C"/CONN/ENGLISH/TAMA 4096L	REV A
DATE 9/14/98		
CHECKED	MATERIAL	
APPROVED	DRAWING NUMBER MPM1143CTJ6JZ1N	SCALE 1/2:1