

MOTOR DATA @ 230 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	1.05
KILOWATTS	KW RATED	0.78
MAX. OPERATING SPEED	N. MAX RPM	3000
SPEED @ RATED TORQUE	N RATED RPM	2400
* CONTINUOUS RATED TORQUE @ 2400 RPM	IN-LBS[Nm]	27.5[3.1]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	30.0[3.4]
CONTINUOUS LINE CURRENT	AMPS	3.7
PEAK TORQUE	IN-LBS[Nm]	111.5[12.6]
PEAK CURRENT	AMPS	13.6
MAX. THEORETICAL ACCEL.	RAD/SEC ²	112,513
TORQUE SENSITIVITY	Kt IN-LBS/AMPI Nm/AMP	8.2[0.94]
BACK EMF (LINE TO LINE)	Vrms/Krpm	73.2
D.C. RESISTANCE (P-P)	OHMS	8.4
INDUCTANCE (P-P)	MILLIHENRIES	27.0
ROTOR INERTIA	Jm [IN-LBS-SEC ²] Kg-M ²	.000991[.000116]
STATIC FRICTION	Tf [IN-LBS] [Nm]	0.5[0.06]

*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 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: 10.0 LBS. [4.5 Kg]
 5. MOTOR FINISH: BLACK EPOXY
 6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
 7. INCHES (MILLIMETERS)

ENCODER: (290-00171)

OIH48-500P616-5V

CONNECTION CHART

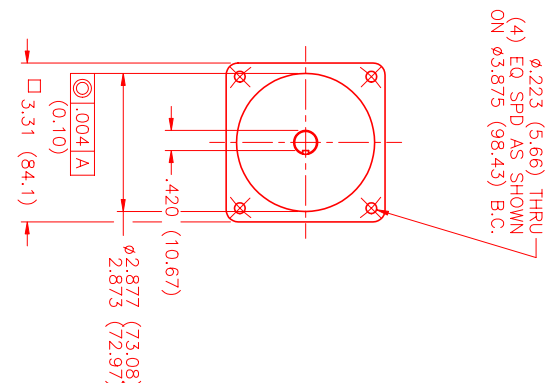
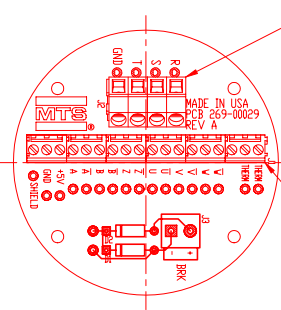
MOTOR CONNECTOR:

TERMINAL	WIRE FUNCTION	WIRE COLOR
T18	ΦR	RED
T19	ΦS	BLACK
T20	ΦT	BLUE
T21	PE GND	GRN/YEL

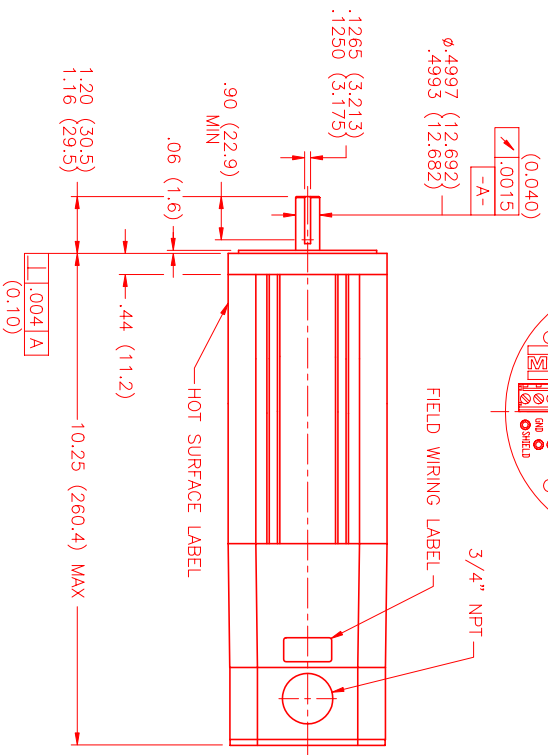
ENCODER/THERM CONNECTOR:

BRK/ENC/THERM	WIRE FUNCTION	WIRE COLOR
T2	GROUND	BLACK
T3	+5VDC	RED
T4	CH A	BLUE
T5	CH A\	BLUE/BLK
T6	CH B	GREEN
T7	CH B\	GRN/BLK
T8	CH Z	YELLOW
T9	CH Z\	YEL/BLK
T10	CH U	BROWN
T11	CH U\	BRN/BLK
T12	CH V	GRAY
T13	CH V\	GRAY/BLK
T14	CH W	WHITE
T15	CH W\	WHT/BLK
T16	GND/CABLE SHLD	BLACK
T17	THERM	BLACK

MOTOR CONN THERMOSTAT & ENCODER CONN



(4) EQ SPD AS SHOWN ON 03.875 (98.43) B.C.



3/4" NPT

FIELD WIRING LABEL

HOT SURFACE LABEL

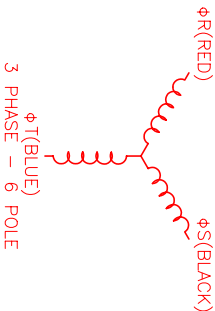
MOTOR & HALL POSITION CHART (GERMAN - TBF \)

HALL LEADS	WHITE	BROWN	GRAY
MOTOR LEADS	BLACK respect to RED	RED respect to BLUE	BLUE respect to BLACK
VIEW ON THE OSCILLOSCOPE	AAA	AAA	AAA

*MOTOR ROTATION COW (COUNTER CLOCKWISE) (LOOKING AT THE FACE OF THE MOTOR)



WAVE REPRESENTING HALL SENSOR



REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		11/17/01	AJS

NO.	PART NUMBER	DESCRIPTION	QTY.
1	290-00171	ENCODER	1
2	03.875	B.C.	1
3	10.0	MOTOR WEIGHT	1
4	10.0	MOTOR WEIGHT	1
5	10.0	MOTOR WEIGHT	1
6	10.0	MOTOR WEIGHT	1
7	10.0	MOTOR WEIGHT	1
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98	10.0	MOTOR WEIGHT	1
99	10.0	MOTOR WEIGHT	1
100	10.0	MOTOR WEIGHT	1

MTS Systems Corporation
Automation Division

DATE: 10/18/01

APPROVED: MPM892BTG6WK3N

SCALE: 1/2:1