

MOTOR DATA @ 54 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	0.18
KILOWATTS	KW RATED	0.13
MAX. OPERATING SPEED	N. MAX RPM	3400
SPEED @ RATED TORQUE	N RATED RPM	2100
* CONTINUOUS RATED TORQUE @ 2100 RPM	IN-LBS[Nm]	5.3[0.60]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	5.8[0.66]
CONTINUOUS LINE CURRENT	AMPS	3.9
PEAK TORQUE	IN-LBS[Nm]	17.0[2.0]
PEAK CURRENT	AMPS	11.6
MAX. THEORETICAL ACCEL.	RAD/SEC ²	77,273
TORQUE SENSITIVITY	Kt IN-LBS/AMP[Nm/AMP]	1.51[0.171]
BACK EMF (LINE TO LINE)	Vrms/Krpm	13.4
D.C. RESISTANCE (P-P)	OHMS	3.1
INDUCTANCE (P-P)	MILLIHENRIES	4.9
ROTOR INERTIA W/BRAKE	Jm [IN-LBS-SEC ²] [Kg-M ²]	0.00022[0.000025]
STATIC FRICTION	Tf [IN-LBS] [Nm]	0.6[0.07]

*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 85°C ON MOTOR. MOTOR MOUNTED ON A 1/2" X 1/2" 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: 20 LBS. MAX
- RADIAL LOAD: 35 LBS. MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 4.4 LBS. [2.0 Kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)
- THIS MOTOR'S OUTPUT KEY IS A PRESS FIT.

ENCODER: (290-00201)

OH35-1024P6-16-5V

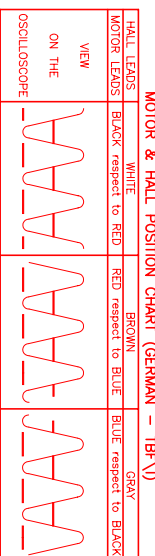
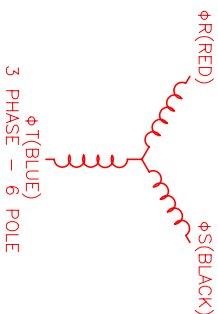
FAILSAFE BRAKE:

MIN HOLDING TORQUE: 24 IN-LBS
INPUT VOLTAGE: 24 VOLTS

CONNECTION CHART MOTOR/ENCODER/THERM/BRAKE CONNECTOR: PT02E-16-23P(027) (270-00219)

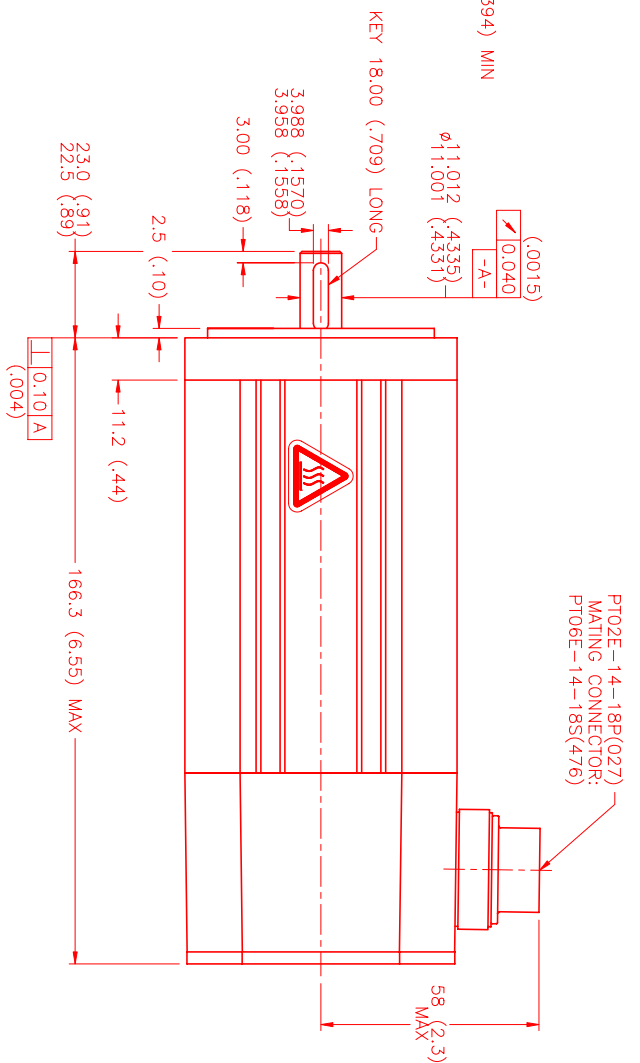
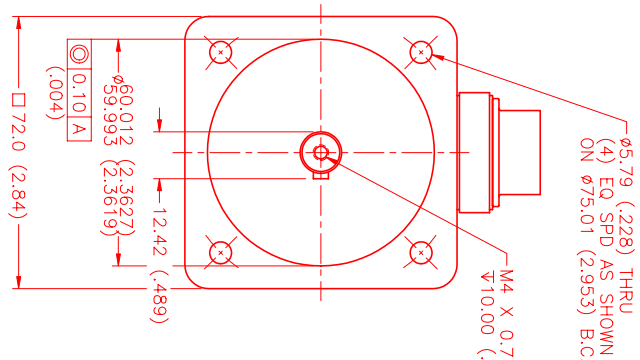
ENC/THERM/BRK	WIRE FUNCTION	WIRE COLOR	WIRE LEADS
PIN	WIRE FUNCTION	WIRE COLOR	WIRE LEADS
T	GROUND	BLACK	
E	+5VDC	RED	A
F	CH A	BLUE	B
U	CH A\	BLUE/BLK	C
G	CH B	GREEN	D
V	CH B\	GRN/BLK	
H	CH Z	YELLOW	
W	CH Z\	YEL/BLK	
J	CH U	BROWN	
K	CH U\	BRN/BLK	
X	CH V	GRAY	
L	CH V\	GRAY/BLK	
Y	CH W	WHITE	
M	CH W\	WHT/BLK	
N	GND/CABLE	SHLD	
S	THERM	BLACK	
R	THERM	BLACK	
P	BRK (+)	DIODE	
Z	BRK (-)	1N4007	

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



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

WAVE REPRESENTING STATOR OUTPUT
WAVE REPRESENTING HALL SENSOR



NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DECIMAL ANG ± .005			
FRAC. ANG ± .002			
FRAC. ANG ± 1/2°			
FRAC. ANG ± 1/2°			
DATE: 11/13/01			
CHECKED: MTS			
APPROVED: MPM721ATE7WX1R			

REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		11/13/01	AJS

MTS
Automation Division

MTS Systems Corporation

SCALE: 1:1