

MOTOR DATA @ 48 VDC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	0.066
KILOWATTS	KW	0.064
MAX. OPERATING SPEED	N. MAX RPM	2000
SPEED @ RATED TORQUE	N RATED RPM	1000
* CONTINUOUS RATED TORQUE @ 1000 RPM	IN-LBS [Nm]	5.4 [0.60]
* CONTINUOUS STALL TORQUE	IN-LBS [Nm]	5.8 [0.70]
CONTINUOUS LINE CURRENT	AMPS	4.0
PEAK TORQUE	IN-LBS [Nm]	17.0 [2.01]
PEAK CURRENT	AMPS	12.0
MAX. THEORETICAL ACCEL.	RAD/SEC ²	116,000
TORQUE SENSITIVITY	Kt IN-LBS/A [Nm/A]	1.51 [0.170]
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	Jm [IN-LBS-SEC ²] [Kg-M ²]	0.00015 [0.000017]
STATIC FRICTION	Tf	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 HEAT-SINK. 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: 3.2 LBS. [1.5 kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)
- THIS MOTOR'S OUTPUT KEY IS A PRESS FIT.

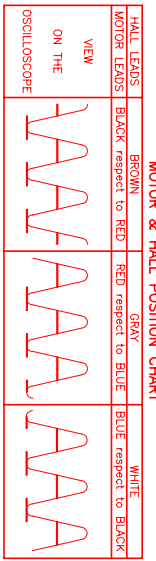
ENCODER: (290-00169)

OH35-500P6-L6-5V

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

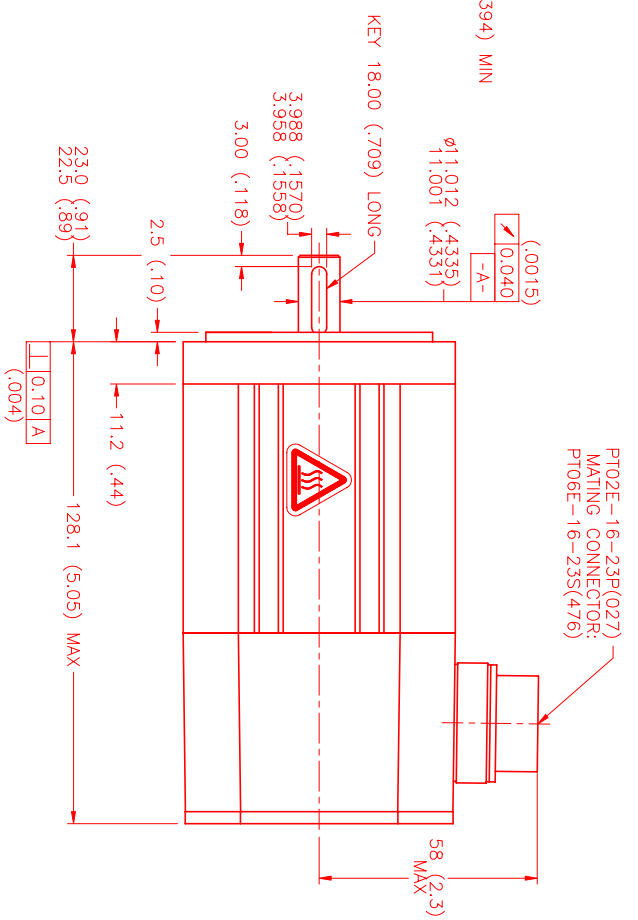
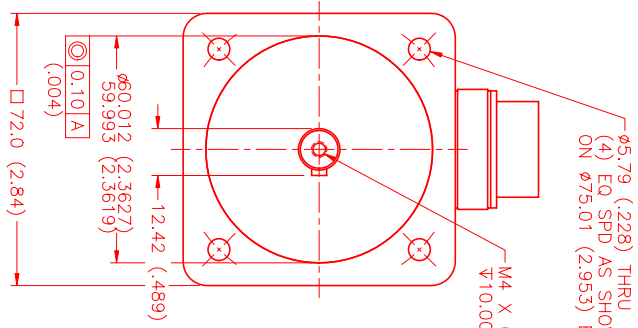
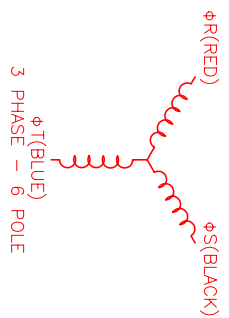
ENC/THERM WIRE LEADS	WIRE FUNCTION	WIRE COLOR
T	GROUND	BLACK
E	+5VDC	RED
F	CH A	BLUE
U	CH A	BLUE/BLK
G	CH B	GREEN
V	CH B	GRN/BLK
H	CH Z	YELLOW
W	CH Z	YEL/BLK
J	CH U	BROWN
K	CH U	BRN/BLK
X	CH V	GRAY
L	CH V	GRAY/BLK
Y	CH W	WHITE
M	CH W	WHT/BLK
N	GND/CABLE	SHLD
S	THERM	BLACK
R	THERM	BLACK
P	-	-
Z	-	-

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



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

WAVE REPRESENTING STATOR OUTPUT
WAVE REPRESENTING HALL SENSOR



NO.	PART NUMBER	DESCRIPTION	QTY.
1	PT02E-16-23P(027)	ENCODER/THERM CONNECTOR	1
2	OH35-500P6-L6-5V	ENCODER	1
3	M4 X 0.7	MINI SCREW	4
4	KEY 18.00 (.709) LONG	KEY	1
5	PT02E-16-23P(027)	MATING CONNECTOR	1
6	OH35-500P6-L6-5V	ENCODER	1
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REV.	DESCRIPTION	DATE	APPD.
1	PRELIMINARY	6/16/00	AJS

REVISIONS

DATE: 6/16/00
DRAWING NUMBER: MPM721ATL7JK1N
SCALE: 1:1

MTS Automation Division

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