

**MOTOR DATA @ 460 VAC (TRAP)**

MOTOR PARAMETERS	UNITS	VALUE
MOTOR HORSEPOWER	HP RATED	2.4
	KW RATED	1.8
MAX. OPERATING SPEED	N MAX	2100
SPEED @ RATED TORQUE	RPM	1500
* CONTINUOUS RATED TORQUE	IN-LBS[Nm]	104.0[11.7]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	116.2[13.1]
CONTINUOUS LINE CURRENT	AMPS	4.7
PEAK TORQUE	IN-LBS[Nm]	406.7[45.7]
PEAK CURRENT	AMPS	16.4
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	41,081
TORQUE SENSITIVITY	K[IN-LBS/AMF[Nm/AMF]	24.8[2.84]
BACK EMF (LINE TO LINE)	Vrms/Krpm	220.0
D.C. RESISTANCE (P-P)	OHMS	3.9
INDUCTANCE (P-P)	MILLIHENRIES	29.6
ROTOR INERTIA W/BRAKE	Jm[IN-LBS-SEC <sup>2</sup> Kg-M <sup>2</sup> ]	.0098[.0012]
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:**

- AXIAL LEAD: 50 LBS MAX
- RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 41.1 LBS [18.6 Kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- INCHES (MILLIMETERS)

**ENCODER: (290-000321)**  
 DH48-200DP6-L6-SV  
**FAILSAFE BRAKE:**  
 MIN HOLDING TORQUE: 240 IN-LBS  
 INPUT VOLTAGE: 24 VOLTS

**CONNECTION CHART**

MOTOR/BRAKE CONNECTOR:  
 P102E-16-8P(027)  
 (270-00032)

ENCODER/THERM. CONNECTOR:  
 P102E-14-18P(027)  
 (270-00024)

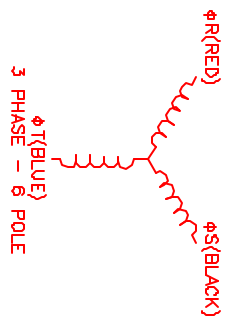
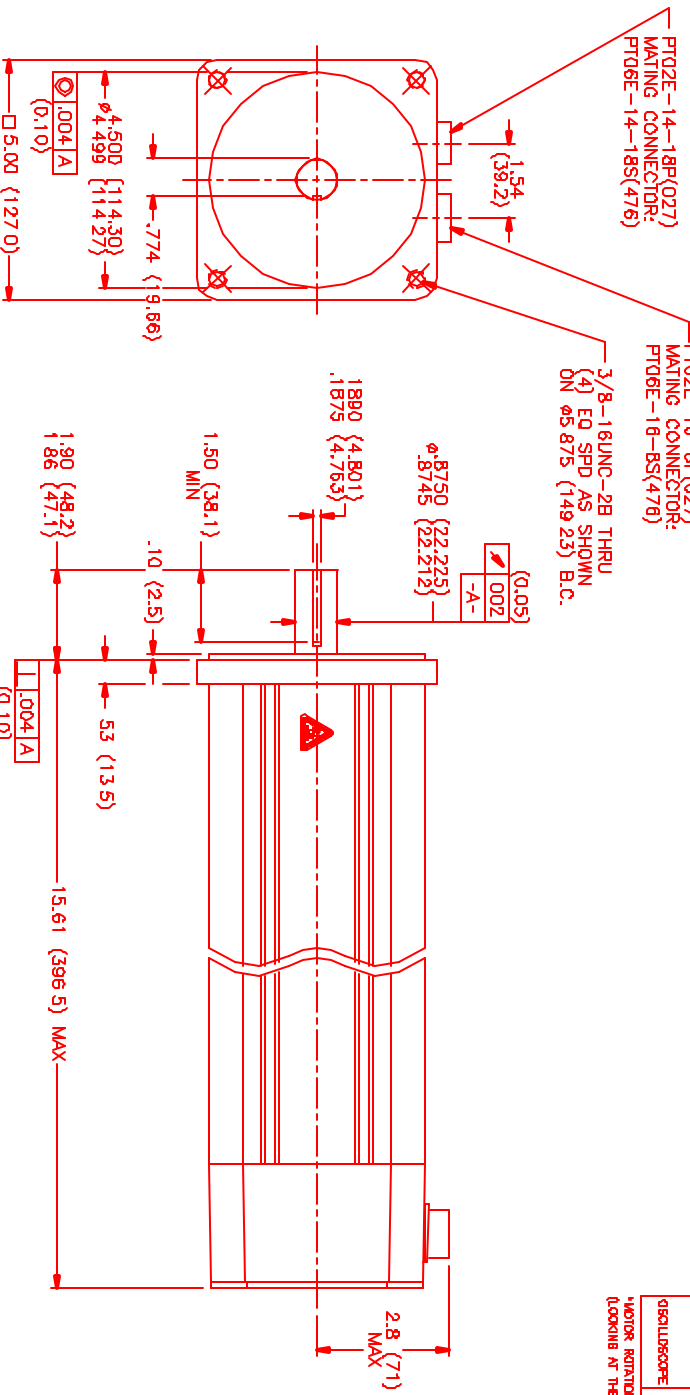
MOTOR/BRAKE	WIRE	WIRE LEADS
PIN	FUNCTION	WIRE COLOR
A	4RS	RED
B	4S	BLACK
C	4T	BLUE
D	PE GND	GRN/YEL
E	BRK SHLD	-
F	BRK (+)	DIODE
G	BRK (-)	1N4007
H	-	-

ENC/THERM	WIRE	WIRE LEADS
PIN	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	GRN/BLK
M	CH Z	YELLOW
U	CH Z	YEL/BLK
E	CH U	BROWN
R	CH V	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 & HALL POSITION CHART**

HALL LEADS	BROWN	GRAY	WHITE
ON THE MOTOR LEADS	BLACK	RED	BLUE
OSCILLOSCOPE	AAAA	AAAA	AAAA

\*MOTOR ROTATION CW (COUNTER CLOCKWISE) (LOOKING AT THE FACE OF THE MOTOR)  
 WAVE REPRESENTING STATOR OUTPUT  
 WAVE REPRESENTING HALL SENSOR



NO.	PART NUMBER	DESCRIPTION	QTY.
1	MOTOR	MNS Systems Corporation Automation Division	1
2	ENCODER	290-000321	1
3	BRAKE	290-000321	1
4	WIRE	24VDC	1
5	WIRE	24VDC	1
6	WIRE	24VDC	1
7	WIRE	24VDC	1
8	WIRE	24VDC	1
9	WIRE	24VDC	1
10	WIRE	24VDC	1
11	WIRE	24VDC	1
12	WIRE	24VDC	1
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