MOTOR DATA @ 460 VAC (SINE)

MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	10.4
KILOWATTS	KW RATED	KW	7.8
MAX. OPERATING SPEED	N MAX	RPM	1500
SPEED @ RATED TORQUE	N RATED	RPM	1200
* CONTINUOUS RATED TORQUE @ 1200 RPM		IN-LBS[Nm]	550.0[61.8]
* CONTINUOUS STALL TORQUE		IN-LBS[Nm]	640.0[71.9]
CONTINUOUS LINE CURRENT		AMPS(RMS/Φ)	12.7
PEAK TORQUE	Tpk	IN-LBS[Nm]	1920.0[215.0]
PEAK CURRENT		AMPS(RMS/Φ)	38.2
MAX. THEORETICAL ACCEL.		RAD/SEC²	26,891
TORQUE SENSITIVITY	Kt	IN-LBS/AMP(RMS/Φ)[Nm/AMP(RMS/Φ)]	49.5[5.59]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	316.0
D.C. RESISTANCE (P-P)	±10%	OHMS	2.0
INDUCTANCE (P-P)	±10%	MILLIHENRIES	29.3
ROTOR INERTIA	Jm	IN-LBS-SEC²[Kg-M²]	.0714[.00807]
STATIC FRICTION	Tf	IN-LBS[Nm]	9.8[1.1]

*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 14" X 14" X 3/4" 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: 100 LBS MAX
2. RADIAL LOAD: 250 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 98 LBS. [45 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MILLIMETERS (INCHES)

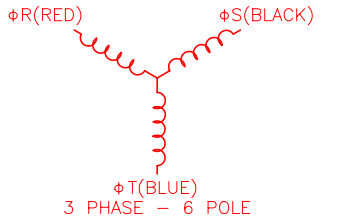
CONNECTION CHART

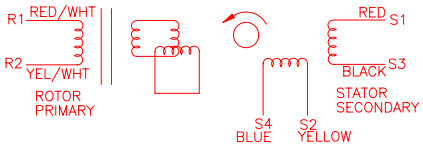
MOTOR CONNECTOR: SG3102E-32-17P(027) (270-00066)

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

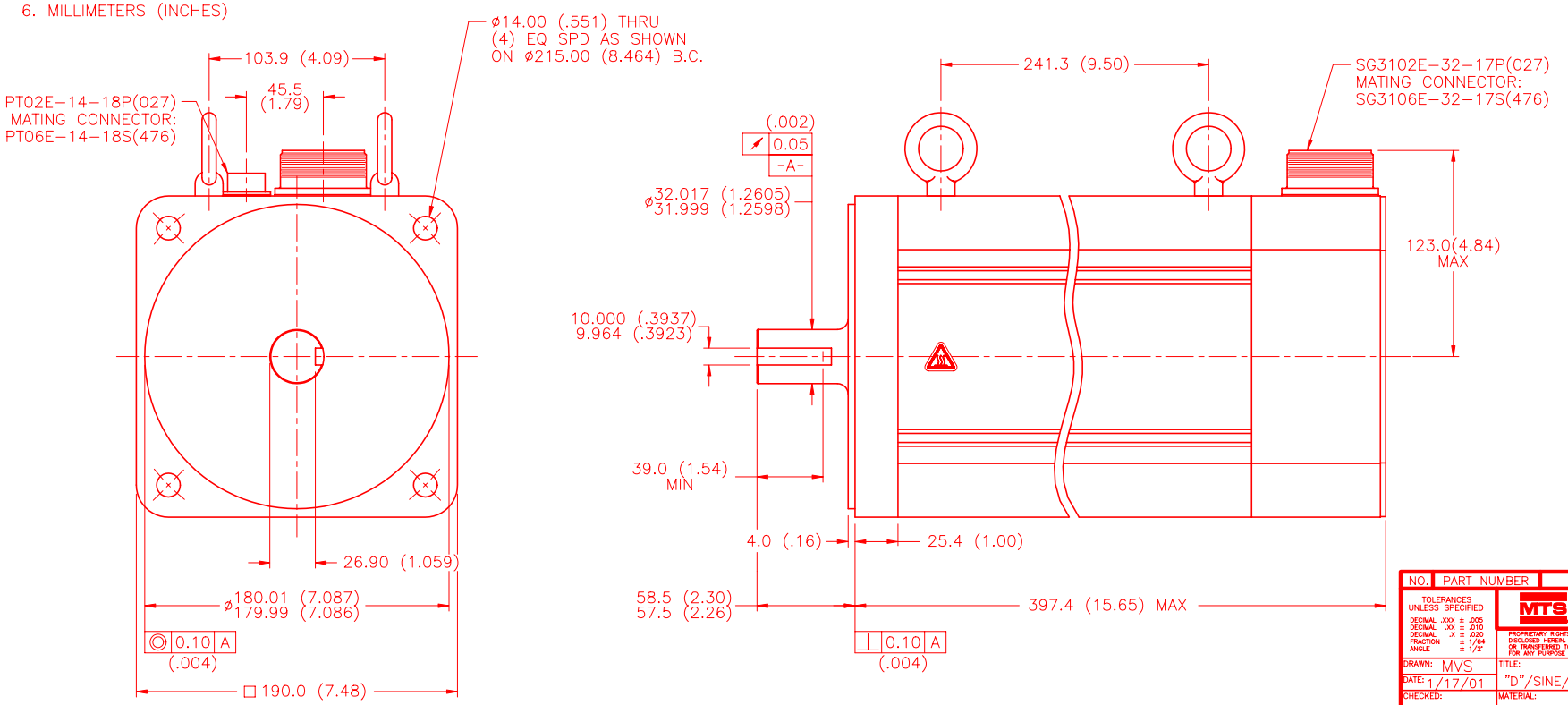
RESOLVER/THERM CONNECTOR: PT02E-14-18P(027) (270-00024)

RES/THERM WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
U	THERM	BLACK
N	THERM	BLACK
H	SIN	YELLOW
G	COS GND	BLACK
S	COS	RED
F	SIN GND	BLUE
R	REF GND	YEL/WHT
E	REF	RED/WHT
D	RES SHLD	GRN/YEL
P	GND	GRN/YEL
A	–	–
B	–	–
C	–	–
J	–	–
K	–	–
L	–	–
M	–	–
T	–	–





SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER



REVISIONS			
REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	1/17/01	MVS

TITLE: "D"/SINE/460/MET/RES/CONN
DRAWING NUMBER: MPM1902DSJ7G1N

NO.	PART NUMBER	DESCRIPTION	QTY.

TOLERANCES UNLESS SPECIFIED
DECIMAL .XXX ± .005
DECIMAL .XX ± .010
DECIMAL .X ± .020
FRACTION ± 1/64
ANGLE ± 1/2°

MTS Systems Corporation
Automation Division

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DRAWN: MVS
DATE: 1/17/01
CHECKED:
APPROVED:
TITLE: "D"/SINE/460/MET/RES/CONN
REV.
MATERIAL:
DRAWING NUMBER: MPM1902DSJ7G1N
SCALE: 1/2:1