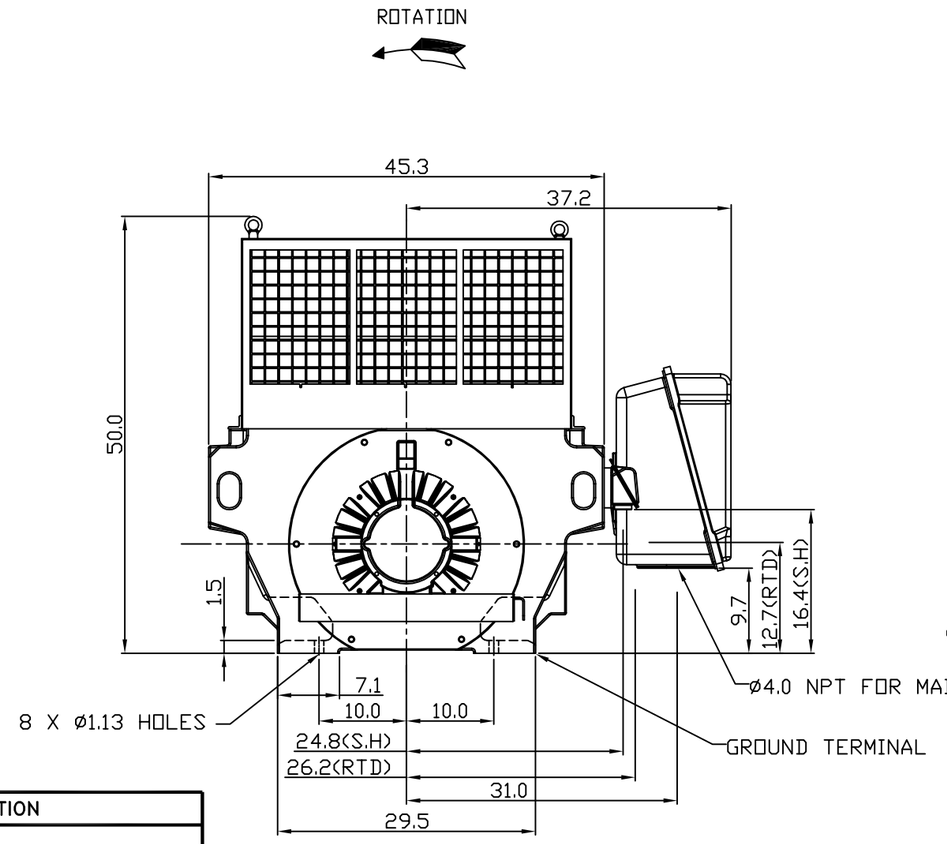
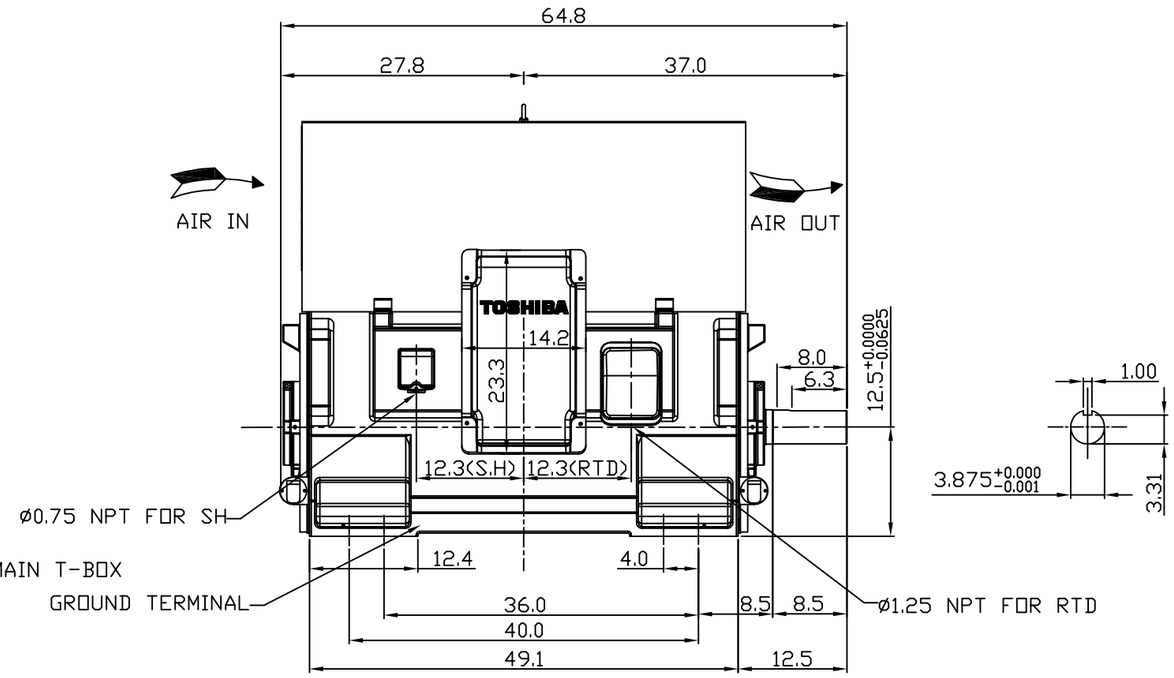
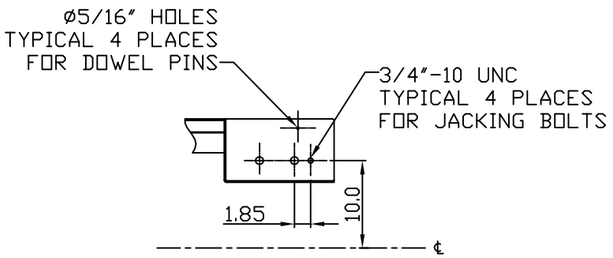






TECHNICAL INFORMATION

1. BEARING LUBRICATION DE: MOBIL POLYREX EM
   ODE: MOBIL POLYREX EM
2. BEARING TYPE DE: 6321C3
   ODE: 6321C3 (INSULATED)
3. WINDING TEMP. DETECTORS
   NUMBER AND TYPE: 6xRTD(Pt0°C-100ohm)
   LOCATION: IN STATOR SLOT
4. BEARING TEMP. DETECTORS
   NUMBER AND TYPE: N/A
5. SPACE HEATER 1 PHASE
   VOLTS: 120 WATTS: 400
6. ROTATION: CCW VIEWED FROM NON DRIVE END
   THIS MOTOR IS BI DIRECTIONAL
7. MOTOR PAINT COLOR: GRAY
8. APPROX. WEIGHT: 5000 Lbs.
9. ACCESORIES:

DRAWING LIST

MAIN TERMINAL BOX
130-7622-55

AUX TERMINAL BOX FOR	
SPACE HEATER	130-7520-50
R.T.D.	130-7522-51
THERMISTOR	-
PRODUCTION #	-
UNITS:	INCHES

NO.	REVISION	BY	DATE
1	UPDATE	RWS	1/2/14
0	FIRST ISSUE	MH	012904

MOTOR OUTLINE FOR THREE PHASE INDUCTION MOTOR

CUSTOMER NAME				P.O. NO.	MOTOR TAG NO.	
OUTPUT HP	POLE	VOLTAGE V	FREQUENCY Hz	FULL LOAD SPEED (min^{-1})	TOSHIBA MODEL NO.	
TYPE	FORM	INS. CLASS	RATING	FRAME	S.F.	ENCLOSURE
		F	CONT.	5011/12US		WP-I

TOSHIBA INTERNATIONAL CORPORATION
HOUSTON, TEXAS U.S.A.

3rd ANGLE PROJ.	PREPARED BY:	DATE:	CHECKED BY:	DATE:	DRAWING NO.:	REV.
	M.HO	012904	D. HENSLEY	012904	MDSL0086-06	1

Issued Date	4/23/2015	Transmit #	
Issued By	dschoeck	Issued Rev	

TOSHIBA
Leading Innovation >>>

TYPICAL MOTOR PERFORMANCE DATA

Model: 4504WPAK11E-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	4	1771	5012US	4000	60	3	61

Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
WP-I	23	F	1.15	CONT	93.4	A	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	450	335.6	60.6	93.4	85.6
¾ Load	337.50	251.7	47.6	93.4	81.6
½ Load	225.00	167.8	36.1	92.7	72.4
¼ Load	112.50	83.9	23.7	89.6	56.9
No Load			18.8		5.6
Locked Rotor			375.40		28.9

Torque				Rotor wk² Inertia
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	(lb-ft²)
1335	155	85	285	158.61

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight
Cold	Hot		DE	NDE	(lbs)
23.9	14.6	-	6321C3	6321C3 INS	

*Bearings are the only recommended spare part(s).

Motor Options:
Product Family:ODP & WP-I
Mounting:Footed,Shaft:US Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.

Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	7/10/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

Issued Date	4/23/2015	Transmit #	
Issued By	dschoeck	Issued Rev	

TOSHIBA
Leading Innovation >>>

SPEED TORQUE/CURRENT CURVE

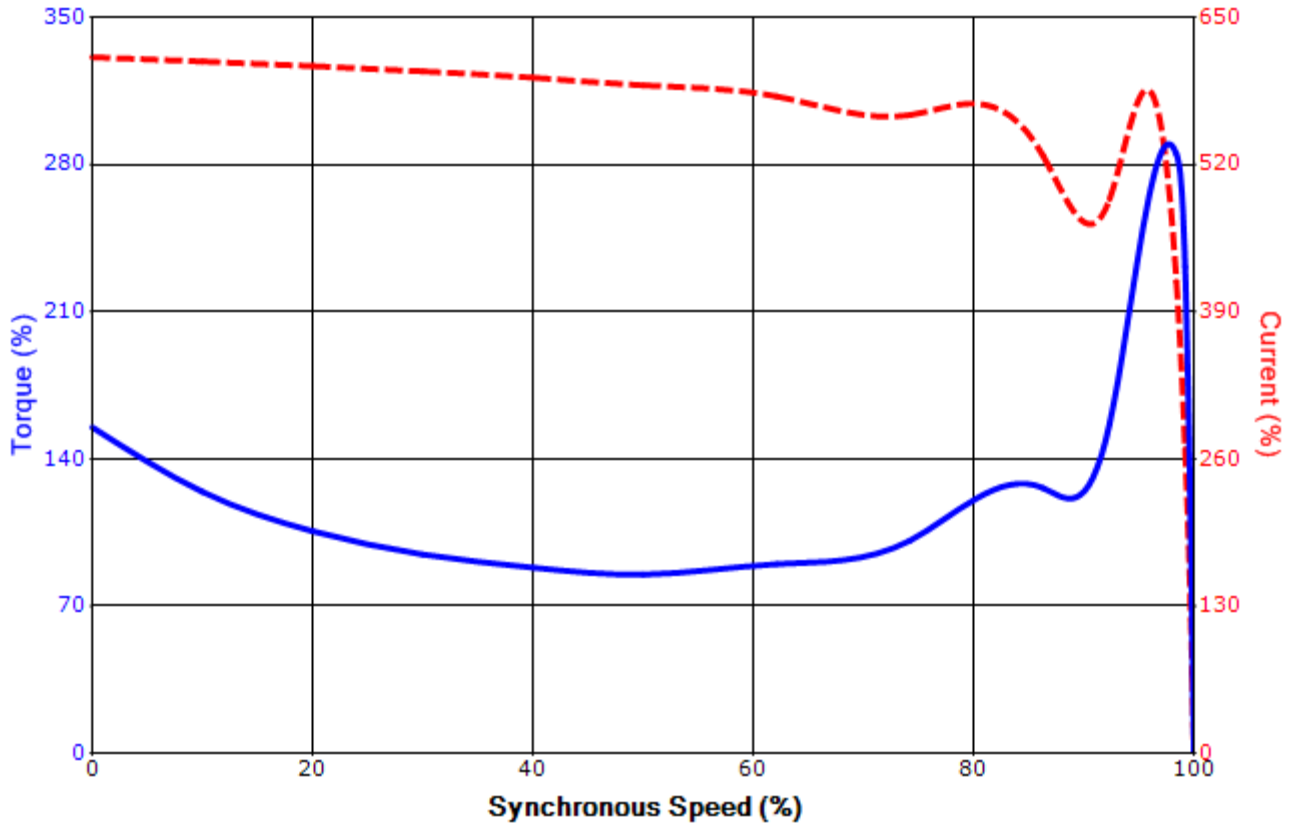
Model: 4504WPAK11E-C

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
450	336	4	1771	5012US	4000	60	3	61

Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
WP-I	23	F	1.15	CONT	93.4	A	G	40 C

Locked Rotor Amps	Rotor wk² Inertia (lb-ft²)	Torque			
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)	Break Down (%)
375.40	158.61	1335	155	85	285

Design Values



Customer		wk² Load Inertia (lb-ft²)	-
Customer PO		Load Type	-
Sales Order		Voltage (%)	100
Project #		Accel. Time	-

Tag:

All characteristics are average expected values.

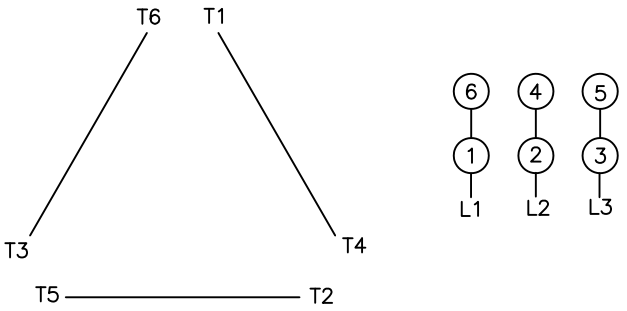
TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.

Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	7/10/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

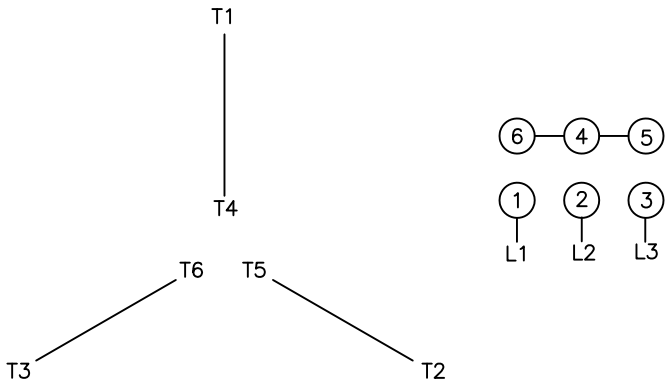
Motor Connection Diagrams
6 Leads

Across-the-Line Starting / Running Connections

Low Voltage – Delta



High Voltage – Wye



Switch L1 and L2 to reverse rotation