

NOTES:

1. DIMENSION V REPRESENTS LENGTH OF STRAIGHT PART OF SHAFT
2. MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
3. KEY DIMENSIONS EQUAL S x S x 6.88 (MOTOR SUPPLIED WITH KEY)
4. MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
5. THIS DIMENSION EQUALS 2F FOR S447T MOUNTING
6. STANDARD PRODUCT USE BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE
7. FRAME GROUND BOLT STANDARD ON 841 PRODUCT

UNITS: INCHES

FRAME SIZE	MOTOR DIMENSIONS											CONDUIT BOX						
	A	B	C	D	G	J	K	M	O	P	T	AA[NPT]	AB	AC	AE	AF	XL	XN
S447T/S449T	22.0	34.0	55.5	11.00	1.4	4.5	15.3	20.8	25.0	27.9	1.3	4.00	23.8	19.6	11.00	9.1	15.2	10.2

FRAME SIZE	MOUNTING				SHAFT EXTENSION			KEY SEAT				BEARINGS				MAXIMUM WEIGHT
	E	2F	H	BA	N-W	V	U	R	S	ES	LS ROLLER	LS BALL 6/8P	LS BALL 4P	OS 4~8P		
S447T/S449T	9.00	20.00/25.00	0.82	7.50	8.50	8.25	3.375	2.880	0.875	6.91	NU322C3	6322C3	6318C3	6318C3	XXX lb	

CUSTOMER: _____ MOTOR MODEL NO.: _____

P.O. NO.: _____ HP: _____ VOLTAGE: _____ RPM(SYN.): _____ Hz: _____

FRAME SIZE: _____ PRODUCT TYPE: TEFC EQP III SD & 841

COMMENTS: _____

PER: _____ DATE: _____

TAG NO's: .

STANDARD (NO AUX. BOXES)

RTD AUX. BOX

SPACE HEATER AUX. BOX

BEARING RTD's

TOSHIBA RESERVES THE RIGHT TO MAKE CHANGES OF TECHNICAL IMPROVEMENT AND THE DATA MAY CHANGE WITHOUT NOTICE PRELIMINARY

DO NOT USE FOR CONSTRUCTION, INSTALLATION, OR APPLICATION PURPOSES UNLESS THE DRAWING IS MARKED AS CERTIFIED CERTIFIED

TOSHIBA

TOSHIBA INTERNATIONAL CORPORATION

TOTALLY-ENCLOSED FAN-COOLED
HORIZONTAL FOOT-MOUNTED
3 PHASE INDUCTION MOTOR
F1 ASSEMBLY

XT SERIES

VISIT OUR WEBSITE AT:
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Issued Date	8/21/2020	Transmit #	
Issued By	dschoeck	Issued Rev	

TYPICAL MOTOR PERFORMANCE DATA

Model: 2504XDSC41A

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1785	S449T	575	60	3	225.99
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	56	F	1.15	CONT	96.2	B	E	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	250	186.4	225.9	95.9	86.3
¾ Load	187.50	139.8	171.3	95.3	86.0
½ Load	125.00	93.2	120.3	93.6	83.1
¼ Load	62.50	46.6	75.0	88.6	70.4
No Load			56.2		5.3
Locked Rotor			1243.8		25.6

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
736	145	125	225	128.84

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
35	15	-	6318C3	6318C3	

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

Motor Options:
 Product Family:EQP Global 841
 Mounting:Footed,Shaft:T Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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

Engineering	zxie	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 1
Engr. Date	7/28/2020	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



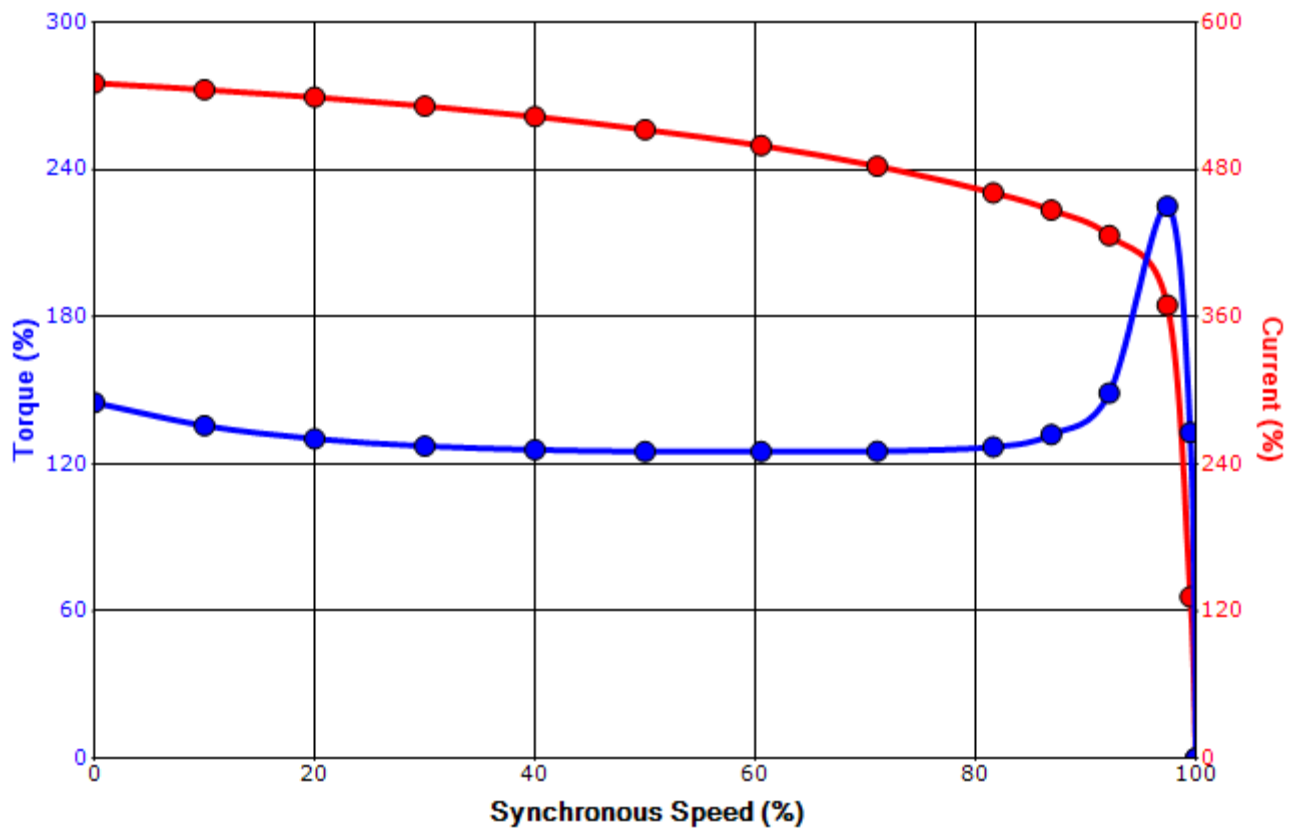
Issued Date	8/21/2020	Transmit #	
Issued By	dschoeck	Issued Rev	

SPEED TORQUE/CURRENT CURVE

Model: 2504XDSC41A

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1785	S449T	575	60	3	225.99
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	56	F	1.15	CONT	96.2	B	E	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque				Pull Up (%)	Break Down (%)	
		Full Load (lb-ft)	Locked Rotor (%)					
1243.8	128.84	736	145		125	225		

Design Values



Customer		wk ² Load Inertia (lb-ft ²)	-
Customer PO		Load Type	-
Sales Order		Voltage (%)	100
Project #		Accel. Time	-

Tag:

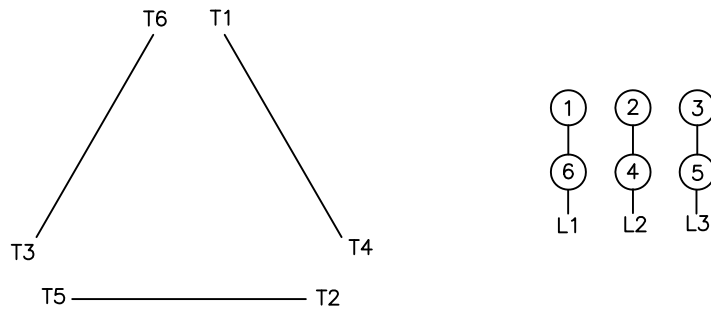
All characteristics are average expected values.

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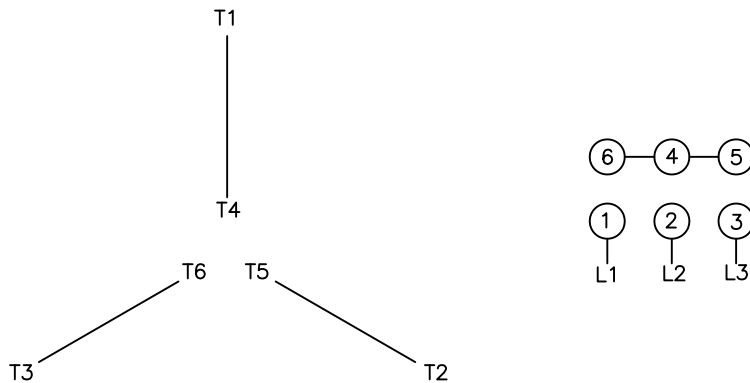
Engineering	zxie	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121/1
Engr. Date	7/28/2020	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019

Motor Connection Diagrams
6 Leads

Across the Line Starting / Run - Delta:



Alternate Starting Connection - Wye:



Switch L1 and L2 to reverse rotation



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SPARE PARTS LIST*

Model: 2504XDSC41A

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
250	186	4	1785	S449T	575	60	3	225.99
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	56	F	1.15	CONT	96.2	B	E	40 C

Bearings DE	6318C3 / 90BC03J3OX
Bearings NDE	6318C3 / 90BC03J3OX

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

Other than the grease used for regreasable bearings and the oil used for oil-lubricated bearings, Toshiba advises that there are no "use" parts. The only insurance spares that Toshiba suggests for these squirrel-cage induction motors are industry-standard and commercially available off-the-shelf bearings as noted above.

Motor components such as terminal boxes, fan covers and other machined parts are available on special request. In these cases, please advise our order entry department of the model and serial numbers found on the motor nameplate and a description of the needed components. With this information they will be able to furnish the current part number, price and availability.

Note: Our internal part numbers are subject to change without notice and are not published.

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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Engineering	zxie	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1125 / 1
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