

UNITS: INCHES

ROTATION FROM NDE

☒ CCW ☐ CW

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

☒ CERTIFIED

☐ PRELIMINARY

NOTES:

1. MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
2. STANDARD PRODUCT USES BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE.
3. KEY DIMENSIONS EQUAL .0500" x .0500" x 2.00" (MOTOR SUPPLIED WITH KEY)

TOTALLY ENCLOSED FAN COOLED

HORIZONTAL FOOT MOUNTED

3 PHASE INDUCTION MOTOR

324TS-326TS F1 ASSEMBLY

DRAWING #: MDSL V002-06

REV. DATE: 07/09/18 REV. #: 4 PER.: M. O'DOWD

REV. DESCRIP.:

TOSHIBA

SEVERE DUTY



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TOSHIBA INTERNATIONAL CORPORATION

TYPICAL MOTOR PERFORMANCE DATA

Model: 0504SDSR41B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
50	37	4	1777	326TS	230/460	60	3	116/58
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	94.5	B		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	50.00	37.3	57	94.5	85.5
¾ Load	37.50	28.0	45	94.0	82.2
½ Load	25.00	18.6	34	92.3	74.0
¼ Load	12.50	9.3	25	86.8	52.6
No Load			19.2		
Locked Rotor			394		

Torque				Rotor wk² Inertia (lb-ft²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
148	210	150	300	11.60

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
35	15	-	6312ZC3	6312ZC3	649

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

Motor Options:
Product Family:EQP Global SD
Mounting:Footed,Shaft:TS Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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Engineering	Jrodrigu	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	7/25/2024	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

TYPICAL MOTOR PERFORMANCE DATA

Model: 0504SDSR41B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
50	37	4	1465	326TS	190/380	50	3	140/70
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	92.7	B		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	50.00	37.3	70	93.0	86.9
¾ Load	37.50	28.0	53	92.9	85.0
½ Load	25.00	18.6	39	91.8	79.0
¼ Load	12.50	9.3	27	87.5	60.0
No Load			18.8		
Locked Rotor			433		

Torque				Rotor wk² Inertia (lb-ft²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
179	165	115	230	11.60

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
30	10	-	6312ZC3	6312ZC3	649

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

Motor Options:
Product Family:EQP Global SD
Mounting:Footed,Shaft:TS Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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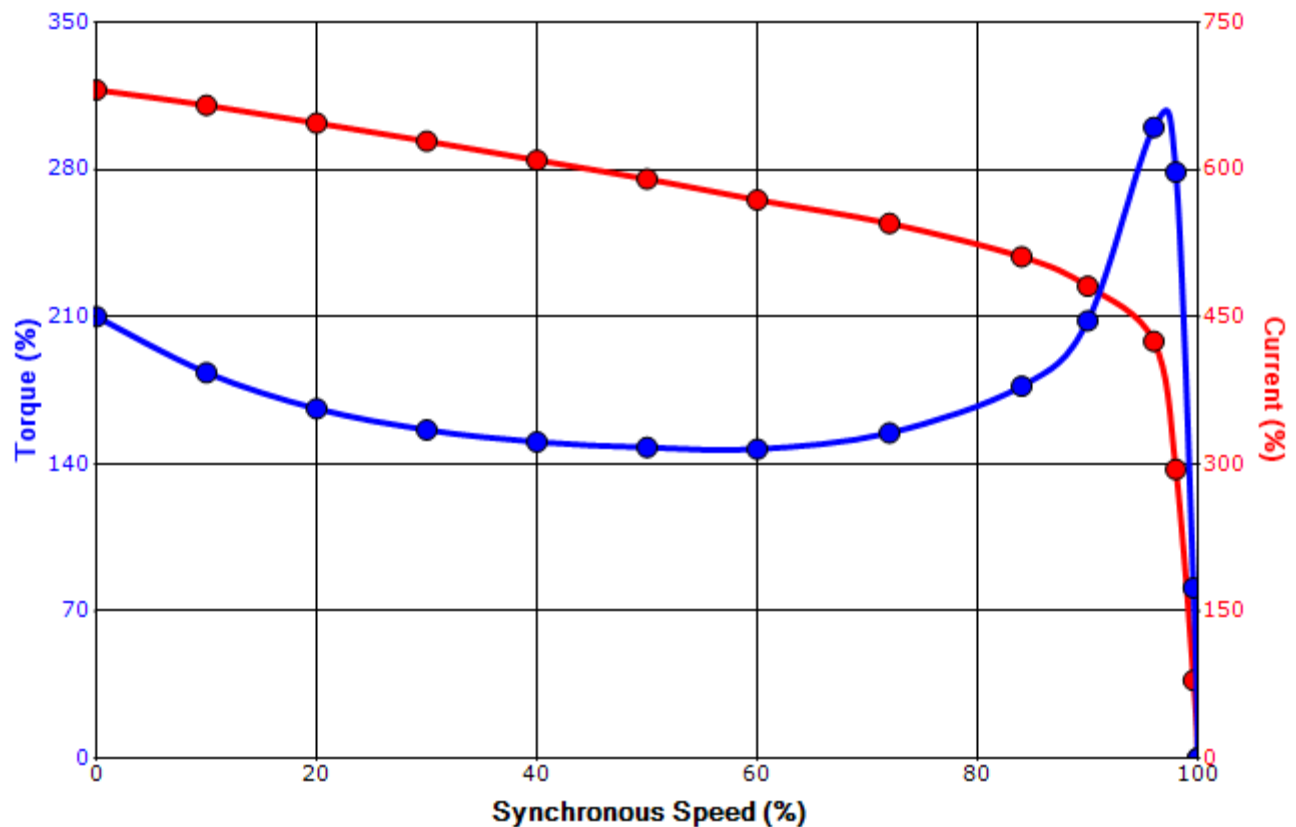
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SPEED TORQUE/CURRENT CURVE

Model: 0504SDSR41B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
50	37	4	1777	326TS	230/460	60	3	116/58
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	94.5	B		40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)		Break Down (%)		
394	11.60	148	210	150		300		

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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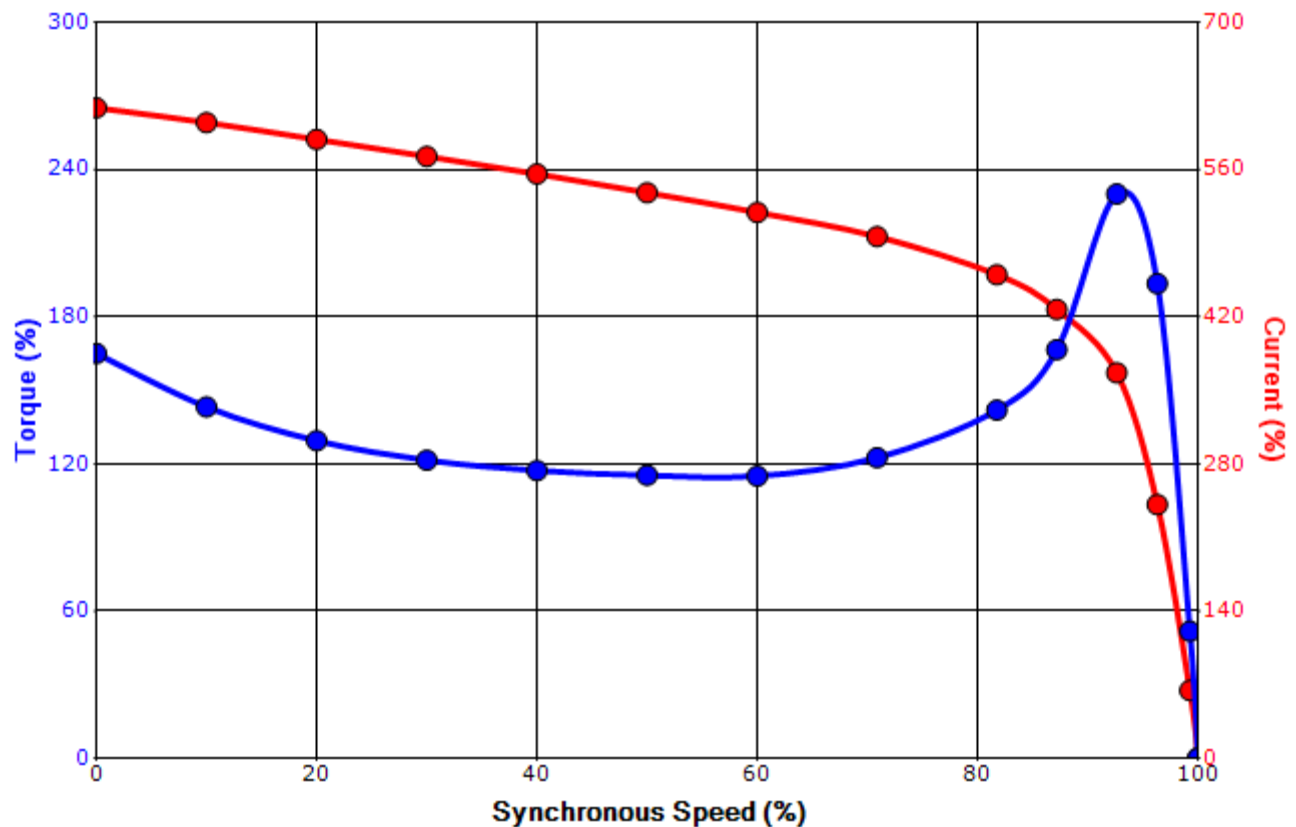
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SPEED TORQUE/CURRENT CURVE

Model: 0504SDSR41B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
50	37	4	1465	326TS	190/380	50	3	140/70
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	92.7	B		40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)		Break Down (%)		
433	11.60	179	165	115		230		

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.

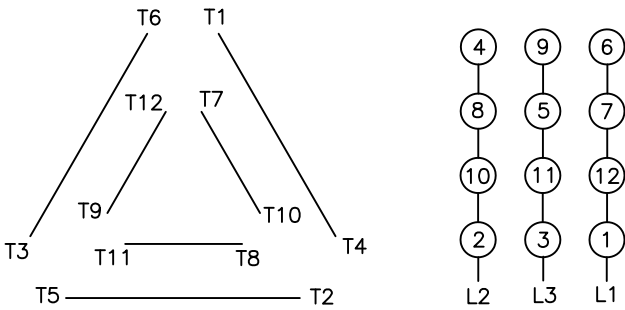
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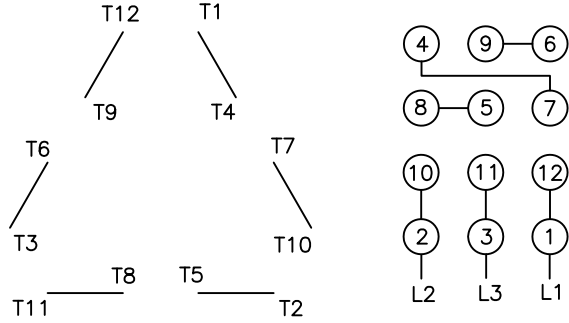
Motor Connection Diagrams
12 Leads

Across-the-Line Starting / Running Connections

Low Voltage Delta



High Voltage Delta



Switch L1 and L2 to reverse rotation

Suitable for Wye-Delta Starting and Limited Part-Winding-Starting.
Please Contact Toshiba International for specific connections.

SPARE PARTS LIST*

Model: 0504SDSR41B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
50	37	4	1777	326TS	230/460	60	3	116/58
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	94.5	B		40 C

Bearings DE 6312ZC3 / 60BC03JP3OX

Bearings NDE 6312ZC3 / 60BC03JP3OX

*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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