

- NOTES:
1. MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
  2. STANDARD PRODUCT USE BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE.
  3. KEY DIMENSIONS EQUAL (MOTOR SUPPLIED WITH KEY)
- 0.500" x 0.500" x 2.00"

UNITS: INCHES

TOSHIBA RESERVES THE RIGHT TO MAKE CHANGES OF TECHNICAL IMPROVEMENT WITHOUT NOTICE. DO NOT USE FOR CONSTRUCTION, INSTALLATION, OR APPLICATION PURPOSES UNLESS THE DRAWING IS CERTIFIED.

**320TS TEFC FRAME  
F3 ASSEMBLY**

MDSL020-06

**TOSHIBA**

**TOSHIBA INTERNATIONAL CORPORATION**

TOLERANCES

.X	.1
.XX	.03
.XXX	.005
.XXXX	.0005

MAXIMUM  
MOTOR WEIGHT

651 lbs.  
295 kgs.

0	FIRST ISSUE	M. O'DOWD	02/03/14	JR
NO	REVISION	DRAWN BY	DATE	CHECK



DRAWN BY: M. O'DOWD  
CHECK BY: J. RUSSELL  
APPROVED BY:

www.toshiba.com/ind

**TYPICAL MOTOR PERFORMANCE DATA**

Model: 0402SDSR41B-P3

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
40	30	2	3540	324TS	230/460	60	3	94/47
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	92.4	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	40	29.8	47.0	92.5	87.7
¾ Load	30.00	22.4	35.5	91.6	85.9
½ Load	20.00	14.9	25.8	89.4	80.8
¼ Load	10.00	7.5	17.8	83.8	62.8
No Load			12.0		7.9
Locked Rotor			290.00		43.9

Torque				Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
59.3	265	225	275	5.74

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

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

**Motor Options:**  
Mounting:Footed,Shaft:TS Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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

Engineering	aacosta	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	4/19/2012	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**TYPICAL MOTOR PERFORMANCE DATA**

Model: 0402SDSR41B-P3

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
40	30	2	2930	324TS	190/380	50	3	114/57
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	91	B	E	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	40	29.8	57.0	93.1	87.0
¾ Load	30.00	22.4	43.1	93.6	85.3
½ Load	20.00	14.9	30.4	93.3	80.2
¼ Load	10.00	7.5	19.6	84.1	68.7
No Load			11.5		6.9
Locked Rotor			301.00		38.5

Torque				Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
71.7	175	155	215	5.74

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
23	9	-	6312ZC3	6312ZC3	

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

**Motor Options:**  
Mounting:Footed,Shaft:TS Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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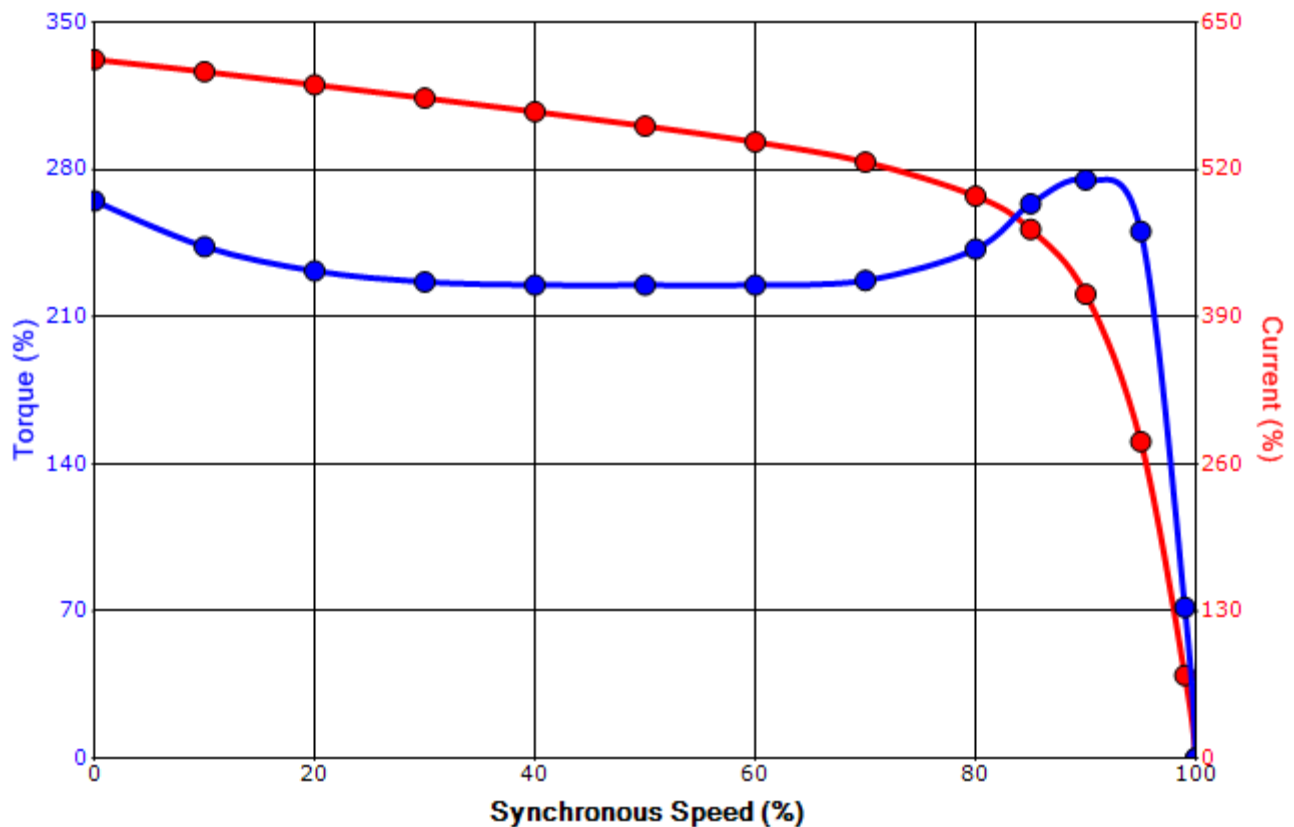
Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	3/13/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: 0402SDSR41B-P3

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
40	30	2	3540	324TS	230/460	60	3	94/47
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	92.4	B	G	40 C
Locked Rotor Amps	Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )	Torque						Break Down (%)
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)				
290.00	5.74	59.3	265	225			275	

**Design Values**



Customer		wk <sup>2</sup> Load Inertia (lb-ft <sup>2</sup> )	-
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.**

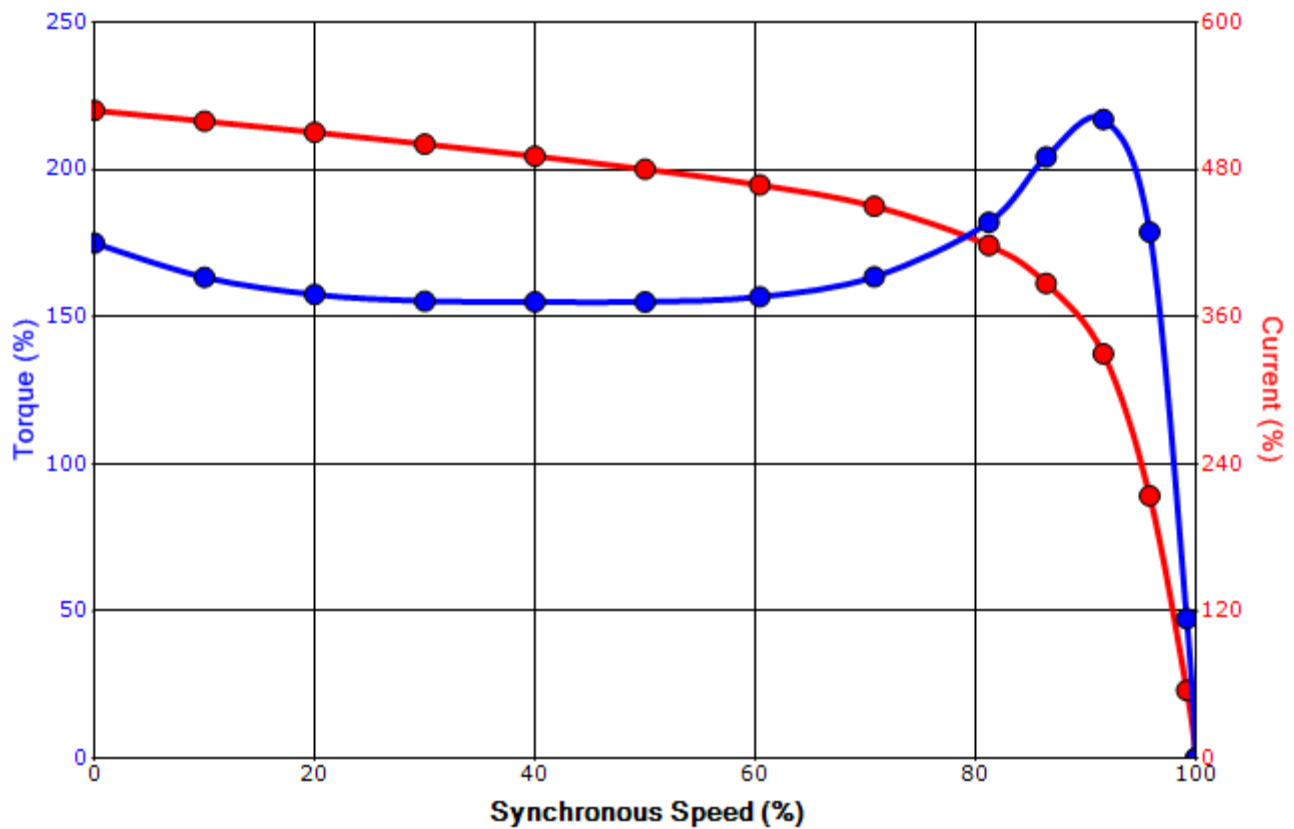
Engineering	aacosta	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
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**SPEED TORQUE/CURRENT CURVE**

Model: 0402SDSR41B-P3

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
40	30	2	2930	324TS	190/380	50	3	114/57
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	91	B	E	40 C
Locked Rotor Amps	Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )	Torque						Break Down (%)
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)				
301.00	5.74	71.7	175	155			215	

**Design Values**



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

Tag: \_\_\_\_\_

All characteristics are average expected values.

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Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
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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.