

- 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)
- 0.375" x 0.375" x 1.88"

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.

**280TS TEFC FRAME  
F3 ASSEMBLY**

MDSL020-05

**TOSHIBA**  
TOSHIBA INTERNATIONAL CORPORATION

TOLERANCES

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

MAXIMUM  
MOTOR WEIGHT

448 lbs.  
203 kgs.

0	FIRST ISSUE (OVERRIDE 'U' & 'R' DIMS.)	M. O'DOWD	02/03/14		
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: 0302SDSR41B-P3

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	2	3540	286TS	230/460	60	3	70/35
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	91.7	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	30	22.4	35.0	91.9	88.9
¾ Load	22.50	16.8	27.1	91.0	86.5
½ Load	15.00	11.2	19.9	88.9	80.7
¼ Load	7.50	5.6	14.0	80.9	62.0
No Load			9.2		11.0
Locked Rotor			217.00		38.1

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)	
44.5	215	195	265	3.58

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
35	15	-	6310ZC3	6310ZC3	

\*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: 0302SDSR41B-P3

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	2	2920	286TS	190/380	50	3	84/42
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	91	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	30	22.4	42.0	92.4	88.0
¾ Load	22.50	16.8	32.4	93.3	85.9
½ Load	15.00	11.2	23.0	93.3	80.1
¼ Load	7.50	5.6	15.0	82.0	68.7
No Load			9.0		8.3
Locked Rotor			287.00		35.8

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)	
54	165	145	220	3.58

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
28	11	-	6310ZC3	6310ZC3	

\*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.**

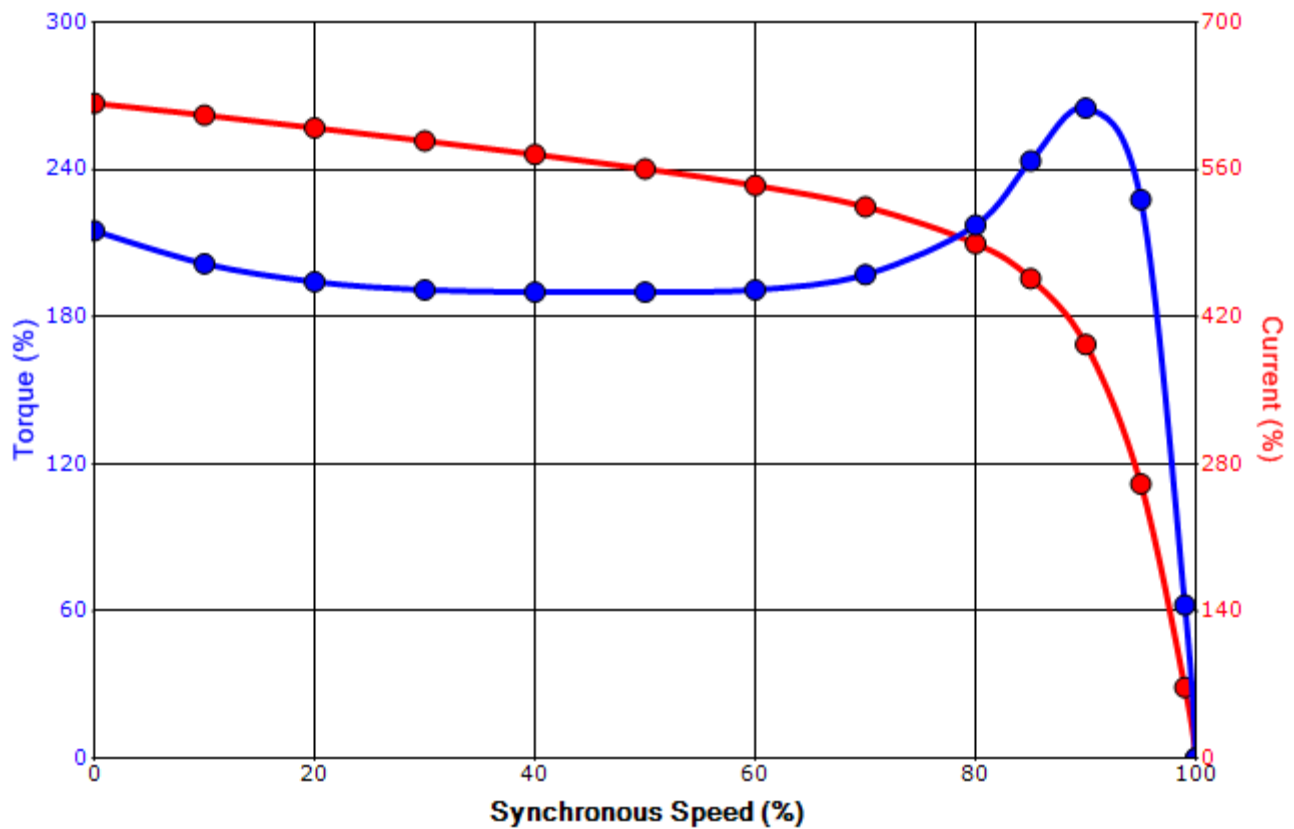
Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	6/17/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: 0302SDSR41B-P3

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	2	3540	286TS	230/460	60	3	70/35
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	91.7	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 (%)				
217.00	3.58	44.5	215	195			265	

**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.**

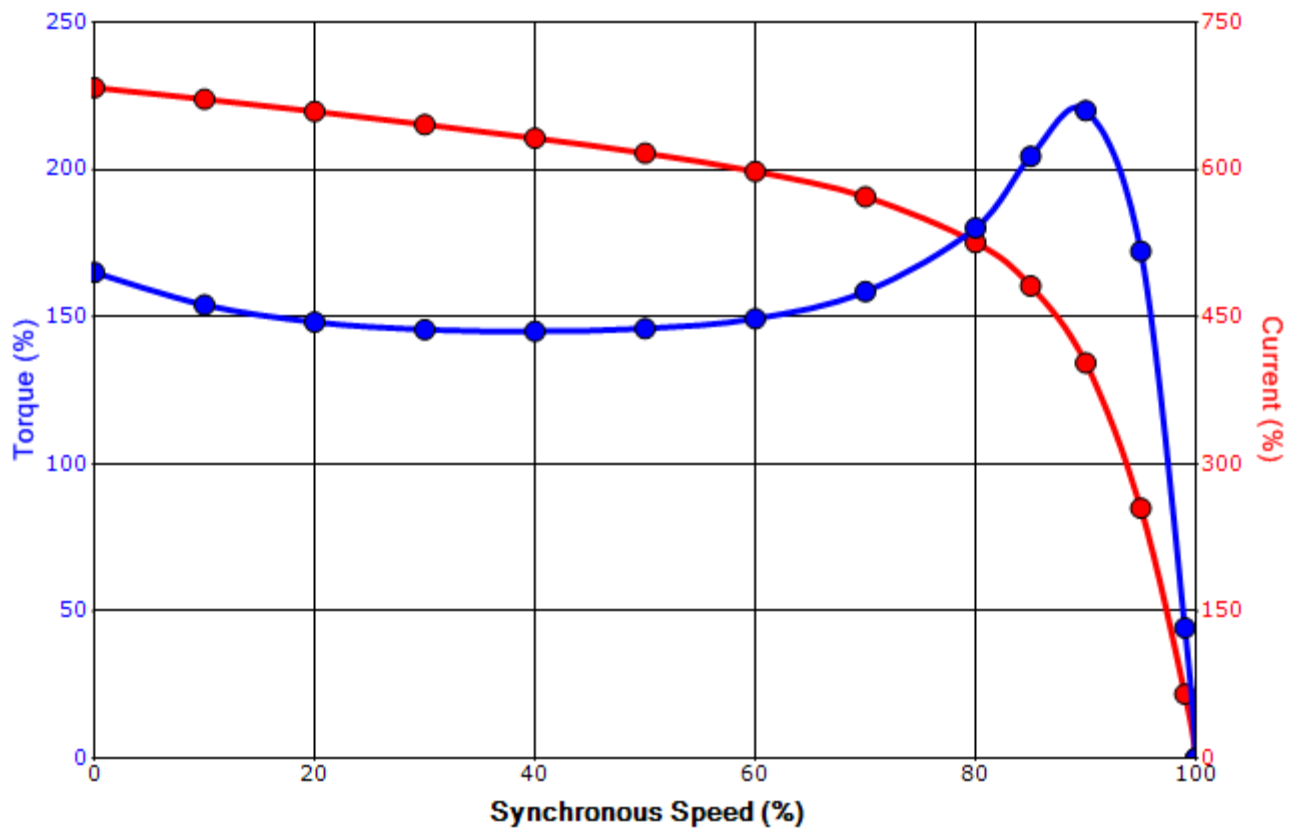
Engineering	aacosta	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	4/19/2012	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: 0302SDSR41B-P3

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	2	2920	286TS	190/380	50	3	84/42
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	91	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 (%)				
287.00	3.58	54	165	145			220	

**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	-

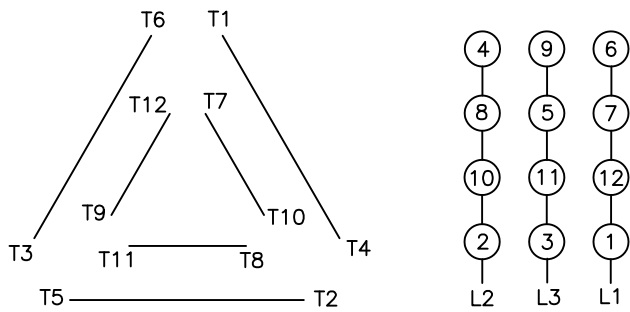
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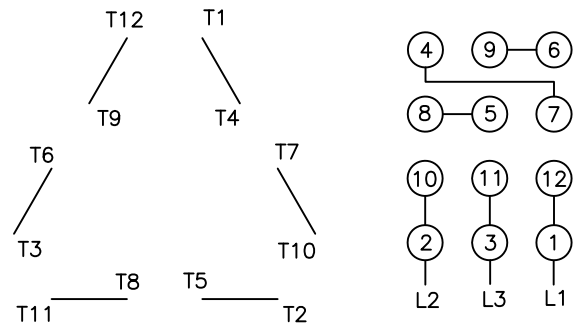
**Motor Connection Diagrams**  
12 Leads

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.