

- 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 3.25"

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.

**280T TEFC FRAME  
F1 ASSEMBLY**

MDSL001-05

**TOSHIBA**

TOSHIBA INTERNATIONAL CORPORATION

TOLERANCES

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

MAXIMUM MOTOR WEIGHT

448 lbs.  
203 kgs.

0	FIRST ISSUE (OVERRIDE 'R' DIM. VALUE)	N. MOMIN	09/02/10	JR
NO	REVISION	DRAWN BY	DATE	CHECK



DRAWN BY: N. MOMIN  
 CHECK BY: J. RUSSELL  
 APPROVED BY: \_\_\_\_\_  
 www.toshiba.com/ind

**TYPICAL MOTOR PERFORMANCE DATA**

Model: 0304SDSR41A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1770	286T	230/460	60	3	72/36
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	93.6	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	30	22.4	36.0	93.8	83.6
¾ Load	22.50	16.8	28.3	93.2	80.9
½ Load	15.00	11.2	21.6	91.6	73.7
¼ Load	7.50	5.6	16.4	85.0	50.1
No Load			12.7		5.4
Locked Rotor			217.00		34.1

Torque				Rotor wk <sup>2</sup>
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	Inertia (lb-ft <sup>2</sup> )
89	185	165	290	5.70

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:**  
Product Family:EQP Global SD  
Mounting:Footed,Shaft:T Shaft  
  
Full Load Amps at 208: 80

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	3/13/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**TYPICAL MOTOR PERFORMANCE DATA**

Model: 0304SDSR41A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1460	286T	190/380	50	3	88/44
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	92.4	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	30	22.4	44.0	93.7	83.5
¾ Load	22.50	16.8	33.6	94.4	80.8
½ Load	15.00	11.2	24.7	94.5	73.7
¼ Load	7.50	5.6	17.6	85.7	56.1
No Load			12.9		4.7
Locked Rotor			256.00		34.2

Torque				Rotor wk <sup>2</sup>
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	Inertia (lb-ft <sup>2</sup> )
108	150	125	230	5.70

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
23	10	-	6310ZC3	6310ZC3	

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

**Motor Options:**  
Product Family:EQP Global SD  
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.**

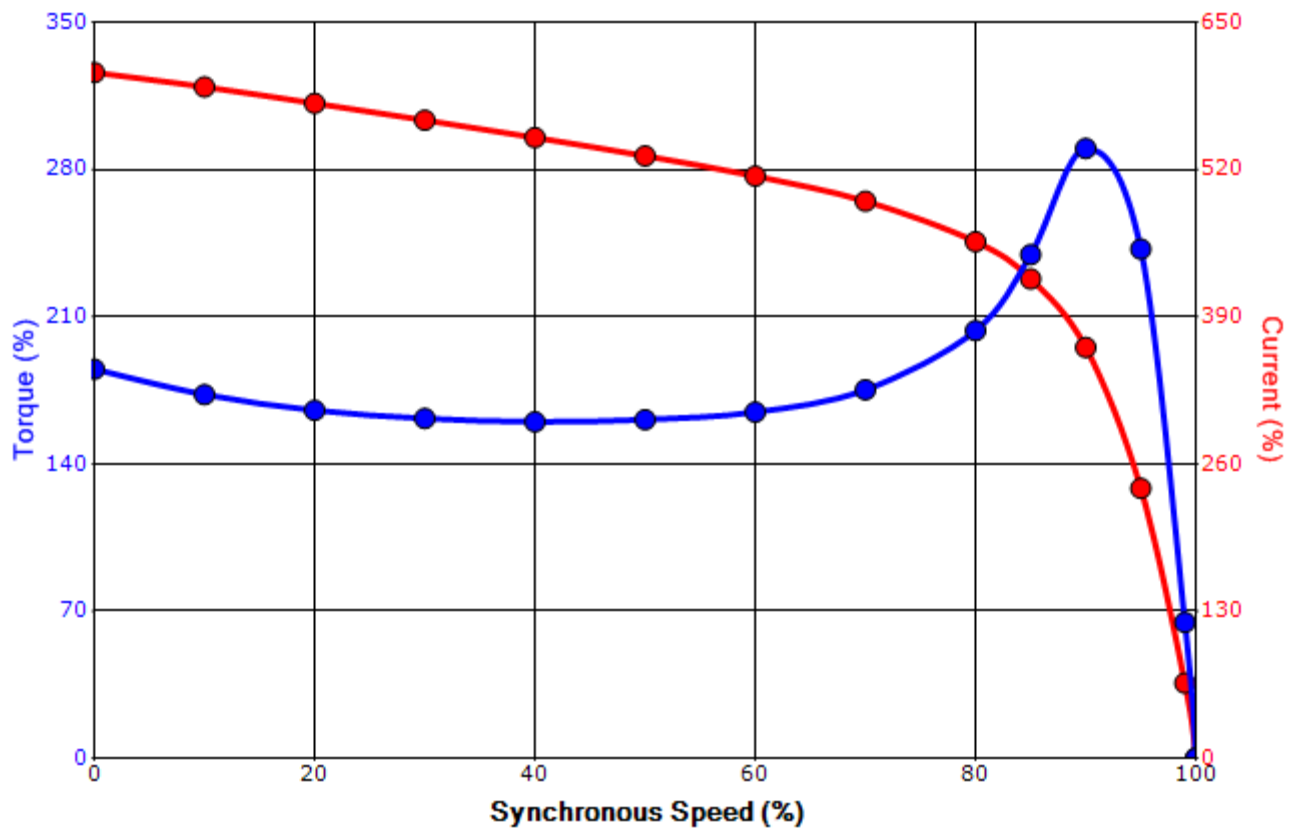
Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	3/25/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: 0304SDSR41A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1770	286T	230/460	60	3	72/36
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	93.6	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	5.70	89	185	165			290	

**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	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	3/13/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

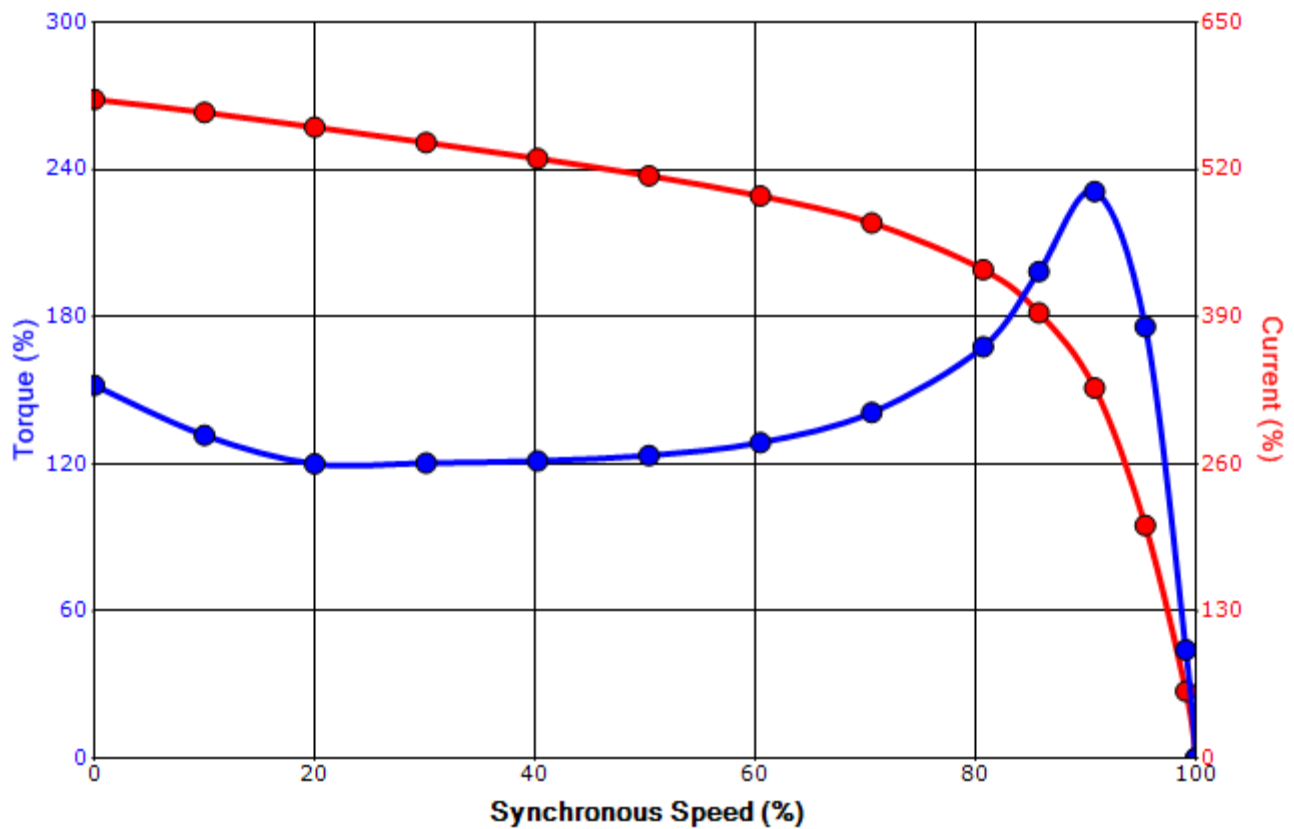
Issued Date	8/18/2016	Transmit #	
Issued By	dschoeck	Issued Rev	

**SPEED TORQUE/CURRENT CURVE**

Model: 0304SDSR41A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1460	286T	190/380	50	3	88/44
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	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 (%)				
256.00	5.70	108	150	125			230	

**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.

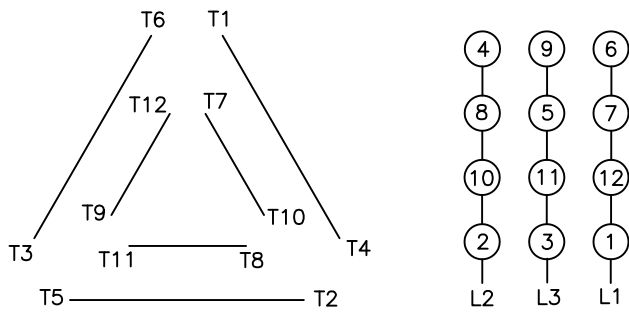
**TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.**

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Engr. Date	3/25/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

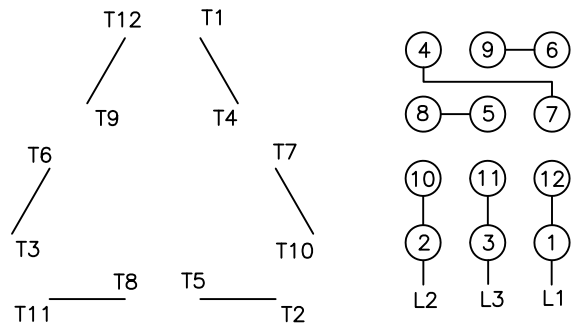
**Motor Connection Diagrams**  
12 Leads

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.