

- 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 2.88"

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.

**250T TEFC FRAME  
F1 ASSEMBLY**

MDSL001-04

**TOSHIBA**  
TOSHIBA INTERNATIONAL CORPORATION

TOLERANCES

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

MAXIMUM  
MOTOR WEIGHT

340 lbs.  
154 kgs.

0	FIRST ISSUE (OVERRIDE 'U' 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: 0202SDSR41A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
20	15	2	3520	256T	230/460	60	3	48/24
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	91	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	20	14.9	24.0	91.3	87.7
¾ Load	15.00	11.2	17.8	90.6	86.2
½ Load	10.00	7.5	12.9	88.5	81.5
¼ Load	5.00	3.7	8.9	82.3	63.9
No Load			6.1		8.6
Locked Rotor			143.00		40.1

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)	
29.8	215	195	255	1.38

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
35	15	-	6309ZZC3	6309ZZC3	

\*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	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: 0202SDSR41A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
20	15	2	2890	256T	190/380	50	3	58/29
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	88.5	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	20	14.9	29.0	91.6	88.5
¾ Load	15.00	11.2	21.7	92.3	87.1
½ Load	10.00	7.5	15.2	92.1	82.3
¼ Load	5.00	3.7	9.7	82.4	70.3
No Load			5.8		7.8
Locked Rotor			191.00		38.2

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> )
36.3	155	140	210	1.38

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
30	12	-	6309ZZC3	6309ZZC3	

\*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.**

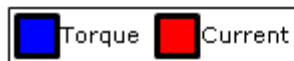
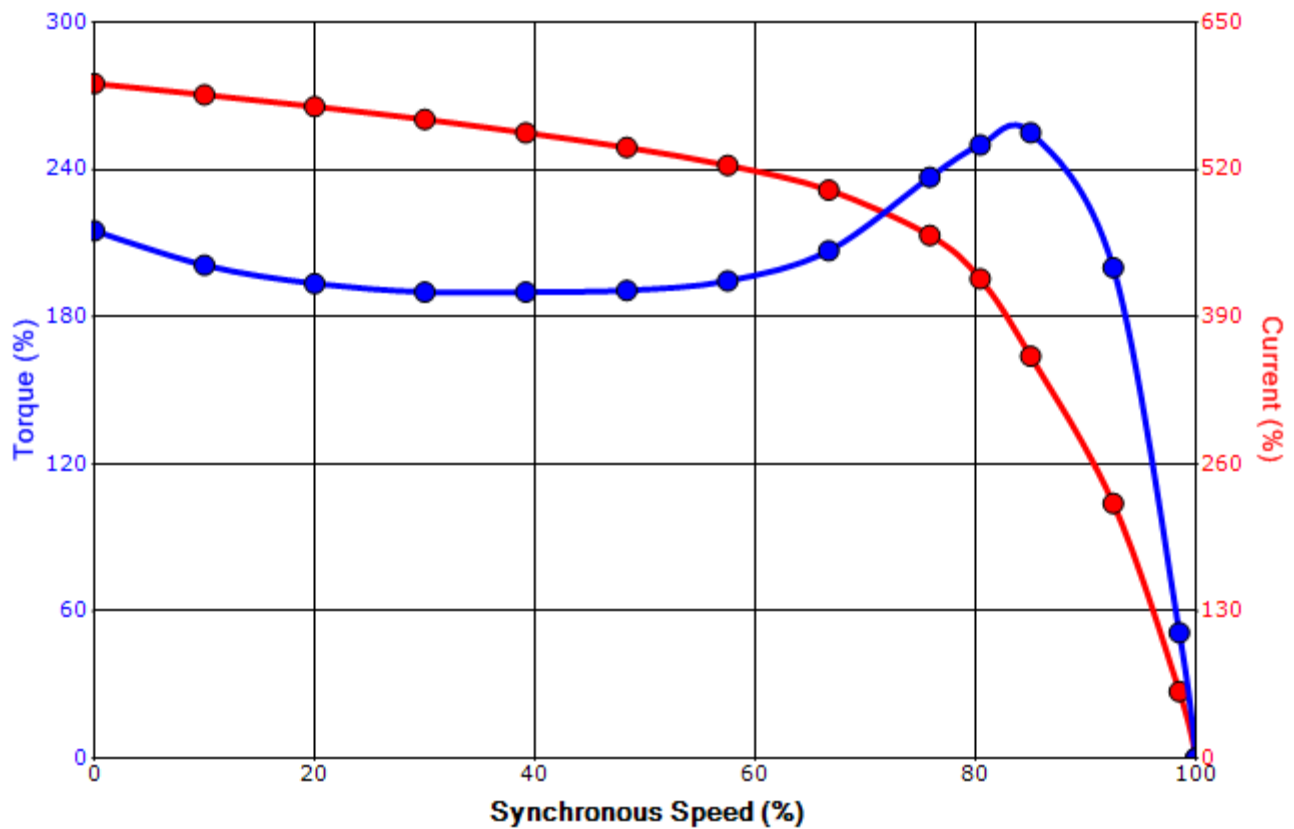
Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	6/17/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: 0202SDSR41A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
20	15	2	3520	256T	230/460	60	3	48/24
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	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 (%)				
143.00	1.38	29.8	215	195			255	

**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.**

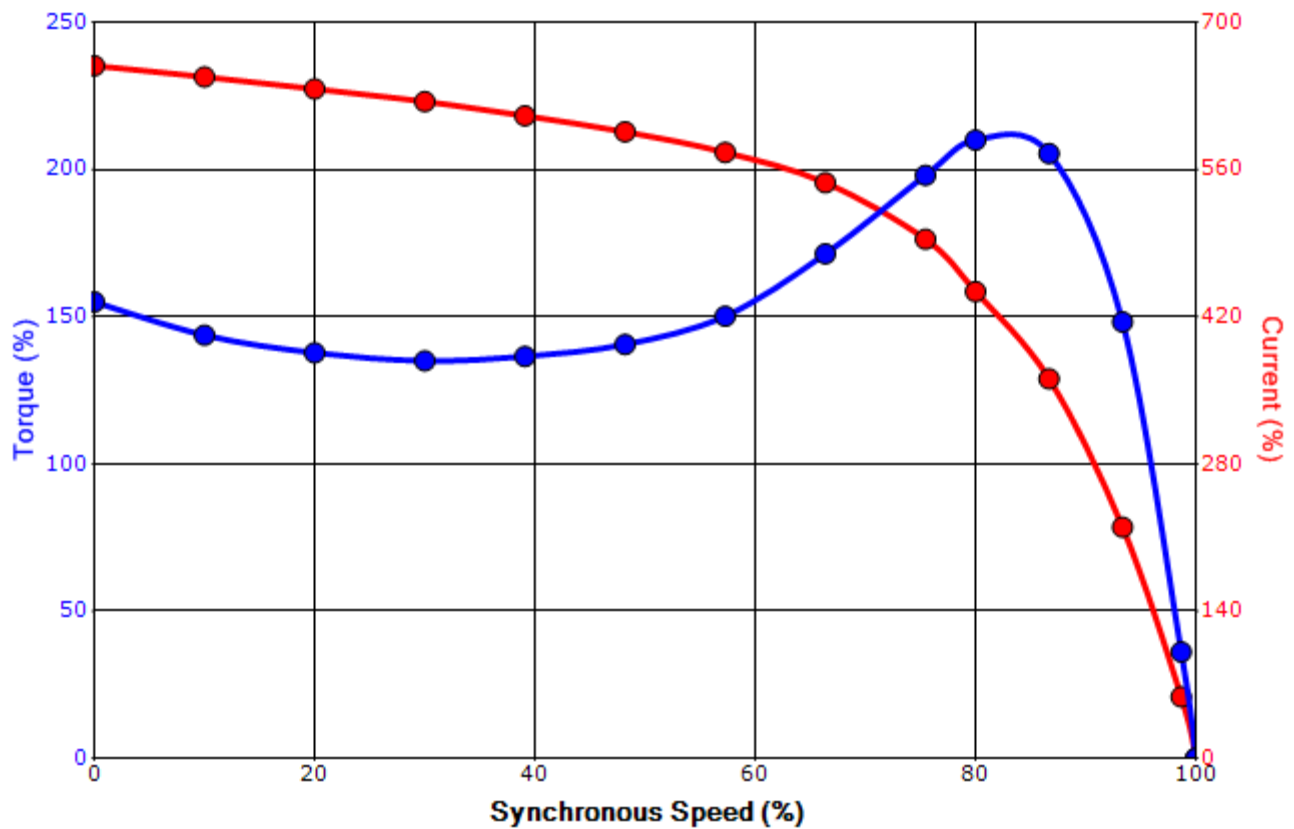
Engineering	aacosta	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	4/19/2012	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: 0202SDSR41A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
20	15	2	2890	256T	190/380	50	3	58/29
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	88.5	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 (%)				
191.00	1.38	36.3	155	140			210	

**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	6/17/2014	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.