

UNITS: INCHES

ROTATION FROM NDE

<input checked="" type="checkbox"/> CCW	<input type="checkbox"/> CW

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 0.375"x 0.375"x 2.88" (MOTOR SUPPLIED WITH KEY)

TOSHIBA RESERVES THE RIGHT TO MAKE CHANGES OF TECHNICAL IMPROVEMENT AND THE DATA MAY CHANGE WITHOUT NOTICE

PRELIMINARY

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

CERTIFIED

**TOSHIBA**  
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TOSHIBA INTERNATIONAL CORPORATION

SEVERE DUTY  
**EQP** **SD**

TOTALLY ENCLOSED FAN COOLED  
FOOTED C-FACED (NEMA BA)  
3 PHASE INDUCTION MOTOR  
254TC-256TC F1 ASSEMBLY

DRAWING #: MDSL005-04  
REV. DATE: 06/29/18 REV. #: 3 PER.: M. O'DOWD  
REV. DESCRIP.:



Issued Date	12/18/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

### TYPICAL MOTOR PERFORMANCE DATA

Model: 0202SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
20	15	2	3520	256TC	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		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	318

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

Motor Options:  
Mounting:C-Face 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 / 1
Engr. Date	4/19/2012	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



Issued Date	12/18/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

### TYPICAL MOTOR PERFORMANCE DATA

Model: 0202SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
20	15	2	2890	256TC	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		38.2

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)	
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	318

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

Motor Options:  
Mounting:C-Face 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 / 1
Engr. Date	6/17/2014	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



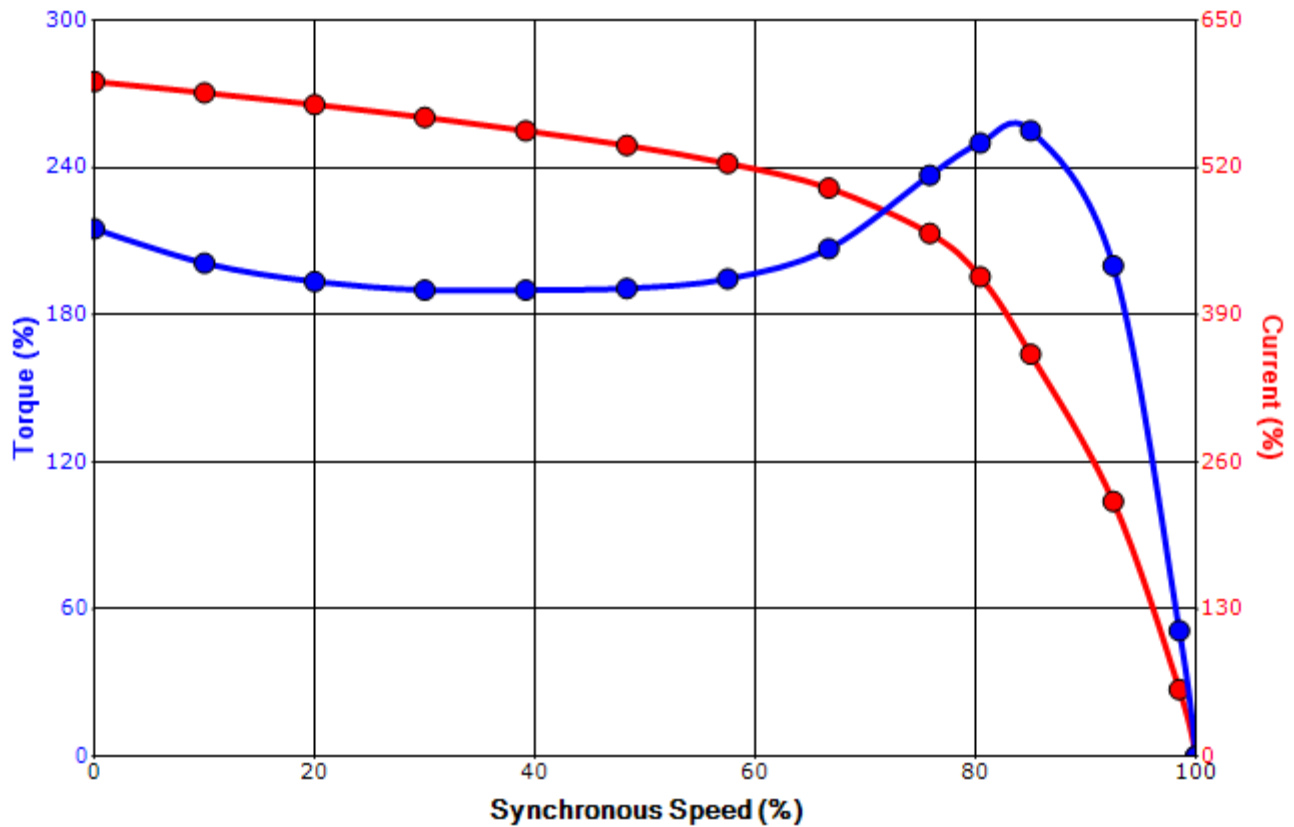
Issued Date	12/18/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

### SPEED TORQUE/CURRENT CURVE

Model: 0202SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
20	15	2	3520	256TC	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				Pull Up (%)	Break Down (%)	
		Full Load (lb-ft)	Locked Rotor (%)					
143	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-1121/1
Engr. Date	4/19/2012	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



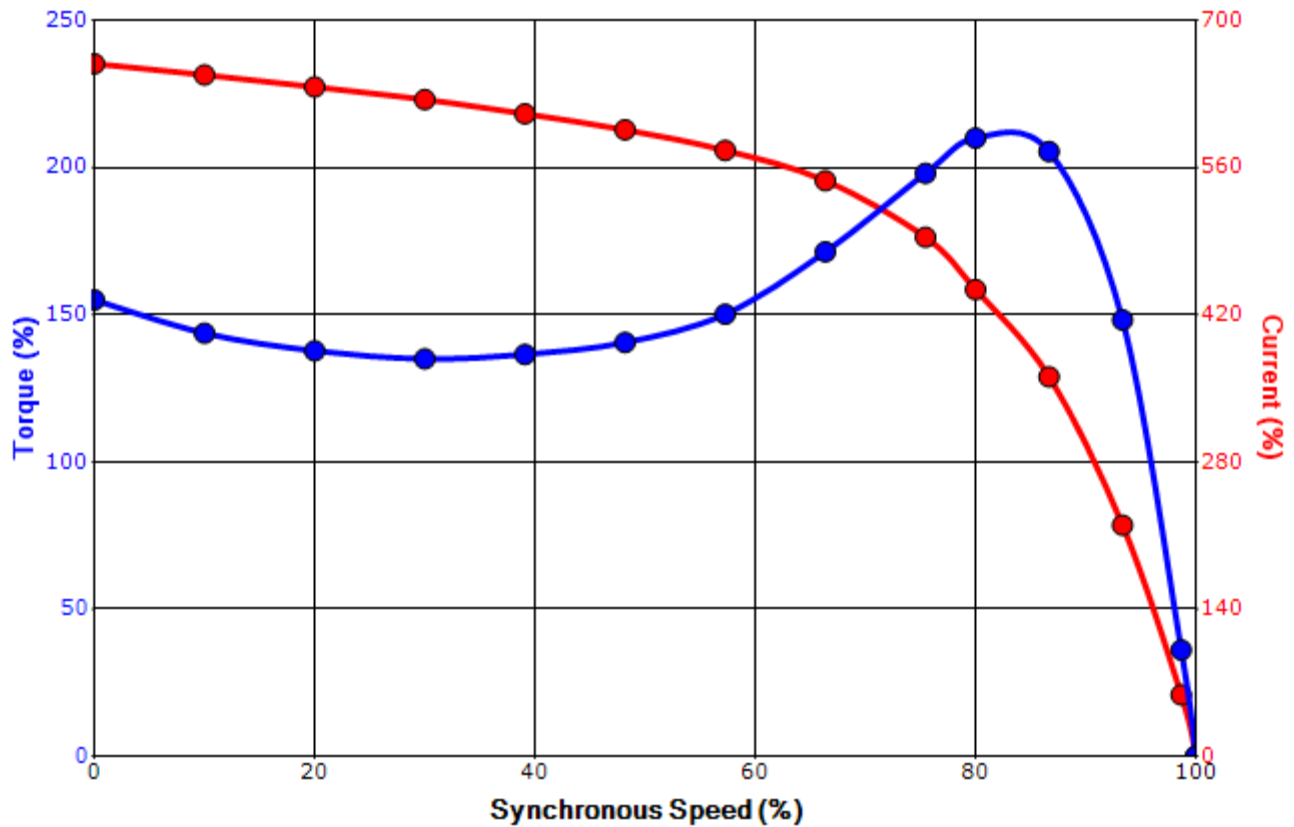
Issued Date	12/18/2019	Transmit #	
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### SPEED TORQUE/CURRENT CURVE

Model: 0202SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
20	15	2	2890	256TC	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				Pull Up (%)	Break Down (%)	
		Full Load (lb-ft)	Locked Rotor (%)					
191	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.

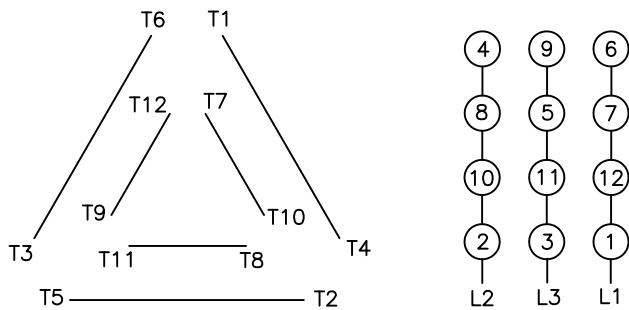
### TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.

Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121/1
Engr. Date	6/17/2014	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019

**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.