

UNITS: INCHES

ROTATION FROM NDE

CCW
  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  $0.312'' \times 0.312'' \times 2.38''$  (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  
213TC-215TC F1 ASSEMBLY

DRAWING #: MDSL005-03  
REV. DATE: 06/27/18 REV. #: 3 PER.: M. O'DOWD  
REV. DESCRIP.:



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

### TYPICAL MOTOR PERFORMANCE DATA

Model: 0104SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
10	7.5	4	1760	215TC	230/460	60	3	26/12.8
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	H	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	10	7.5	12.7	91.6	80.2
¾ Load	7.50	5.6	10.1	91.0	76.2
½ Load	5.00	3.7	7.8	88.9	67.1
¼ Load	2.50	1.9	6.1	81.7	46.3
No Load			5.7		6.0
Locked Rotor			81		45.7

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	260	225	330	1.34

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
35	15	-	6308ZC3	6308ZC3	207

\*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	bmmamen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 1
Engr. Date	8/22/2019	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: 0104SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
10	7.5	4	1450	215TC	190/380	50	3	31/15.5
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	89.5	B	H	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	10	7.5	15.5	91.6	79.5
¾ Load	7.50	5.6	11.7	92.1	75.7
½ Load	5.00	3.7	8.6	91.5	66.9
¼ Load	2.50	1.9	5.5	83.6	61.1
No Load			5.5		5.5
Locked Rotor			100		44.7

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)	
36.2	200	180	250	1.34

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
26	14	-	6308ZC3	6308ZC3	207

\*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	4/9/2014	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



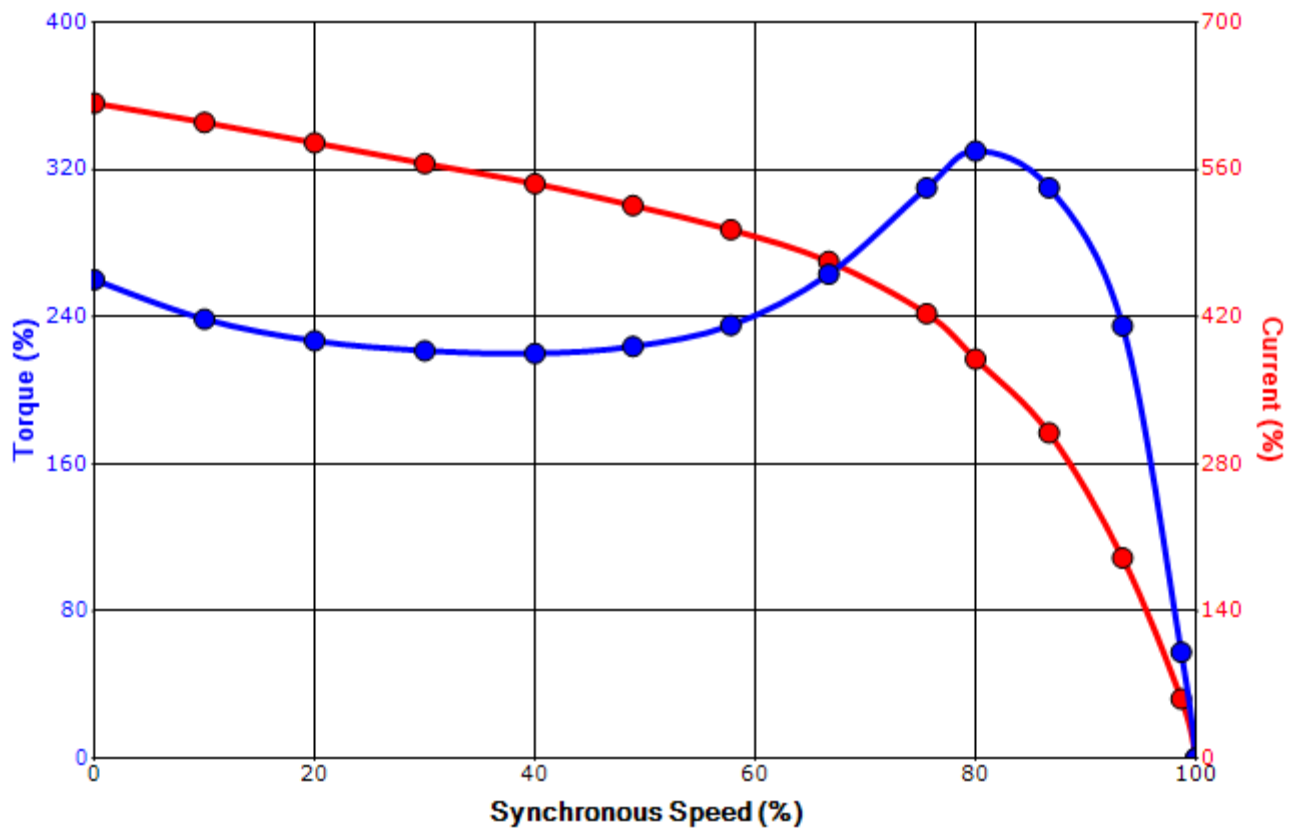
Issued Date	12/18/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

### SPEED TORQUE/CURRENT CURVE

Model: 0104SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
10	7.5	4	1760	215TC	230/460	60	3	26/12.8
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	H	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 (%)					
81	1.34	29.8	260		225	330		

### 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	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121/1
Engr. Date	8/22/2019	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



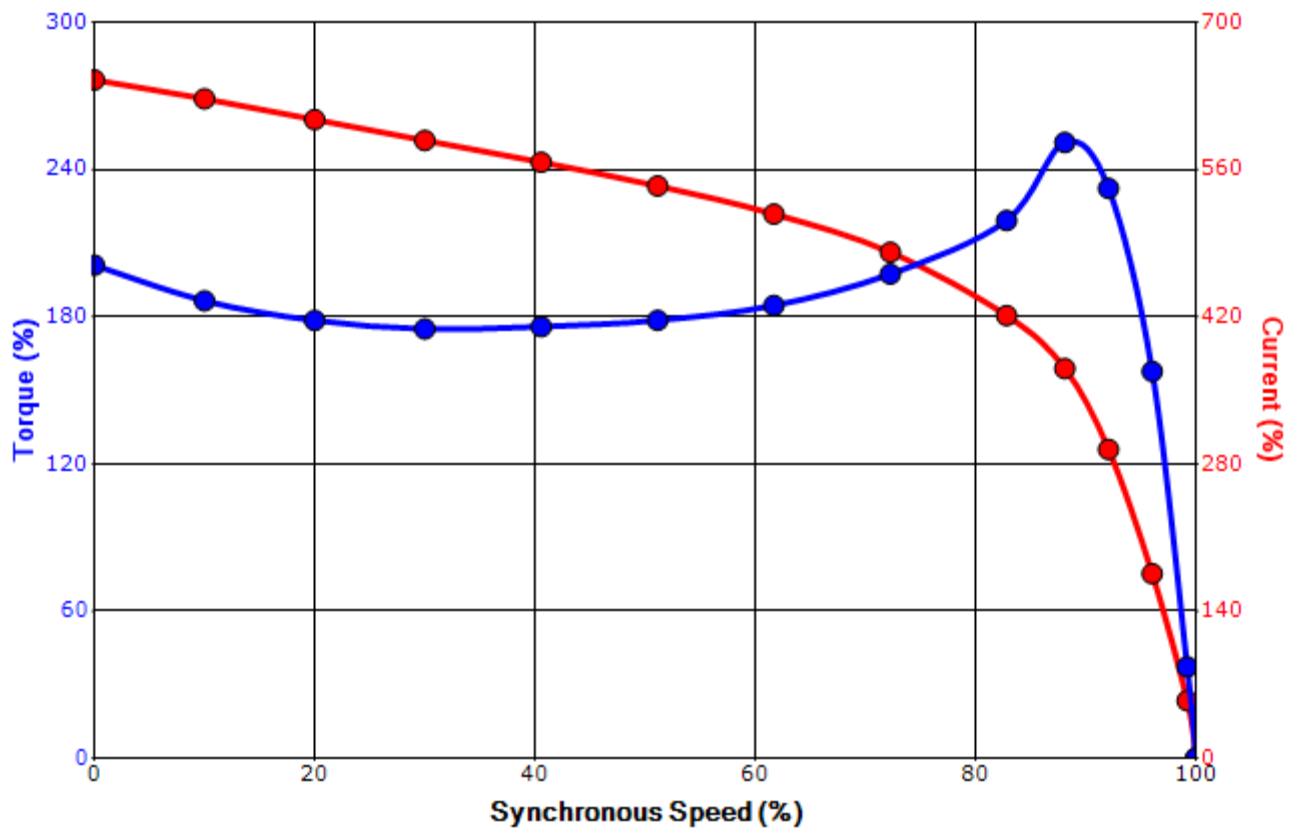
Issued Date	12/18/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

### SPEED TORQUE/CURRENT CURVE

Model: 0104SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
10	7.5	4	1450	215TC	190/380	50	3	31/15.5
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	89.5	B	H	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 (%)					
100	1.34	36.2	200		180	250		

### 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	4/9/2014	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019

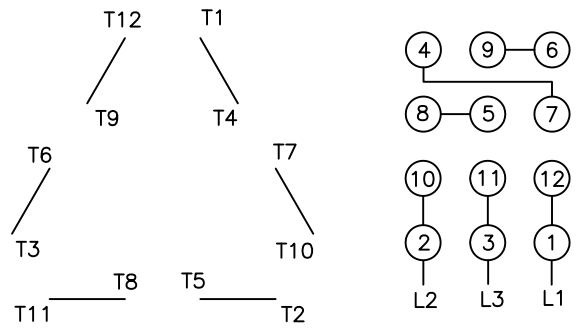
**Motor Connection Diagrams**  
12 Leads

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.