

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 0.188"x 0.188"x 1.38" (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

TOTALLY ENCLOSED FAN COOLED  
FOOTED C-FACED (NEMA BA)  
3 PHASE INDUCTION MOTOR  
143TC-145TC F1 ASSEMBLY

DRAWING #: MDSL005-01

REV. DATE: 06/20/18 REV. #: 4 PER.: M. O'DOWD

REV. DESCRIP.:

**TYPICAL MOTOR PERFORMANCE DATA**

Model: Y154SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
1.50	1.1	4	1755	145TC	230/460	60	3	4.5/2.2
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	86.5	B		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	1.50	1.1	2.2	85.8	73.1
¾ Load	1.12	0.8	1.9	84.7	65.3
½ Load	0.75	0.6	1.6	81.0	52.7
¼ Load	0.37	0.3	1.5	69.1	33.8
No Load			1.3		8.2
Locked Rotor			17.1		54.3

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)	
4.49	260	325	365	0.12

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
35	15	-	6305ZZC3	6305ZZC3	66

\*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	aguerrretaz	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	4/28/2021	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**TYPICAL MOTOR PERFORMANCE DATA**

Model: Y154SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
1.50	1.1	4	1440	145TC	190/380	50	3	5.2/2.6
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	84.0	B		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	1.50	1.1	2.6	86.1	69.5
¾ Load	1.13	0.8	2.0	85.7	62.2
½ Load	0.75	0.6	1.7	83.1	50.1
¼ Load	0.38	0.3	1.4	71.5	40.4
No Load			1.3		8.4
Locked Rotor			25		72.9

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)	
5.47	250	195	280	0.12

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
17	12	-	6305ZZC3	6305ZZC3	66

\*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.

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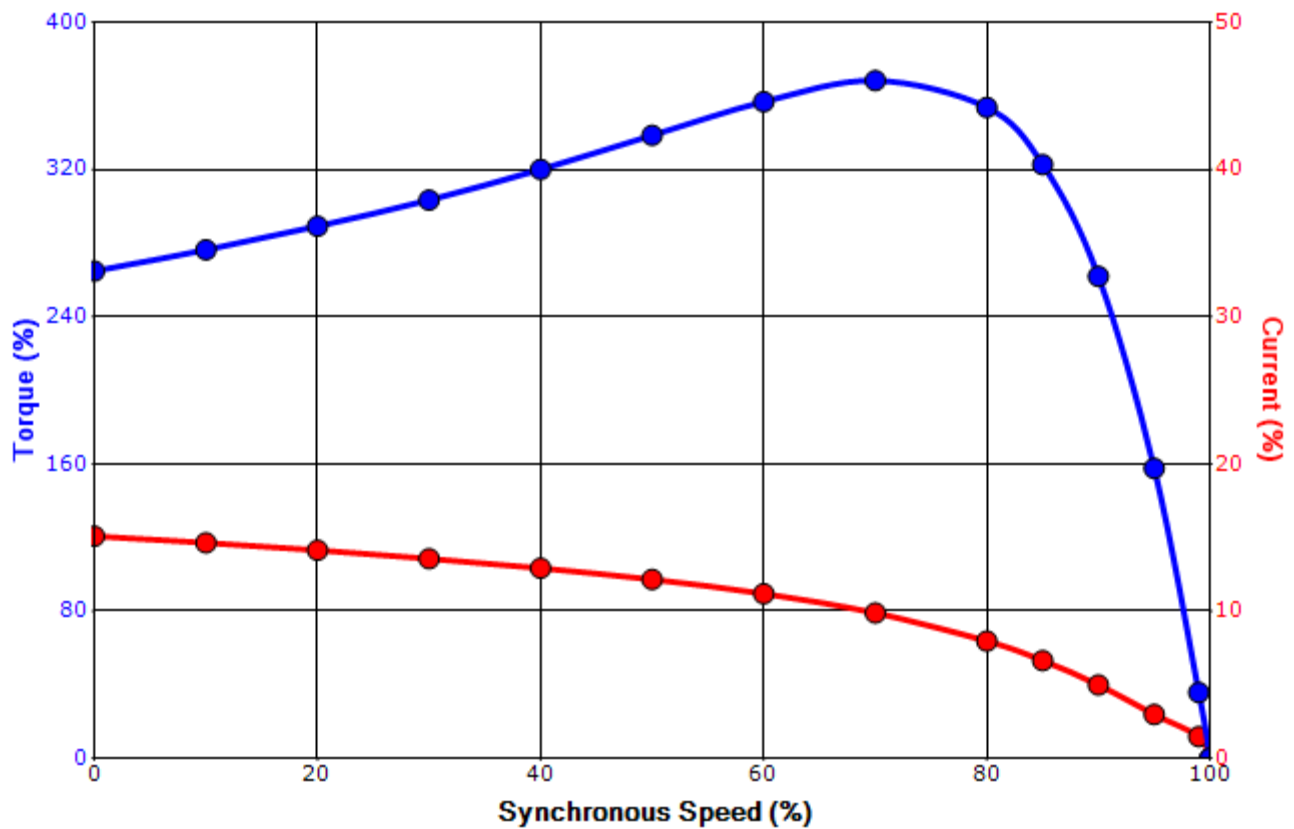
Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	4/3/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: Y154SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
1.50	1.1	4	1755	145TC	230/460	60	3	4.5/2.2
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	86.5	B		40 C
Locked Rotor Amps	Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )	Torque						
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)	Break Down (%)			
17.1	0.12	4.49	260	325	365			

**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.**

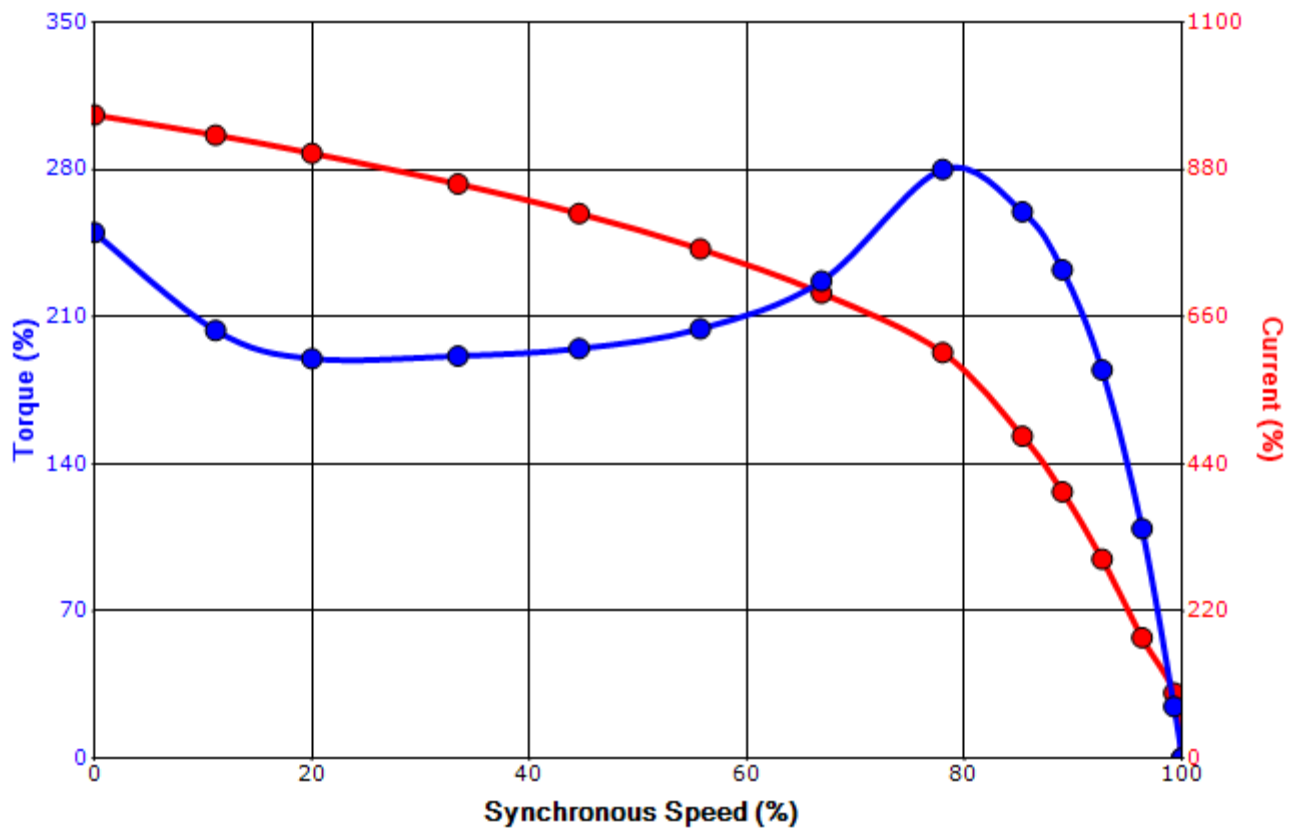
Engineering	aguerrettaz	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	4/28/2021	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

**SPEED TORQUE/CURRENT CURVE**

Model: Y154SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
1.50	1.1	4	1440	145TC	190/380	50	3	5.2/2.6
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	84.0	B		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 (%)				
25	0.12	5.47	250	195		280		

**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.

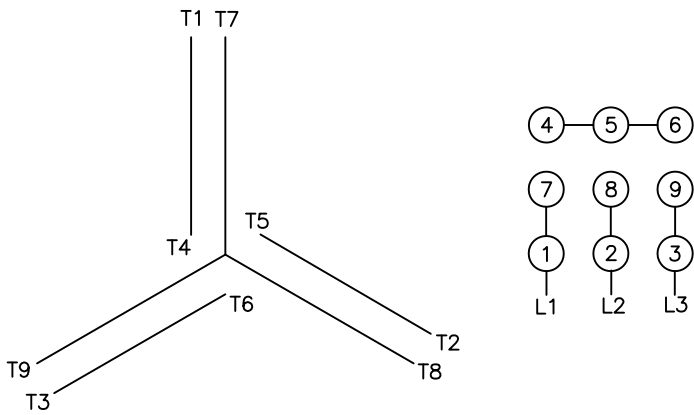
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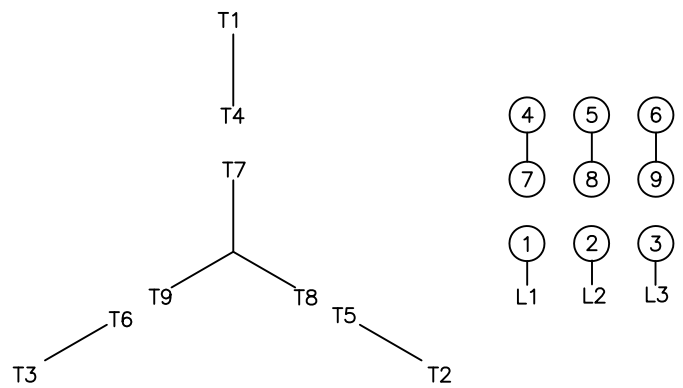
**Motor Connection Diagrams**  
9 Leads

Across-the-Line Starting / Running Connections

Low Voltage Wye



High Voltage Wye



Switch L1 and L2 to reverse rotation