

UNITS: INCHES		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)
ROTATION FROM NDE		
<div><div><div></div></div><div>X</div></div> CCW	<div><div><div></div></div><div></div></div> CW	

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 SEVERE DUTY
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TOSHIBA INTERNATIONAL CORPORATION

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

DRAWING #: MDSL003-01
 REV. DATE: 06/20/18 REV. #: 5 PER.: M. O'DOWD
 REV. DESCRIP.:

TYPICAL MOTOR PERFORMANCE DATA

Model: Y154SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
1.50	1.1	4	1760	145TC	230/460	60	3	4.6/2.3
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	2.3	86.9	69.4
¾ Load	1.13	0.8	2.0	85.5	61.7
½ Load	0.75	0.6	1.6	82.6	53.2
¼ Load	0.38	0.3	1.1	77.6	41.2
No Load			1.5		
Locked Rotor			19.6		

Torque				Rotor wk² Inertia (lb-ft²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
4.48	330	245	375	0.13

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
31	26	-	6305ZZC3	6305ZZC3	58

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

Motor Options:
Product Family:EQP Global SD CFace Footed
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	bammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	6/17/2025	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

TYPICAL MOTOR PERFORMANCE DATA

Model: Y154SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
1.50	1.1	4	1450	145TC	190/380	50	3	5.0/2.5
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	84.5	-		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	1.50	1.1	2.5	85.4	78.3
¾ Load	1.13	0.8	2.0	85.5	71.8
½ Load	0.75	0.6	1.7	83.0	59.4
¼ Load	0.38	0.3	1.2	75.7	44.5
No Load			1.4		
Locked Rotor			17.4		

Torque				Rotor wk² Inertia (lb-ft²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
5.44	230	165	295	0.13

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
37	29	-	6305ZZC3	6305ZZC3	58

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

Motor Options:
Product Family:EQP Global SD CFace Footed
Mounting:C-Face Footed,Shaft:T Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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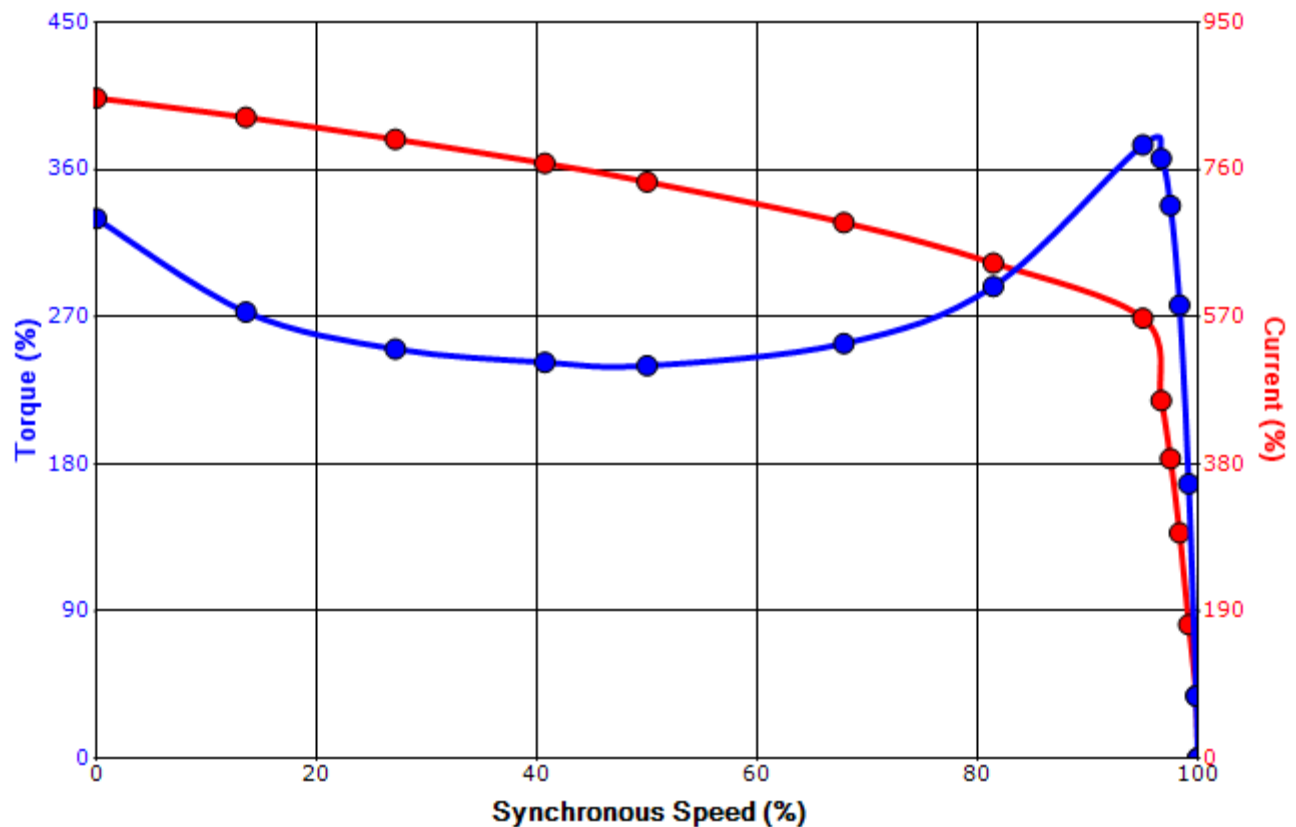
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SPEED TORQUE/CURRENT CURVE

Model: Y154SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
1.50	1.1	4	1760	145TC	230/460	60	3	4.6/2.3
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 ² Inertia (lb-ft ²)	Torque						
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)		Break Down (%)		
19.6	0.13	4.48	330	245		375		

Design Values



Customer			wk ² Load Inertia (lb-ft ²)	-
Customer PO			Load Type	-
Sales Order			Voltage (%)	100
Project #			Accel. Time	-

Tag:

All characteristics are average expected values.

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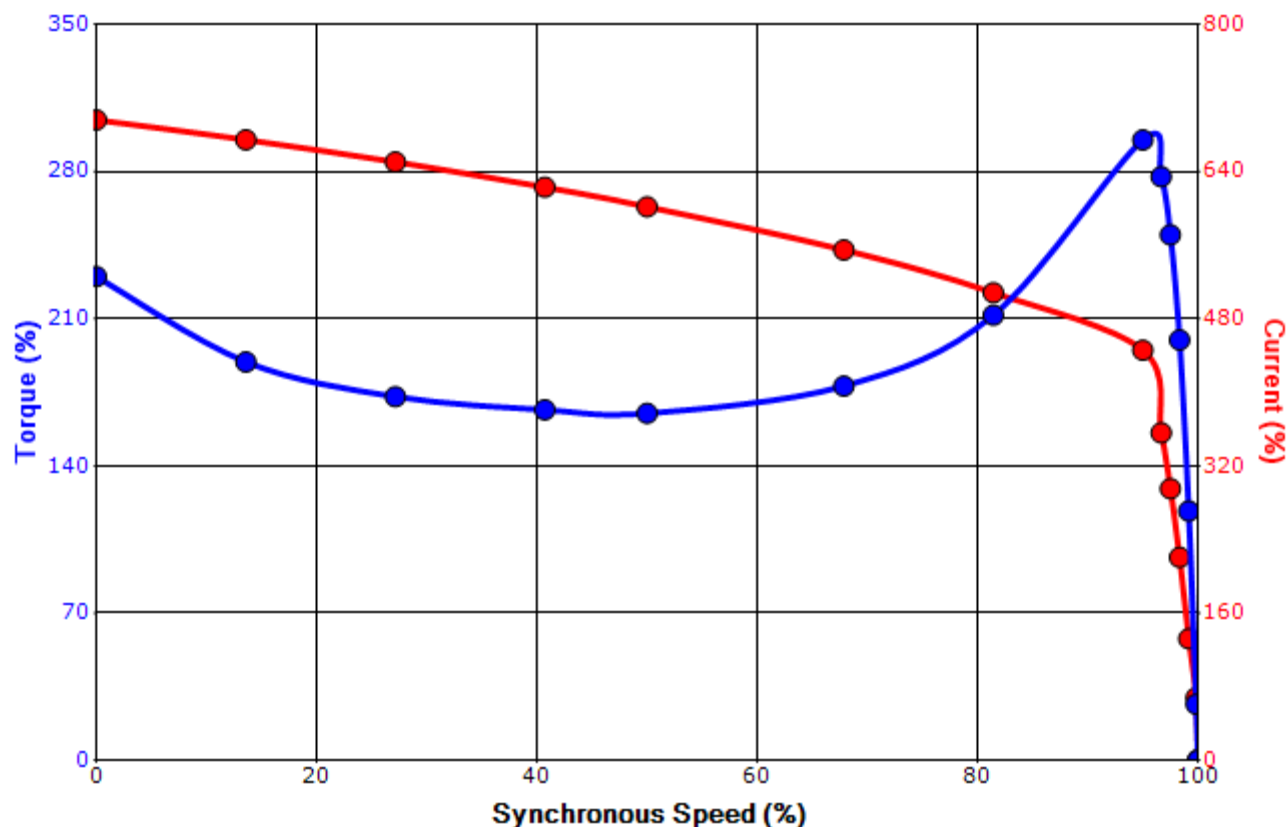
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SPEED TORQUE/CURRENT CURVE

Model: Y154SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
1.50	1.1	4	1450	145TC	190/380	50	3	5.0/2.5
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	84.5	-		40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)		Break Down (%)		
17.4	0.13	5.44	230	165		295		

Design Values



Customer			wk ² Load Inertia (lb-ft ²)	-
Customer PO			Load Type	-
Sales Order			Voltage (%)	100
Project #			Accel. Time	-

Tag:

All characteristics are average expected values.

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Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
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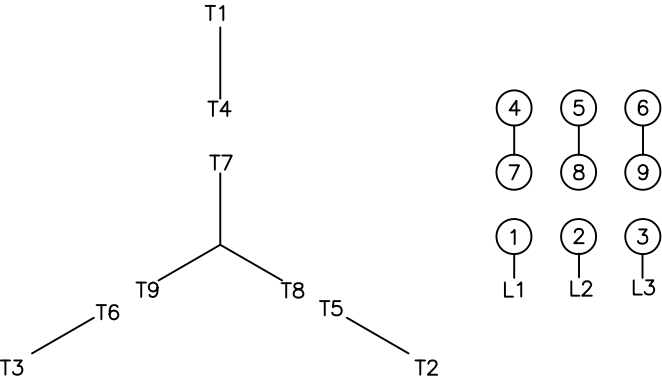
Motor Connection Diagrams
9 Leads

Across-the-Line Starting / Running Connections

Low Voltage Wye



High Voltage Wye



Switch L1 and L2 to reverse rotation

SPARE PARTS LIST*

Model: Y154SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
1.50	1.1	4	1760	145TC	230/460	60	3	4.6/2.3
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

Bearings DE 6305ZZC3 / 25BC03JPP3OA

Bearings NDE 6305ZZC3 / 25BC03JPP3OA

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

Other than the grease used for regreasable bearings and the oil used for oil-lubricated bearings, Toshiba advises that there are no "use" parts. The only insurance spares that Toshiba suggests for these squirrel-cage induction motors are industry-standard and commercially available off-the-shelf bearings as noted above.

Motor components such as terminal boxes, fan covers and other machined parts are available on special request. In these cases, please advise our order entry department of the model and serial numbers found on the motor nameplate and a description of the needed components. With this information they will be able to furnish the current part number, price and availability.

Note: Our internal part numbers are subject to change without notice and are not published.

Customer		
Customer PO		
Sales Order		
Project #		

Tag:

All characteristics are average expected values.

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

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