

UNITS: INCHES	
ROTATION FROM NDE	
	
<input checked="" type="checkbox"/> CCW	<input type="checkbox"/> CW

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TOSHIBA SEVERE DUTY www.toshiba.com/tic TOSHIBA INTERNATIONAL CORPORATION	TOTALLY ENCLOSED FAN COOLED FOOTED C-FACED 3 PHASE INDUCTION MOTOR 284TC-286TC F1 ASSEMBLY	DRAWING #: MDSL005-05	
		REV. DATE: 07/05/18	REV. #: 0 PER.: M. O'DOWD
		REV. DESCRIP.: _____	
		<input type="checkbox"/> PRELIMINARY <input checked="" type="checkbox"/> CERTIFIED	

TYPICAL MOTOR PERFORMANCE DATA

Model: 0304SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1770	284TC	230/460	60	3	74/37
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	93.6	B		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	30.00	22.4	36	93.8	81.6
¾ Load	22.50	16.8	28	93.3	78.2
½ Load	15.00	11.2	21	91.5	70.1
¼ Load	7.50	5.6	16.5	85.6	49.5
No Load			15.0		
Locked Rotor			236		

Torque				Rotor wk² Inertia (lb-ft²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
89.0	190	135	300	5.70

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
35	15	-	6310ZC3	6310ZC3	478

*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	Jrodrigu	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	7/25/2024	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

TYPICAL MOTOR PERFORMANCE DATA

Model: 0304SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1460	284TC	190/380	50	3	86/43
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	91.6	B		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	30.00	22.4	42	92.2	86.4
¾ Load	22.50	16.8	32	92.2	84.4
½ Load	15.00	11.2	23	91.2	78.1
¼ Load	7.50	5.6	16.7	86.4	58.9
No Load			12.0		
Locked Rotor			241		

Torque				Rotor wk² Inertia (lb-ft²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
108	150	105	235	5.70

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
35	15	-	6310ZC3	6310ZC3	478

*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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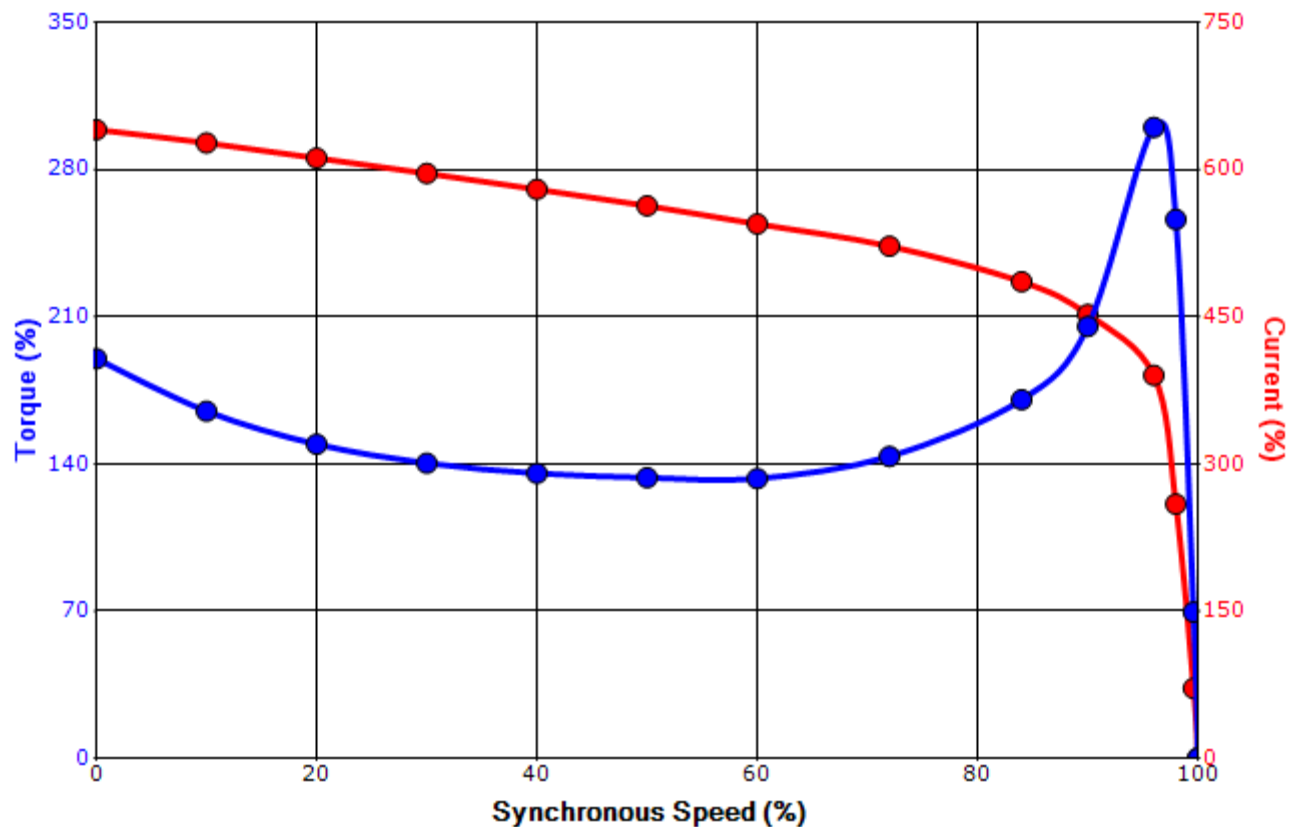
Engineering	Jrodrigu	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
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SPEED TORQUE/CURRENT CURVE

Model: 0304SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1770	284TC	230/460	60	3	74/37
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	93.6	B		40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)		Break Down (%)		
236	5.70	89.0	190	135		300		

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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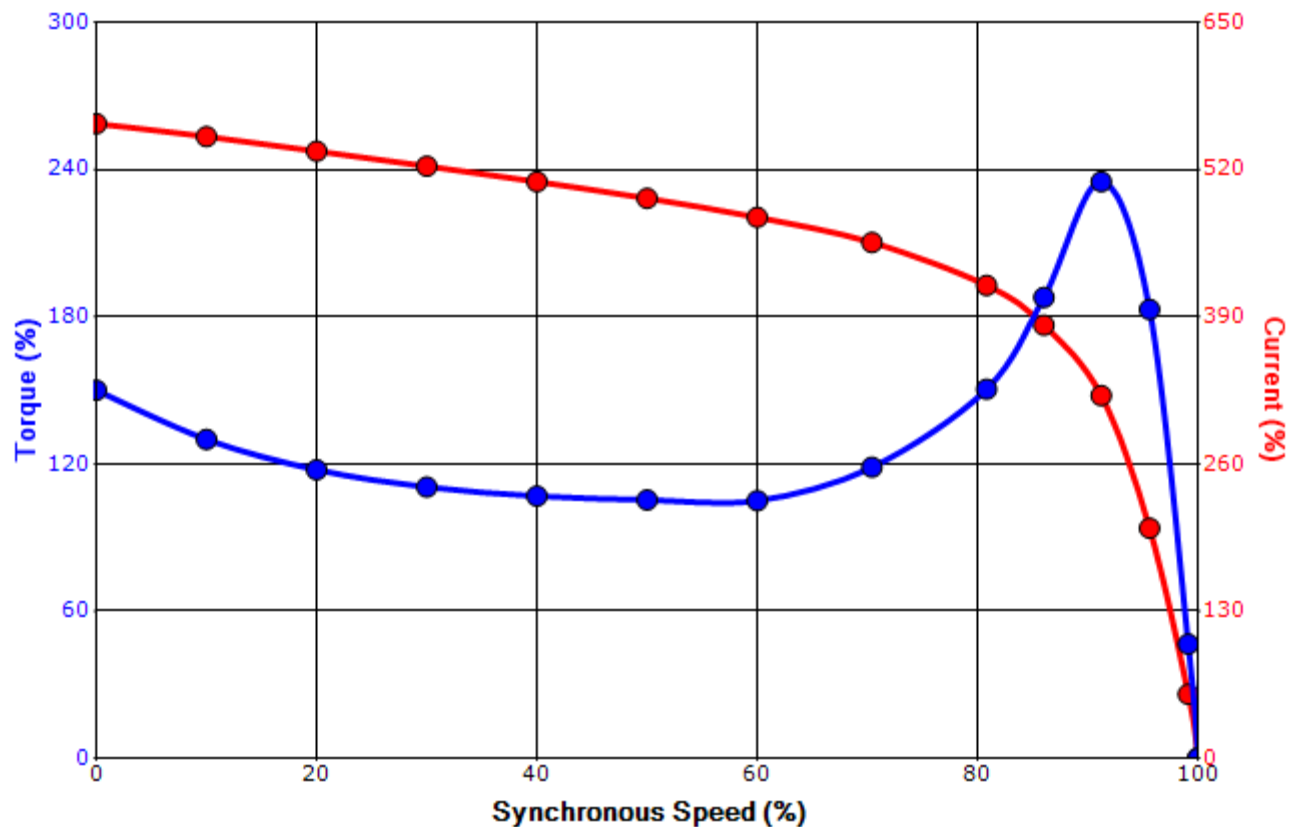
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SPEED TORQUE/CURRENT CURVE

Model: 0304SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1460	284TC	190/380	50	3	86/43
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	91.6	B		40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						
		Full Load (lb-ft)	Locked Rotor (%)		Pull Up (%)		Break Down (%)	
241	5.70	108	150		105		235	

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	Jrodrigu	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	8/1/2024	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.

SPARE PARTS LIST*

Model: 0304SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1770	284TC	230/460	60	3	74/37
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	93.6	B		40 C

Bearings DE 6310ZC3 / 50BC03JP3OX

Bearings NDE 6310ZC3 / 50BC03JP3OX

*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.

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