

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 0.375"x 0.375"x 1.88" (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
www.toshiba.com/tic
EQP Global SD
TOSHIBA INTERNATIONAL CORPORATION

TOTALLY ENCLOSED FAN COOLED
 FOOTED C-FACED
 3 PHASE INDUCTION MOTOR
 284TSC-286TSC F1 ASSEMBLY

DRAWING #: MDSL006-05
 REV. DATE: 07/05/18 REV. #: 0 PER.: M. O'DOWD
 REV. DESCRIP.:

TYPICAL MOTOR PERFORMANCE DATA

Model: 0302SDSR42B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	2	3540	286TSC	230/460	60	3	70/35
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		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	30.00	22.4	35	91.9	88.9
¾ Load	22.50	16.8	27	91.0	86.5
½ Load	15.00	11.2	19.9	88.9	80.7
¼ Load	7.50	5.6	14.0	80.9	62.0
No Load			9.2		11.0
Locked Rotor			217		35.6

Torque				Rotor wk² Inertia (lb-ft²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
44.5	215	195	265	3.58

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
35	15	-	6310ZC3	6310ZC3	456

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

Motor Options:
Product Family:EQP Global SD CFace Footed
Mounting:C-Face Footed,Shaft:TS 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 / 0
Engr. Date	4/19/2012	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

TYPICAL MOTOR PERFORMANCE DATA

Model: 0302SDSR42B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	2	2920	286TSC	190/380	50	3	84/42
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	91.0	B		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	30.00	22.4	42	92.4	88.0
¾ Load	22.50	16.8	32	93.3	85.9
½ Load	15.00	11.2	23	93.3	80.1
¼ Load	7.50	5.6	15.0	82.0	68.7
No Load			9.0		8.3
Locked Rotor			287		31.8

Torque				Rotor wk² Inertia (lb-ft²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
54.0	165	145	220	3.58

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
28	11	-	6310ZC3	6310ZC3	456

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

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

Customer	
Customer PO	
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Project #	

Tag:

All characteristics are average expected values.

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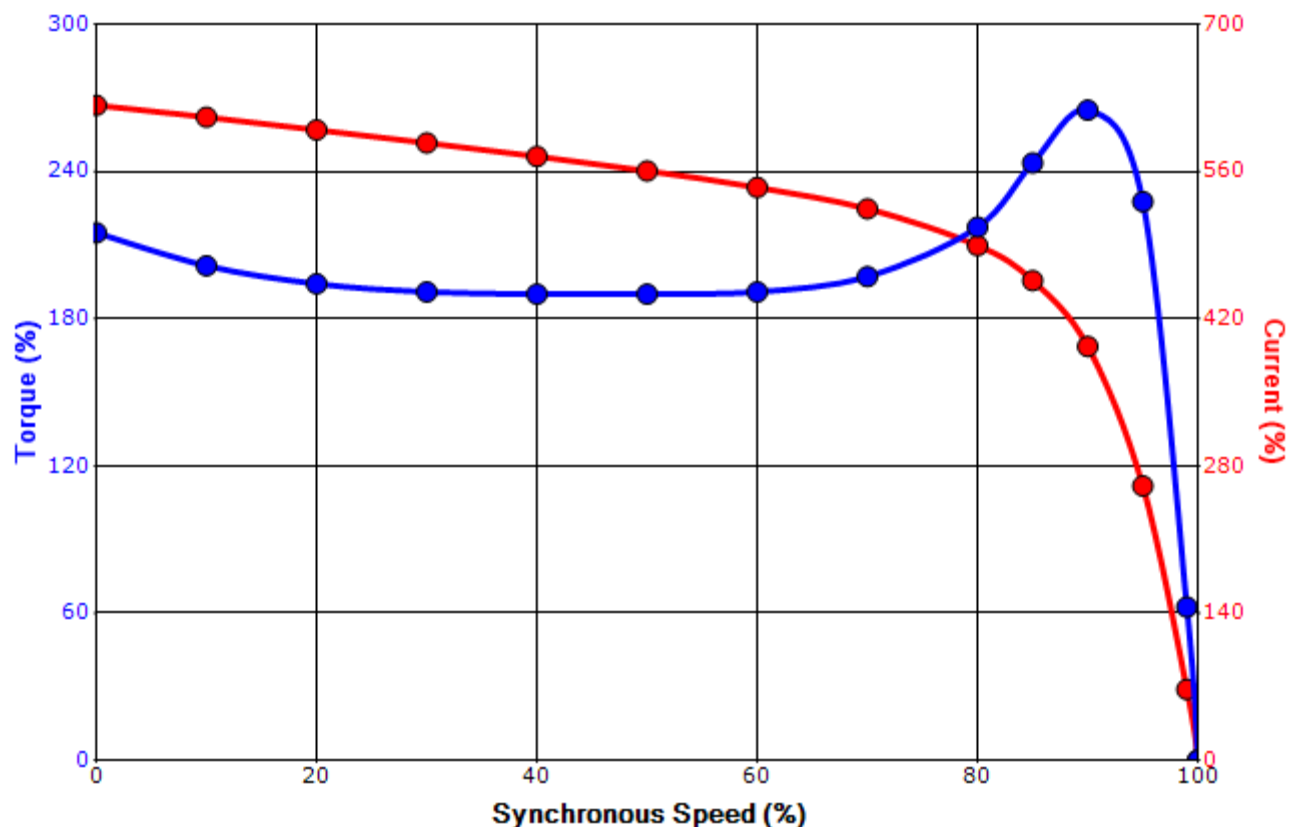
Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	6/17/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

SPEED TORQUE/CURRENT CURVE

Model: 0302SDSR42B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	2	3540	286TSC	230/460	60	3	70/35
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		40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)		Break Down (%)		
217	3.58	44.5	215	195		265		

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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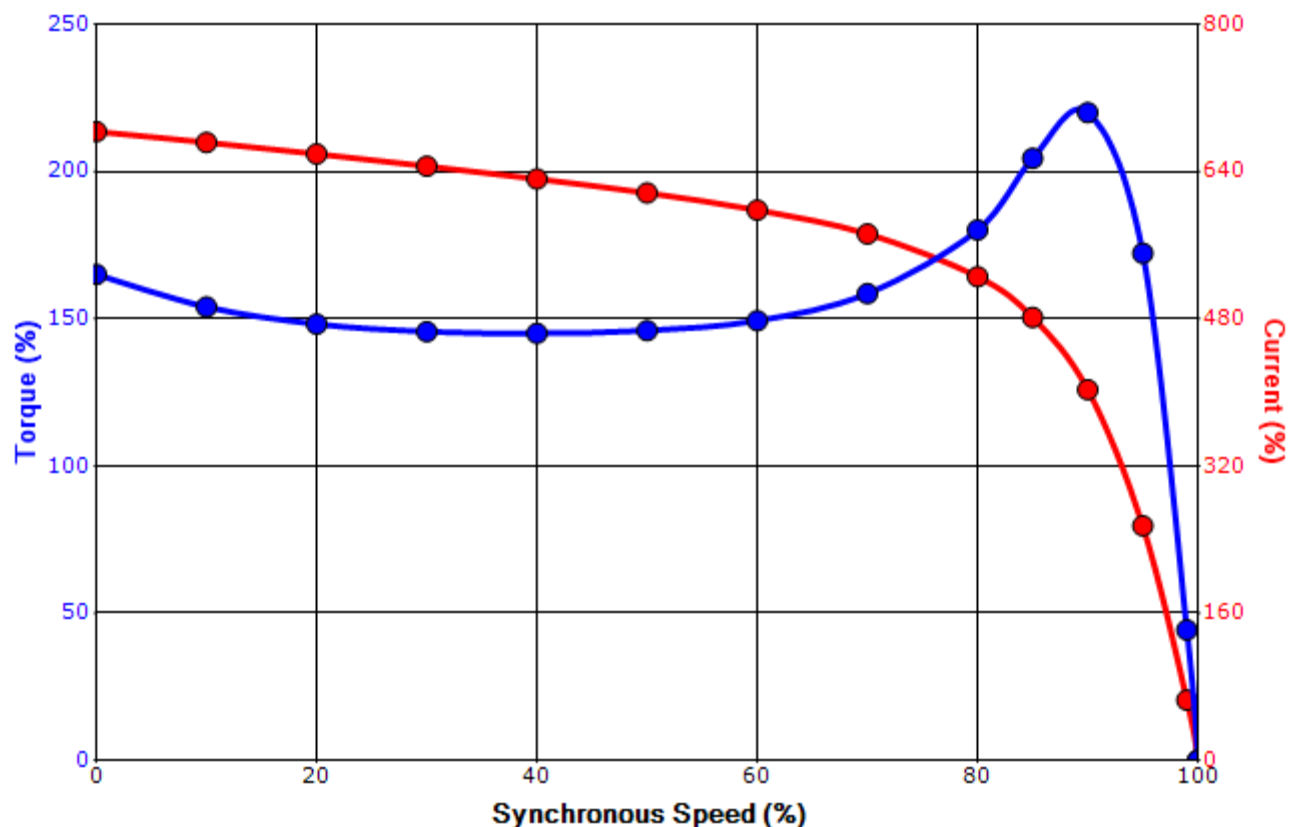
Engineering	aacosta	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	4/19/2012	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

SPEED TORQUE/CURRENT CURVE

Model: 0302SDSR42B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	2	2920	286TSC	190/380	50	3	84/42
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	91.0	B		40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)		Break Down (%)		
287	3.58	54.0	165	145		220		

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	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	6/17/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

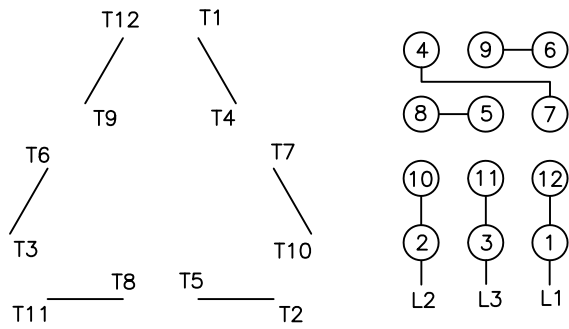
Motor Connection Diagrams
12 Leads

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: 0302SDSR42B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	2	3540	286TSC	230/460	60	3	70/35
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		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.

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

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