

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 0.50x0.50x2.75 (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
 www.toshiba.com/tic
 TOSHIBA INTERNATIONAL CORPORATION

SEVERE DUTY
EQP Global SD

TOTALLY ENCLOSED FAN COOLED
 HORIZONTAL FOOT MOUNT
 3 PHASE INDUCTION MOTOR
 404TS/405TS F1 ASSEMBLY

DRAWING #: MDSL002-08
 REV. DATE: 8/16/17 REV. #: 3 PER.: J. HOCK
 REV. DESCRIP.: CHANGED DRAWING TABLE FORMAT



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

TYPICAL MOTOR PERFORMANCE DATA

Model: 1002SDSR41B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
100	75	2	3560	405TS	230/460	60	3	225/112
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	94.1	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	100	74.6	112.3	94.6	88.0
¾ Load	75.00	55.9	86.3	93.9	86.6
½ Load	50.00	37.3	61.9	91.9	82.2
¼ Load	25.00	18.6	40.7	85.8	66.9
No Load			27.0		8.1
Locked Rotor			710.4		33.5

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
148	195	125	245	17.36

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
15	6.8	85	6313C3	6313C3	

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

Motor Options:
Mounting: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	bmmmen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 1
Engr. Date	10/17/2018	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: 1002SDSR41B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
75	55	2	2960	405TS	190/380	50	3	205/102
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	94.3	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	75	55.9	102.3	94.5	87.8
¾ Load	56.25	41.9	79.0	93.6	86.1
½ Load	37.50	28.0	57.3	91.3	81.2
¼ Load	18.75	14.0	38.6	84.2	65.2
No Load			26.4		7.4
Locked Rotor			696.9		30.9

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
133	180	135	280	17.36

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
21	13	85	6313C3	6313C3	

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

Motor Options:
Mounting: Footed, Shaft: TS Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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Engineering	bmmmen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 1
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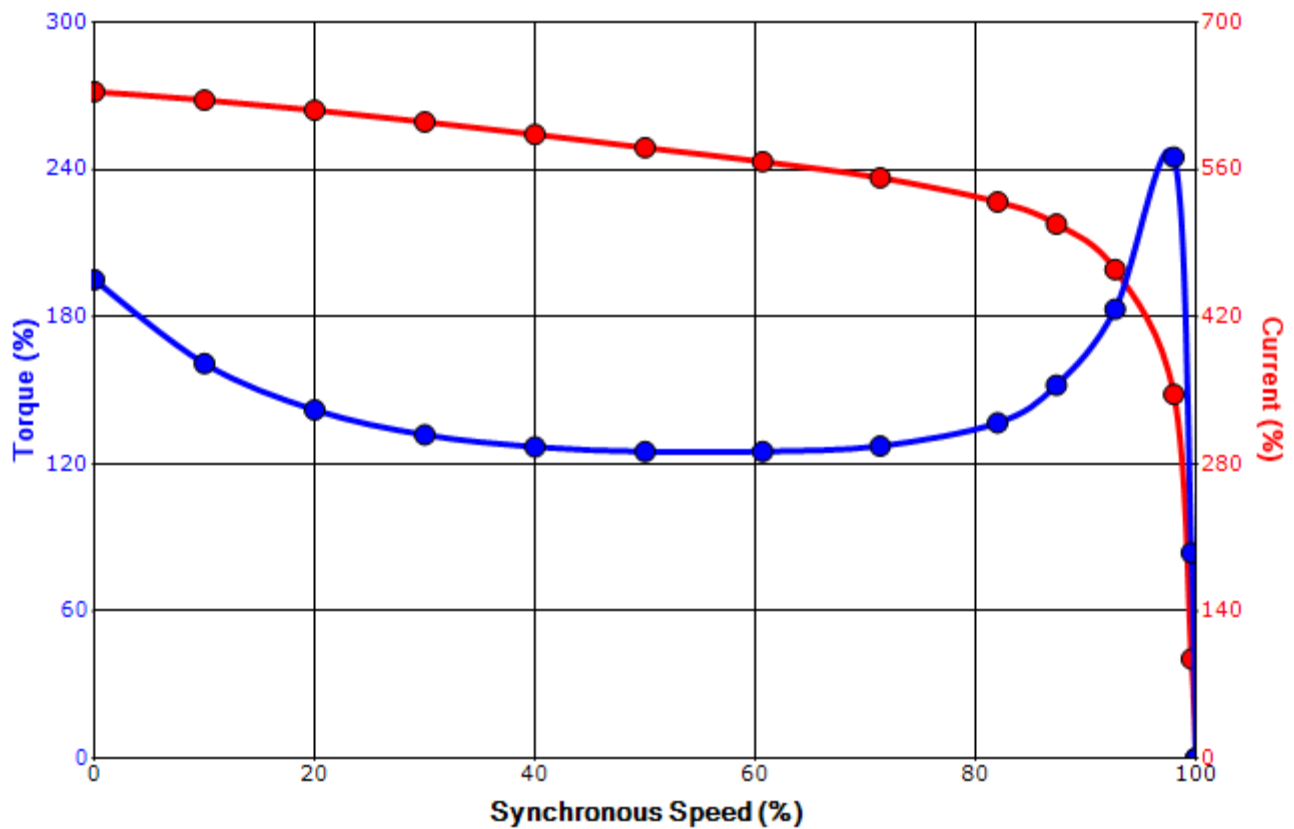
Issued Date	12/18/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

SPEED TORQUE/CURRENT CURVE

Model: 1002SDSR41B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
100	75	2	3560	405TS	230/460	60	3	225/112
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	94.1	B	G	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)	Break Down (%)			
710.4	17.36	148	195	125	245			

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.

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

Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121/1
Engr. Date	10/17/2018	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



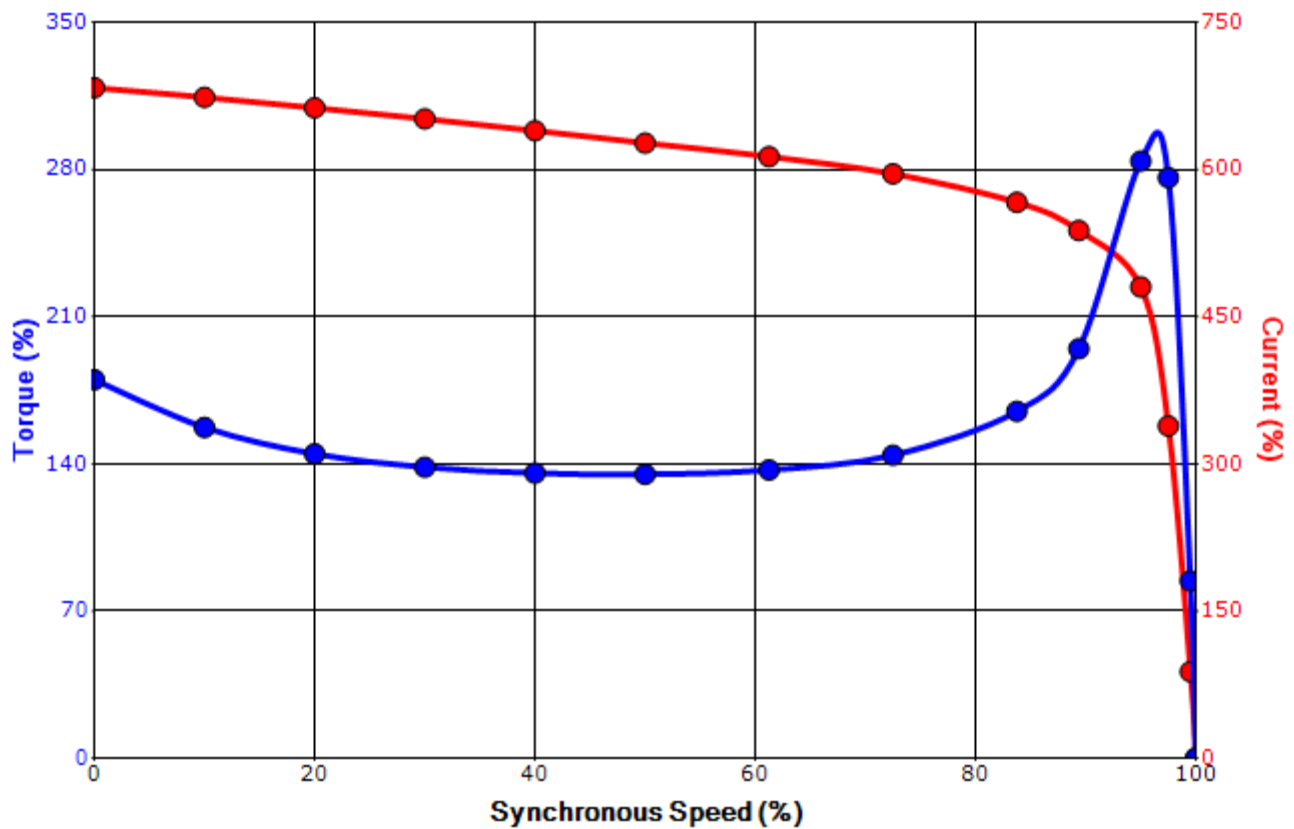
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SPEED TORQUE/CURRENT CURVE

Model: 1002SDSR41B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
75	55	2	2960	405TS	190/380	50	3	205/102
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	94.3	B	G	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque				Pull Up (%)	Break Down (%)	
		Full Load (lb-ft)	Locked Rotor (%)					
696.9	17.36	133	180		135	280		

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.

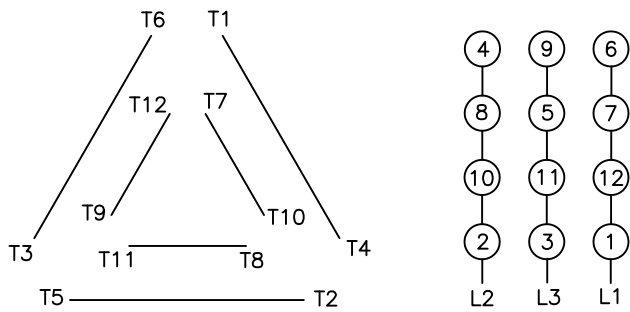
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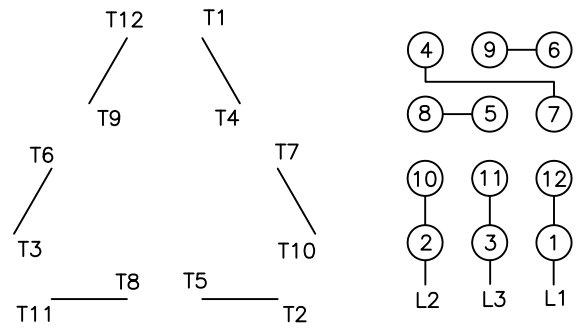
Motor Connection Diagrams
12 Leads

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.