

UNITS: INCHES

ROTATION FROM NDE

<input checked="" type="checkbox"/>	CCW	<input type="checkbox"/>	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 0.75x0.75x5.62 (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



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

DRAWING #: MDSL001-08

REV. DATE: 05/25/21 REV. #: 4 PER.: J. HOCK

REV. DESCRIP.: REMOVED MOT2 FROM MODEL

TYPICAL MOTOR PERFORMANCE DATA

Model: 1004SDSR41A-PR

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
100	75	4	1775	405T	230/460	60	3	232/116
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	95.4	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	100.00	74.6	115	95.6	84.6
¾ Load	75.00	55.9	91	95.2	81.0
½ Load	50.00	37.3	69	93.9	72.1
¼ Load	25.00	18.6	52	89.2	50.1
No Load			38.8		
Locked Rotor			725		32.9

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
296	215	175	310	25.95

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
16	8	75	NU317C3	6313C3	

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

Motor Options:
Product Family:EQP Global SD
Mounting: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	bmmamen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	11/15/2018	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

TYPICAL MOTOR PERFORMANCE DATA

Model: 1004SDSR41A-PR

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
75	55	4	1475	405T	190/380	50	3	214/107
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	94.6	B	H	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	75.00	55.9	106	94.4	84.4
¾ Load	56.25	41.9	84	93.9	80.1
½ Load	37.50	28.0	65	92.4	70.3
¼ Load	18.75	14.0	50	87.1	47.9
No Load			39.3		
Locked Rotor			722		32.4

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
267	225	170	310	25.95

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
20	11	75	NU317C3	6313C3	

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

Motor Options:
Product Family:EQP Global SD
Mounting: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.

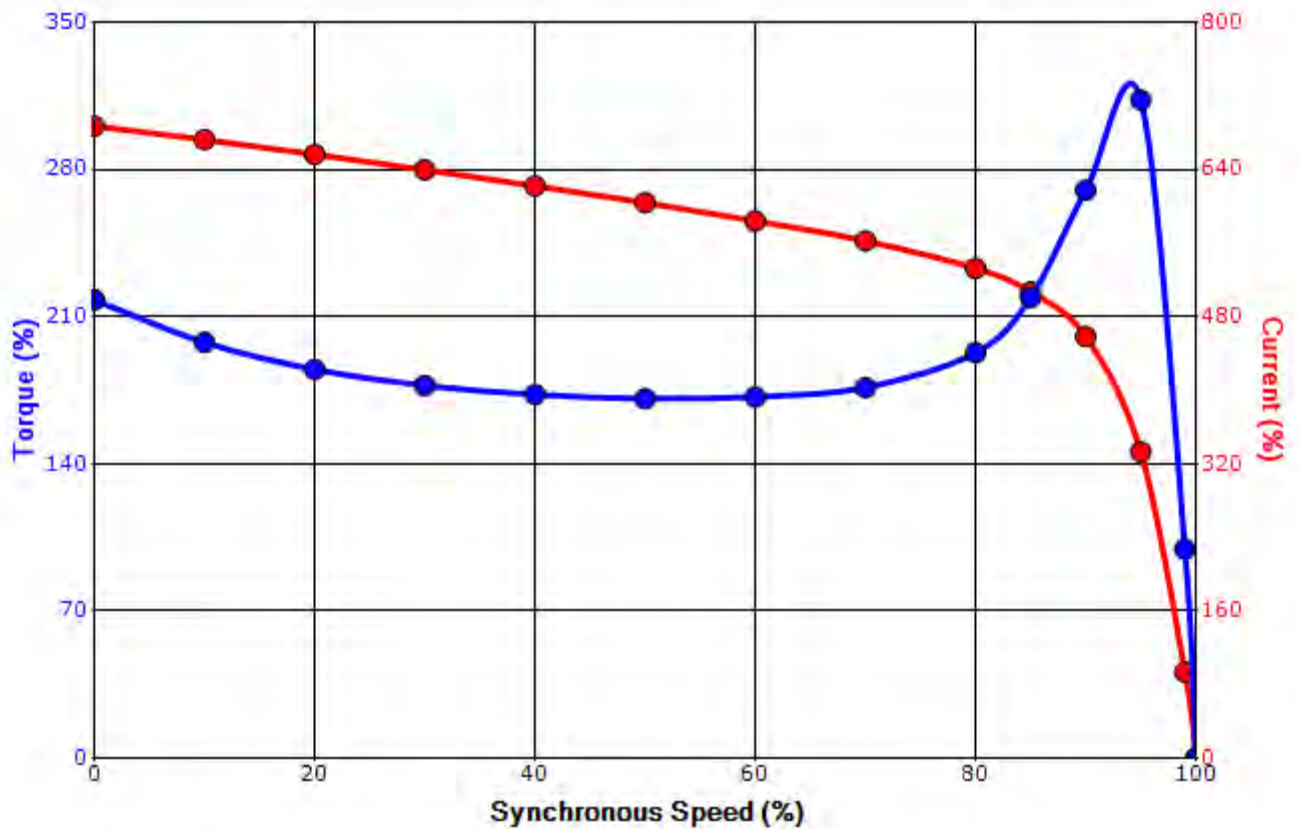
Engineering	bmmamen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	10/31/2018	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

SPEED TORQUE/CURRENT CURVE

Model: 1004SDSR41A-PR

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
100	75	4	1775	405T	230/460	60	3	232/116
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	95.4	B	G	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						Break Down (%)
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)				
725	25.95	296	215	175			310	

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.

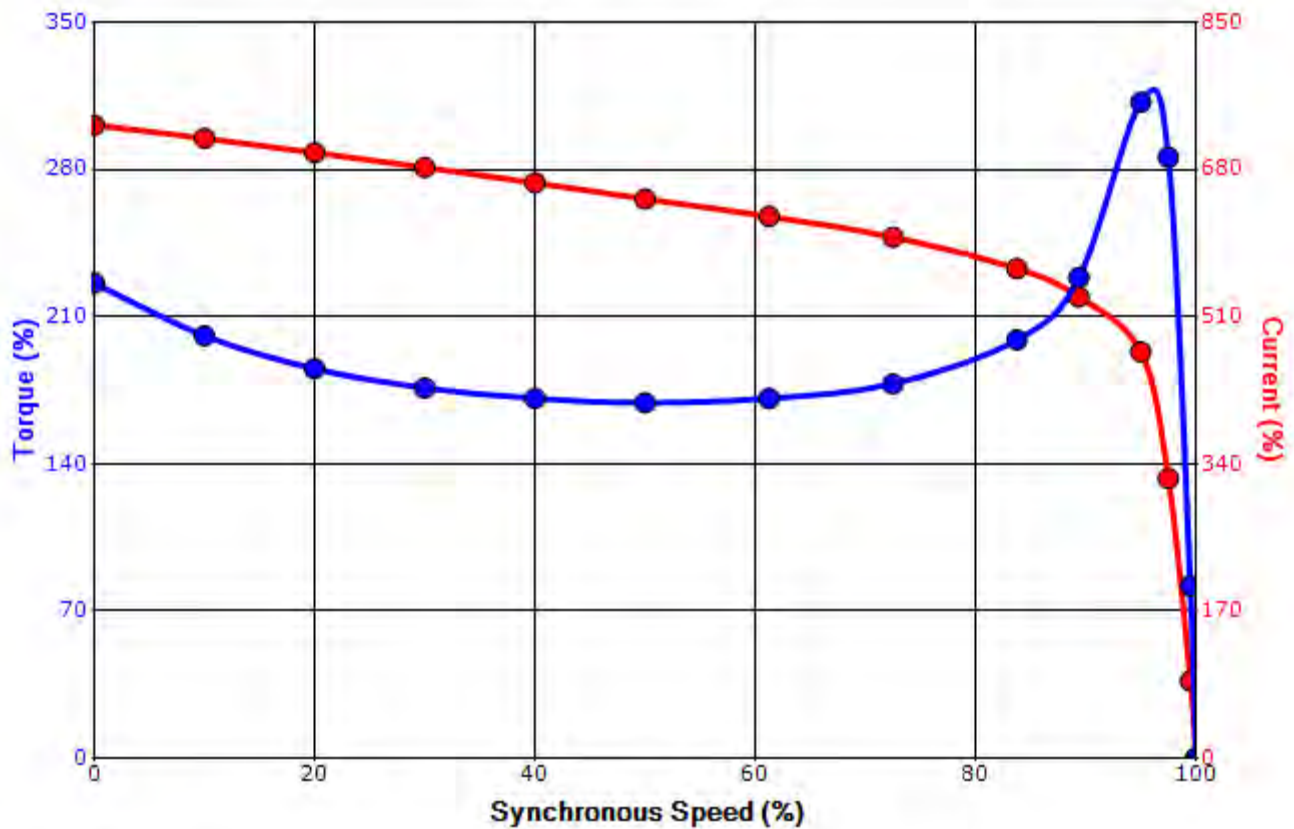
Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	11/15/2018	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

SPEED TORQUE/CURRENT CURVE

Model: 1004SDSR41A-PR

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
75	55	4	1475	405T	190/380	50	3	214/107
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	94.6	B	H	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						Break Down (%)
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)				
722	25.95	267	225	170			310	

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 / 0
Engr. Date	10/31/2018	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: 1004SDSR41A-PR

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
100	75	4	1775	405T	230/460	60	3	232/116
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	95.4	B	G	40 C

Bearings DE	NU317C3 / 85RU03J3OX
Bearings NDE	6313C3 / 65BC03J3OX

*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.

Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1125 / 0
Engr. Date	11/15/2018	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

SPARE PARTS LIST*

Model: 1004SDSR41A-PR

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
75	55	4	1475	405T	190/380	50	3	214/107
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	94.6	B	H	40 C

Bearings DE	NU317C3 / 85RU03J3OX
Bearings NDE	6313C3 / 65BC03J3OX

*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.

Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1125 / 0
Engr. Date	10/31/2018	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011