

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 0.25" x 0.25" x 2.53" (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
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TOSHIBA INTERNATIONAL CORPORATION

SEVERE DUTY
EQP SD

TOTALLY ENCLOSED FAN COOLED
HORIZONTAL FOOT MOUNTED
3 PHASE INDUCTION MOTOR
324JM/326JM F1 ASSEMBLY

DRAWING #: MDSL108-06
REV. DATE: 05/09/18 REV. #: 3 PER.: M. O'DOWD
REV. DESCIP.: UPDATED TITLEBLOCK, NOTES, & DIMENSIONS

TYPICAL MOTOR PERFORMANCE DATA

Model: 0502SDJR41M-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
50	37	2	3540	326JM	230/460	60	3	116/58
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	93.0	B		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	50.00	37.3	58	93.0	88.2
¾ Load	37.50	28.0	43	92.2	85.7
½ Load	25.00	18.6	31	90.2	80.5
¼ Load	12.50	9.3	21	85.1	65.0
No Load			13.7		7.1
Locked Rotor			362		39.0

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
74.2	250	215	260	6.39

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
35	15	-	6312ZC3	6312ZC3	693

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

Motor Options:
Product Family:EQP Global JM
Mounting:Footed,Shaft:JM Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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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: 0502SDJR41M-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
50	37	2	2905	326JM	190/380	50	3	143/72
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	90.2	B		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	50.00	37.3	71	90.1	87.8
¾ Load	37.50	28.0	54	90.1	87.3
½ Load	25.00	18.6	37	89.1	84.2
¼ Load	12.50	9.3	23	84.6	70.7
No Load			13.2		6.2
Locked Rotor			371		34.7

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
90.4	170	145	200	6.39

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
27	10	-	6312ZC3	6312ZC3	693

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

Motor Options:
Product Family:EQP Global JM
Mounting:Footed,Shaft:JM Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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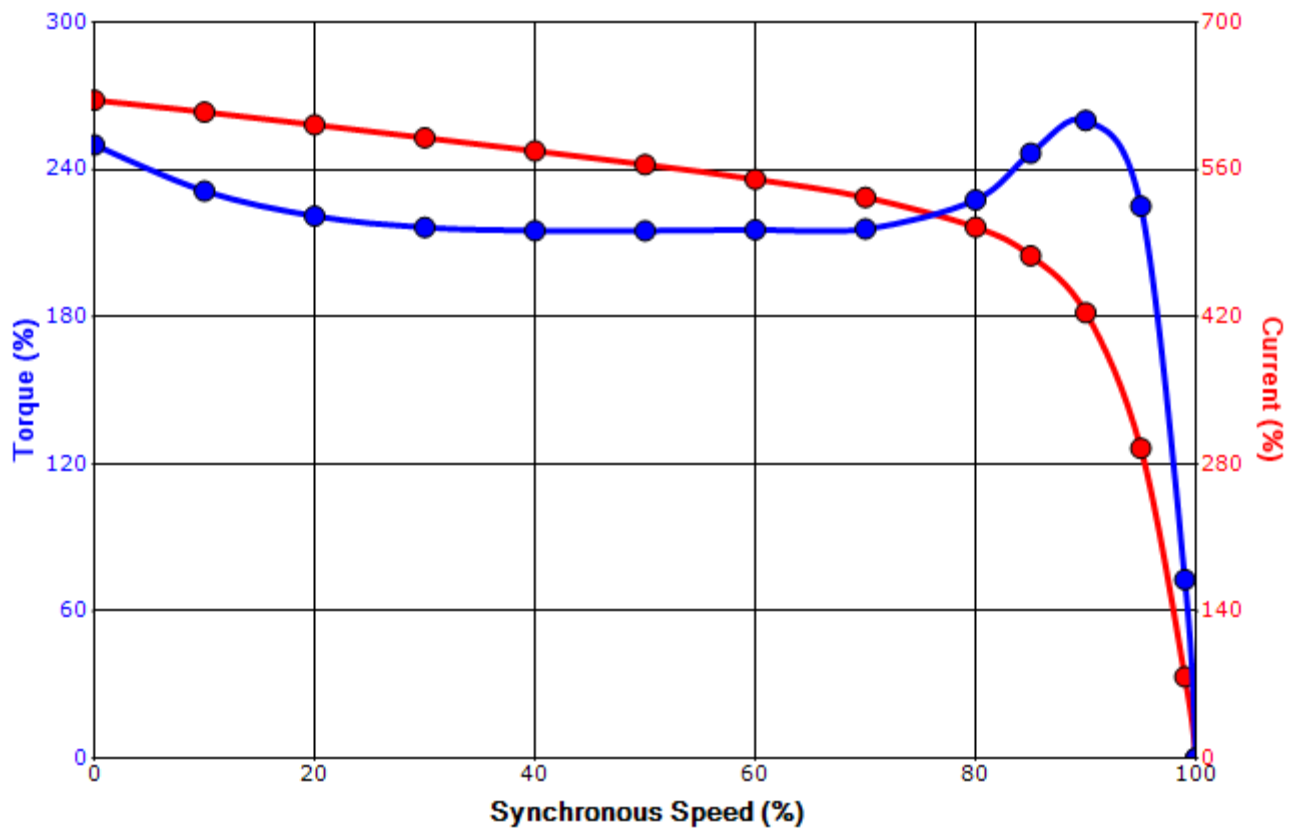
Engineering	bmmamen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
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SPEED TORQUE/CURRENT CURVE

Model: 0502SDJR41M-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
50	37	2	3540	326JM	230/460	60	3	116/58
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	93.0	B		40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)	Break Down (%)			
362	6.39	74.2	250	215	260			

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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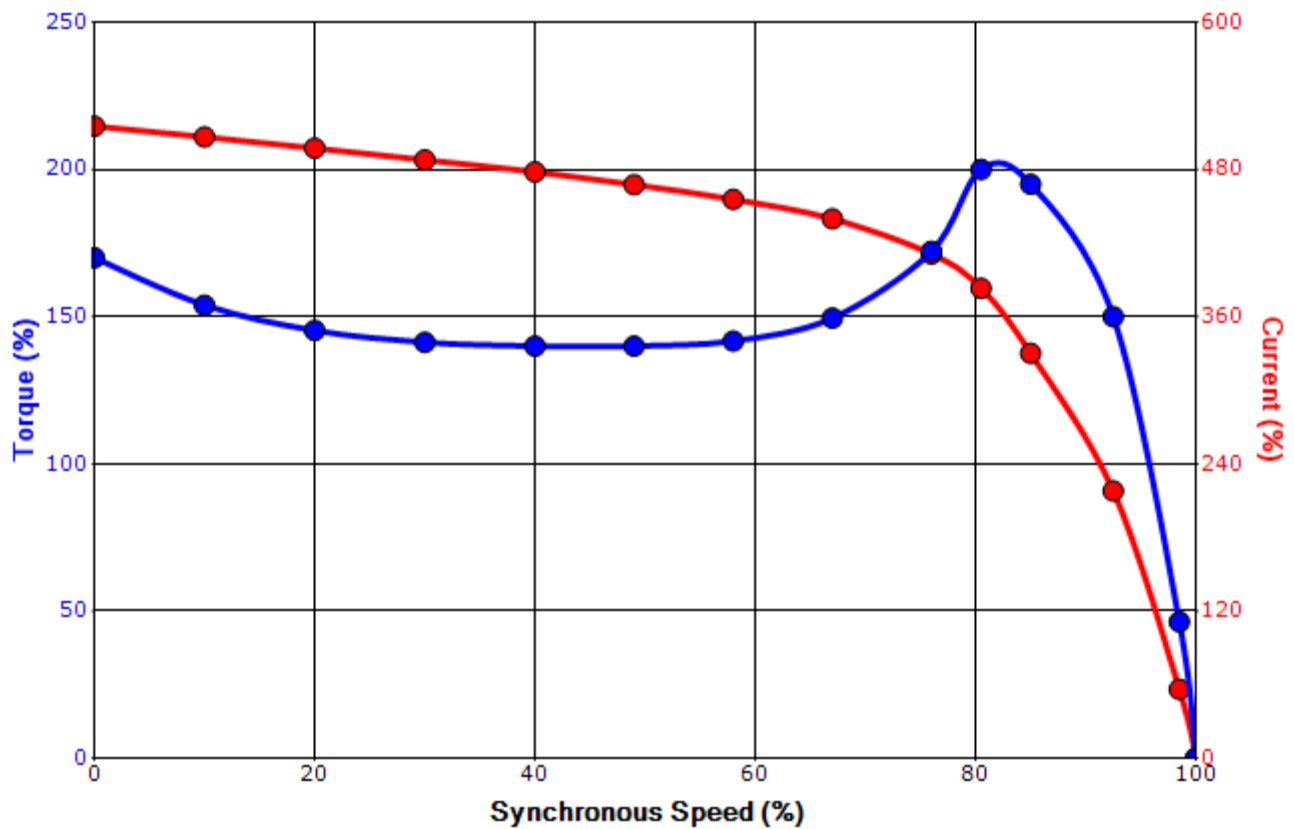
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Engr. Date	4/19/2012	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

SPEED TORQUE/CURRENT CURVE

Model: 0502SDJR41M-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
50	37	2	2905	326JM	190/380	50	3	143/72
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	90.2	B		40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque						Break Down (%)
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)				
371	6.39	90.4	170	145			200	

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.

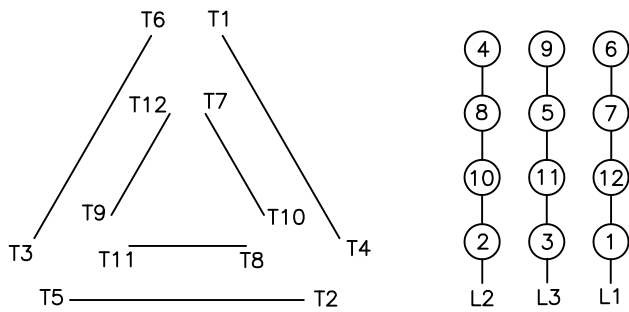
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Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	3/19/2021	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

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.