

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

0.500"x 0.500"x 3.25"

(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

X CERTIFIED



TOTALLY ENCLOSED FAN COOLED
HORIZONTAL FOOT MOUNTED
3 PHASE INDUCTION MOTOR
284T-286T F1 ASSEMBLY

DRAWING #:	MDSLV001-	-05			
REV. DATE:	07/03/18	REV. #:	0	PER.: M. O'DOWD	
REV. DESCRIP.:					



Issued Date	6/19/2025	Transmit #	
Issued By	dschoeck	Issued Rev	

TYPICAL MOTOR PERFORMANCE DATA

Model: 0304SDSR41A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1770	286T	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	В		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		4.6
Locked Rotor			236		30.5

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

Safe Stall Time(s)		Sound	Bearin	Approx. Motor Weight		
Cold	Hot	Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight	
	Cold Hot		DE	NDE	(lbs)	
35	15	-	6310ZC3	6310ZC3	461	

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

Motor Options: Product Family:EQP Global SD Mounting:Footed,Shaft:T Shaft Full Load Amps at 208: 82

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

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



Issued Date	6/19/2025	Transmit #	
Issued By	dschoeck	Issued Rev	

TYPICAL MOTOR PERFORMANCE DATA

Model: 0304SDSR41A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1460	286T	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	В		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
1/4 Load	7.50	5.6	16.7	86.4	58.9
No Load			12.0		4.9
Locked Rotor			241		30.4

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

Safe Stall Time(s)		Sound Bearings*		Approx. Motor Weight		
Cold	Hot	Pressure	<u> </u>		1	
	1141	dB(A) @ 1M	DE	NDE	(lbs)	
35	15	-	6310ZC3	6310ZC3	461	

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

Motor Options: Product Family:EQP Global SD Mounting:Footed,Shaft:T Shaft

Customer	
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TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.							
Engineering	Jrodrigu	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0		
Engr. Date	8/1/2024	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011		



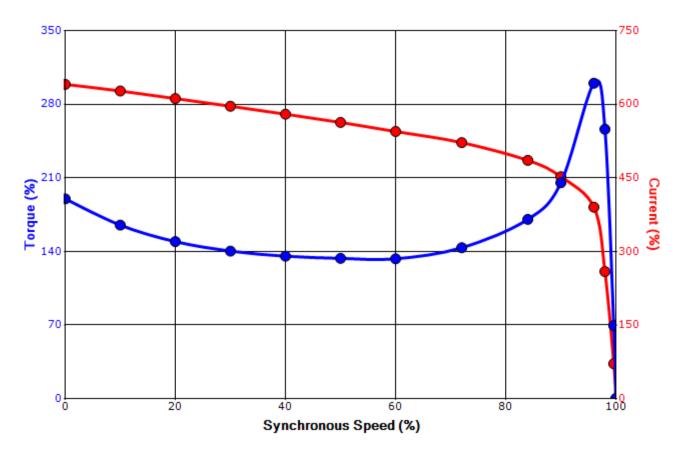
Issued Date 6/19/2025		Transmit #	
Issued By	dschoeck	Issued Rev	

SPEED TORQUE/CURRENT CURVE

Model: 0304SDSR41A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1770	286T	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	В		40 C
Leaked Deter	Rotor wk ²	Torque						
Locked Rotor Amps	Inertia	Full Load	Locked	Rotor	Pull Up)	Break	Down
Amps	(lb-ft²)	(lb-ft)	(%	(%)			(%	%)
236	5.70	89.0	19	0	135		30	00

Design Values





Customer	wk² Load Inertia (Ib-f	2) -
Customer PO	Load Typ	е -
Sales Order	Voltage (%	6) 100
Project #	Accel. Tim	е -

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TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.						
Engineering	Jrodrigu	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0	
Engr. Date	7/25/2024	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011	



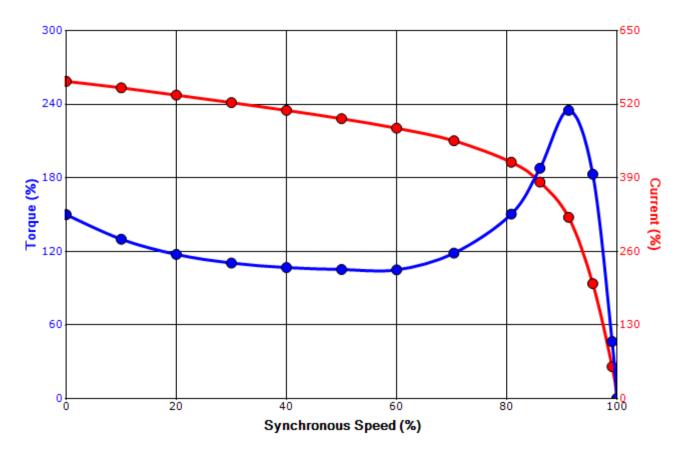
Issued Date	ssued Date 6/19/2025		
Issued By	dschoeck	Issued Rev	

SPEED TORQUE/CURRENT CURVE

Model: 0304SDSR41A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1460	286T	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	В		40 C
Looked Deter	Rotor wk ²	Torque						
Locked Rotor Amps	Inertia	Full Load	Locked	Rotor	Pull Up		Break	Down
Amps	(lb-ft²)	(lb-ft)	(%	(%)			(%	6)
241	5.70	108	15	0	105		23	35

Design Values





Customer	wk² Load Inertia (lb-ft²)	-
Customer PO	Load Type	-
Sales Order	Voltage (%)	100
Project #	Accel. Time	_

Tag:

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

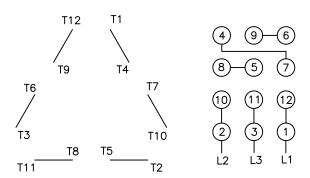
Motor Connection Diagrams 12 Leads

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.

By: R. Murillo Date: 4/9/08 Checked: MDC Date: 5/17/11 Revision 1



Issued Date:	6/19/2025	Transmit #:	
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SPARE PARTS LIST*

Model: 0304SDSR41A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1770	286T	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	В		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 #	

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TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.										
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Engr. Date	7/25/2024	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011					