

UNITS: INCHES		NOTES:	
ROTATION FROM NDE		1. MAIN CONDUIT BOX MAY BE ROTATED IN 90° II	NCREMENTS
		2. STANDARD PRODUCT USES BI-DIRECTIONAL FAN. OPPOS AVAILABLE ONLY BY CONNECTION CHANGE.	SITE ROTATION
		3. KEY DIMENSIONS EQUAL 0.375'x 0.375'x 1.88'	(MOTOR SUPPLIED WITH KEY)
TOSHIBA RESERVES THE RIGHT TO MAKE CHANGES OF TECHN	NICAL IMPROVEMENT AND THE DATA MAY CHANGE	WITHOUT NOTICE	PRELIMINARY
DO NOT USE FOR CONSTRUCTION, INSTALLATION, OR APPLICAT	ION PURPOSES UNLESS THE DRAWING IS MARKED A	AS CERTIFIED	X CERTIFIED
	TOTALLY ENCLOSED FAN COOLED	DRAWING #: MDSLV002-05	
	HORIZONTAL FOOT MOUNTED	REV. DATE: 07/05/18 REV. #: 0	PER.: M. O'DOWD
www.toshiba.com/tic	3 PHASE INDUCTION MOTOR	REV. DESCRIP.:	
TOSHIBA INTERNATIONAL CORPORATION	284TS-286TS F1 ASSEMBLY		

				Issued Date	12/18/2019		Transmit #	
				Issued By	dschoeck		Issued Rev	
TOS	SHIE							
		TYF	PICAL MOTO		ANCE DATA			
Model:	0304SDSR41B-F)						
HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1770	286TS	230/460	60	3	72/36
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA	NEMA	kVA Code	Ambient
				-	Nom. Eff.	Design		(°C)
TEFC	55	F	1.15	CONT	93.6	В	G	40 C
Load	HP	kW	Amp		Efficiency	(%)	Power Fa	
Full Load	30	22.4	36.		93.8		83.	
³ / ₄ Load	22.50	16.8	28.		93.2		80.	-
1/2 Load	15.00	11.2	21.	-	91.6		73.	
1/4 Load	7.50	5.6	16.		85.0		50.	
No Load		-	12.				5.4	
Locked Rotor			21	/			34.	1
			Torqu	•				Rotor wk ²
Full Lo	ad	Locko	d Rotor		l Up	Bro	ak Down	Inertia
(lb-ft			FLT)		FLT)		% FLT)	(lb-ft²)
89	9		35	16		(/	290	5.70
09			55	10	10		290	5.70
Safe Stall	Time(s)	Sound						
Oule Oldi	11110(0)	Pressure		Bearing	S*		Approx. Mo	tor Weight
Cold	Hot	dB(A) @ 1M	D	E	NDE		(Ib	s)
25	45	(,)	63102	-	6310ZC3			,
35	15	-	63102	203	6310203		50	0
		1						
*Bearings are the only re	ecommended spar	e part(s).						
*Bearings are the only re	ecommended spar	e part(s).						
Motor Options:		e part(s).						
Motor Options: Product Family:EQP Glo	obal SD	e part(s).						
Motor Options:	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo Mounting:Footed,Shaft:	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo Mounting:Footed,Shaft:	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo Mounting:Footed,Shaft: Customer Customer PO	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo Mounting:Footed,Shaft: Customer Customer PO Sales Order	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo Mounting:Footed,Shaft: Customer Customer Customer PO Sales Order Project #	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo Mounting:Footed,Shaft: Customer Customer PO Sales Order	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo Mounting:Footed,Shaft: Customer Customer Customer PO Sales Order Project #	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo Mounting:Footed,Shaft: Customer Customer Customer PO Sales Order Project #	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo Mounting:Footed,Shaft: Customer Customer PO Sales Order Project #	obal SD	e part(s).						
Motor Options: Product Family:EQP Glo Mounting:Footed,Shaft: Customer Customer PO Sales Order Project # Tag:	obal SD TS Shaft							
Motor Options: Product Family:EQP Glo Mounting:Footed,Shaft: Customer Customer PO Sales Order Project # Tag:	obal SD TS Shaft	alues.						
Motor Options: Product Family:EQP Glo Mounting:Footed,Shaft: Customer Customer PO Sales Order Project # Tag: All characteristics are av	erage expected va	alues. TOSHIBA INTER	RNATIONAL CC				Doc # / Pevl	MPCE-1110/1
Motor Options: Product Family:EQP Glo Mounting:Footed,Shaft: Customer Customer PO Sales Order Project # Tag:	obal SD TS Shaft erage expected va	alues.	RNATIONAL CC	DRPORATION • H Doc. Written By Doc. Approved By	IOUSTON, TEX D. Suarez M. Campbe		Doc.# / Rev Doc. Issued	MPCF-1119 / 1 9/20/2019

				Issued Date	12/18/2019		Transmit #	
		_		Issued By	dschoeck		Issued Rev	
	SHIB			· · · · ·				
		Т						
Model:	0304SDSR41B-P							
mouon								
HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1460	286TS	190/380	50	3	88/44
					NEMA	NEMA	-	Ambient
Enclosure	IP	Ins. Class	S.F.	Duty	Nom. Eff.	Design	kVA Code	(°C)
TEFC	55	F	1.0	CONT	92.4	B	G	40 C
0		·			02		Ţ.	10 0
Load	HP	kW	Amp	eres	Efficiency	(%)	Power Fa	ctor (%)
Full Load	30	22.4	44.		93.7		83.	
³ / ₄ Load	22.50	16.8	33.		94.4		80.8	
¹ / ₂ Load	15.00	11.2	24.		94.5		73.	
¹ / ₄ Load	7.50	5.6	17.		85.7		56.	
No Load		0.0	12.	-			4.7	
Locked Rotor			25				34.2	
			20	•			04.	
			Torqu	e				Rotor wk ²
Full Lo	oad	Locke	d Rotor		l Up	Break Down		Inertia
(lb-f			FLT)		FLT)		% FLT)	(lb-ft²)
108	-		50	12		(,	230	5.70
100		<u>'</u>					200	0.70
Safe Stall	Time(s)	Sound						
Safe Stall		Sound Pressure		Bearing	IS*		Approx. Mo	tor Weight
Safe Stall	Time(s) Hot		D		is* NDE			-
Cold	Hot	Pressure		E	NDE		(Ib	s)
		Pressure	D 63102	E				s)
Cold	Hot	Pressure		E	NDE		(Ib	s)
Cold 23	Hot 10	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold	Hot 10	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options:	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Glo	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options:	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Glo	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Glo	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Glo	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Glo	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Glo	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Glo	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Glo	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Glo	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Glo	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Glo	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Gle Mounting:Footed,Shaft:	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Gl Mounting:Footed,Shaft: Mounting:Footed,Shaft:	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Gl Mounting:Footed,Shaft: Mounting:Footed,Shaft:	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Gle Mounting:Footed,Shaft: Customer Customer Customer PO Sales Order	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Gle Mounting:Footed,Shaft: Mounting:Footed,Shaft: Customer Customer Customer PO Sales Order Project #	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Gle Mounting:Footed,Shaft: Customer Customer Customer PO Sales Order	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Gle Mounting:Footed,Shaft: Mounting:Footed,Shaft: Customer Customer Customer PO Sales Order Project #	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Gle Mounting:Footed,Shaft: Mounting:Footed,Shaft: Customer Customer Customer PO Sales Order Project #	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Gle Mounting:Footed,Shaft: Mounting:Footed,Shaft: Customer Customer Customer PO Sales Order Project #	Hot 10 ecommended spare	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Gle Mounting:Footed,Shaft: Customer Customer Customer PO Sales Order Project # Tag:	Hot 10 ecommended spare obal SD TS Shaft	Pressure dB(A) @ 1M -		E	NDE		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Gle Mounting:Footed,Shaft: Mounting:Footed,Shaft: Customer Customer Customer PO Sales Order Project #	Hot 10 ecommended spare obal SD TS Shaft	Pressure dB(A) @ 1M - e part(s).	63102	E	NDE 6310ZC3		(Ib	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Gle Mounting:Footed,Shaft: Customer Customer Customer PO Sales Order Project # Tag: All characteristics are av	Hot 10 ecommended spare obal SD TS Shaft //erage expected val	Pressure dB(A) @ 1M - part(s).	63102	E C3	NDE 6310ZC3		(lb 50)	s)
Cold 23 *Bearings are the only re Motor Options: Product Family:EQP Gle Mounting:Footed,Shaft: Customer Customer Customer PO Sales Order Project # Tag:	Hot 10 ecommended spare obal SD TS Shaft //erage expected val	Pressure dB(A) @ 1M - e part(s).	63102	E	NDE 6310ZC3		(Ib	s)

			Issued Date	12/18/201	9	Transmit #	
	-		Issued By	dschoeck	(Issued Rev	
0304SDSR41B-P	SI	PEED TORQ	UE/CURREN	T CURVE			
kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
22	4	1770	286TS	230/460	60	3	72/36
IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
55	F	1.15	CONT	93.6	В	G	40 C
Rotor wk ²				Torque			
Inertia	Full Load	Full Load Locked		Rotor Pull Up		Break Down	
(lb-ft²)	(lb-ft)	(%	6)	(%)		(%	6)
5.70	89	185	j	165		29	0
0		De	sign Valu	es			650
	0304SDSR41B-P kW 22 IP 55 Rotor wk ² Inertia (Ib-ft ²) 5.70	0304SDSR41B-PkWPole224IPIns. Class55FRotor wk²InertiaInertiaFull Load(Ib-ft²)(Ib-ft)5.7089	KW Pole FL RPM 22 4 1770 IP Ins. Class S.F. 55 F 1.15 Rotor wk² Full Load Locked (Ib-ft²) (Ib-ft) (% 5.70 89 185	Issued By Issued By O304SDSR41B-P kW Pole FL RPM Frame 22 4 1770 286TS IP Ins. Class S.F. Duty 55 F 1.15 CONT Rotor wk² Full Load Locked Rotor (%) 5.70 89 185 Design Value	Issued By dschoed SPEED TORQUE/CURRENT CURVE 0304SDSR41B-P kW Pole FL RPM Frame Voltage 22 4 1770 286TS 230/460 IP Ins. Class S.F. Duty NEMA 55 F 1.15 CONT 93.6 Rotor wk² Torque Inertia Full Load Locked Rotor Pull U (Ib-ft') (Ib-ft) (%) (%) 5.70 89 185 165	Issued By dschoeck Issued By dschoeck SPEED TORQUE/CURRENT CURVE 0304SDSR41B-P KW Pole FL RPM Frame Voltage Hz 22 4 1770 286TS 230/460 60 IP Ins. Class S.F. Duty NEMA Nom. Eff. Design 55 F 1.15 CONT 93.6 B Torque Inertia Full Load Locked Rotor Pull Up (Ib-ft²) (Ib-ft) (%) (%) 165	Nationalists Issued By dschoeck Issued Rev SPEED TORQUE/CURRENT CURVE 0304SDSR41B-P kW Pole FL RPM Frame Voltage Hz Phase 22 4 1770 286TS 230/460 60 3 IP Ins. Class S.F. Duty NEMA Nom. Eff. Design kVA Code 55 F 1.15 CONT 93.6 B G Rotor wk² Torque Inertia Locked Rotor Pull Up Break (lb-ft²) (lb-ft) (%) (%) (%) (%) 5.70 89 185 165 29 Design Values



Doc. Approved By

M. Campbell

Doc. Issued

9/20/2019

3/13/2014

Engr. Date

Model:	0304SDSR41B-P							
HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	4	1460	286TS	190/380	50	3	88/44
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	92.4	В	G	40 C
Lookod Doton	Rotor wk ²				Torque			
Locked Rotor Amps	Inertia	Full Load	Locked	Rotor	Pull U	р	Break	Down
Amps	(lb-ft²)	(lb-ft)	(%	b)	(%)		(%	b)
256	5.70	108	150)	125		23	0
	0		De	sign Valu	es			650



All characteristics are average expected values.									
TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.									
Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121/1				
Engr. Date	3/25/2014	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019				

