

#### 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

0.375"x 0.375"x 2.88"

(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
FOOTED C-FACED
3 PHASE INDUCTION MOTOR
254TC-256TC F1 ASSEMBLY

DRAWING #: MDSLV003-04

REV. DATE: 06/29/18 REV. #: 1 PER.: M. O'DOWD

REV. DESCRIP.:



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

#### **TYPICAL MOTOR PERFORMANCE DATA**

Model: 0204SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
20	15	4	1770	256TC	230/460	60	3	52/26
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	93.0	В		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	20.00	14.9	26	93.0	76.5
¼ Load	15.00	11.2	21	92.2	72.1
∕₂ Load	10.00	7.5	16.6	90.0	62.4
4 Load	5.00	3.7	13.4	83.0	41.8
No Load			11.9		4.6
ocked Rotor			157		39.3

Torque							
Full Load	Locked Rotor	Pull Up	Break Down	Inertia			
(lb-ft)	(% FLT)	(lb-ft²)					
59.3	270	190	295	3.17			

Safe Stall	Safe Stall Time(s)		Safe Stall Time(s) Sound		Bearin	Bearings*		
Cold	Hot	Pressure Pressure	Dearin	Dearnigs				
oolu	1100	dB(A) @ 1M	DE	NDE	(lbs)			
35	15	-	6309ZZC3	6309ZZC3	340			

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

Motor Options: Product Family:EQP Global SD CFace Footed Mounting:C-Face Footed,Shaft:T Shaft

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	9/4/2024	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011			



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Issued By	dschoeck	Issued Rev	

#### **TYPICAL MOTOR PERFORMANCE DATA**

Model: 0204SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
20	15	4	1460	256TC	190/380	50	3	62/31
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	90.6	В		40 C

Load HP kW		Amperes	Efficiency (%)	Power Factor (%)	
Full Load	20.00	14.9	31	91.2	80.2
¾ Load	15.00	11.2	24	91.0	77.3
½ Load	10.00	7.5	18.2	89.6	69.4
∕₄ Load	5.00	3.7	13.7	83.9	49.3
No Load			12.9		4.2
Locked Rotor			159		40.1

Torque							
Full Load	Locked Rotor	Pull Up	Break Down	Inertia			
(lb-ft)	(% FLT)	(% FLT)	(% FLT)	(lb-ft²)			
71.9	220	155	220	3.17			

Safe Stall	Safe Stall Time(s) Sound		Bearin	Bearings*		
Cold	Hot I	Pressure	bearings		Approx. Motor Weight	
oolu	1100	dB(A) @ 1M	DE	NDE	(lbs)	
35	15	-	6309ZZC3	6309ZZC3	340	

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

Motor Options: Product Family:EQP Global SD CFace Footed Mounting:C-Face Footed,Shaft:T Shaft

Customer	
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Project #	

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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				



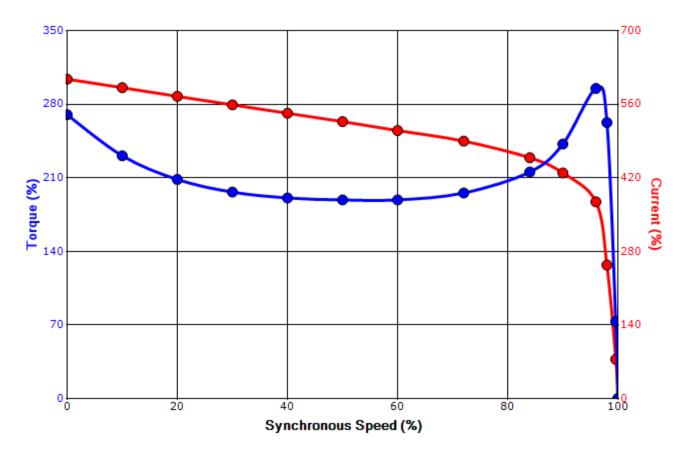
Issued Date	6/19/2025	Transmit #	
Issued By	dschoeck	Issued Rev	

## SPEED TORQUE/CURRENT CURVE

Model: 0204SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
20	15	4	1770	256TC	230/460	60	3	52/26
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	93.0	В		40 C
Locked Rotor	Rotor wk <sup>2</sup>	Torque						
Amps	Inertia	Full Load	Locked Rotor		Pull Up		Break	Down
Allips	(lb-ft²)	(lb-ft)	(%	(%)		(%)		<b>6</b> )
157	3.17	59.3	27	270		190		95

# 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	9/4/2024	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011				



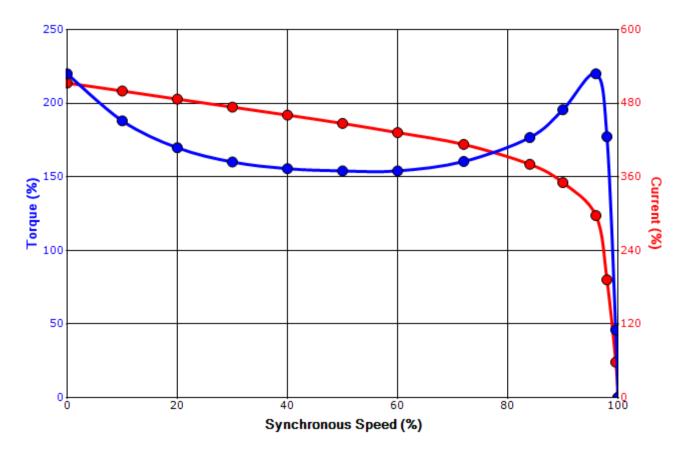
Issued Date 6/19/2025		Transmit #	
Issued By	dschoeck	Issued Rev	

## SPEED TORQUE/CURRENT CURVE

Model: 0204SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps	
20	15	4	1460	256TC	190/380	50	3	62/31	
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)	
TEFC	55	F	1.0	CONT	90.6	В		40 C	
Looked Deter	Rotor wk <sup>2</sup>				Torque				
Locked Rotor Amps	Inertia	Full Load	Locked	Locked Rotor		Pull Up		Down	
Amps	(lb-ft²)	(lb-ft)	(%	b)	(%)		(%	<b>6</b> )	
159	3.17	71.9	22	220		155		220	

# Design Values





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

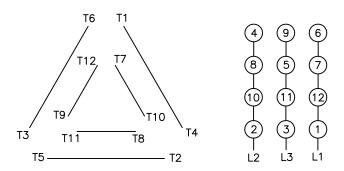
Tag:

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				

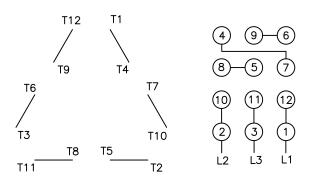
# Motor Connection Diagrams <a href="mailto:12">12 Leads</a>

#### 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: 0204SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
20	15	4	1770	256TC	230/460	60	3	52/26
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	93.0	В		40 C

 Bearings DE
 6309ZZC3 / 45BC03JPP3OA

 Bearings NDE
 6309ZZC3 / 45BC03JPP3OA

\*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:

TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.							
Engineering	Jrodrigu	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1125 / 0		
Engr. Date	9/4/2024	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011		