

- 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

0.188"x 0.188"x 1.38"

(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 (NEMA BA) 3 PHASE INDUCTION MOTOR 143TC-145TC F1 ASSEMBLY

DRAWING #:	MDSLV005-	01			
REV. DATE:	06/20/18	REV. #:	4	PER.:	M. O'DOWD
REV. DESCRIP.:					



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

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

Model: 0024SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
2	1.5	4	1750	145TC	230/460	60	3	5.6/2.8
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	86.5	В		40 C

			•	Ecc: : (0/)	D E ( (0/)
Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	2.00	1.5	2.8	87.1	75.8
¾ Load	1.50	1.1	2.3	86.8	69.8
½ Load	1.00	0.7	1.9	84.4	58.4
¼ Load	0.50	0.4	1.3	77.4	44.6
No Load			11.6		1.9
Locked Rotor			22		53.7

Torque							
Full Load	Locked Rotor	Pull Up	Break Down	Inertia			
(lb-ft)	(% FLT)	(% FLT)	(% FLT)	(lb-ft²)			
6.00	270	205	335	0.15			

Safe Stall Time(s)		Sound		ine*	Approx. Motor Weight	
Cold	Pressure					
Tiot		dB(A) @ 1M	DE	NDE	(lbs)	
32	27	-	6305ZZC3	6305ZZC3	66	

\*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	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0			
Engr. Date	6/17/2025	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: 0024SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
2	1.5	4	1430	145TC	190/380	50	3	6.6/3.3
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	83.5	-		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	2.00	1.5	3.3	83.7	82.7
¾ Load	1.50	1.1	2.5	85.2	78.2
½ Load	1.00	0.7	1.9	84.3	68.1
¼ Load	0.50	0.4	1.3	79.4	55.0
No Load			1.4		8.5
Locked Rotor			34		71.4

Torque							
Full Load	Locked Rotor	Pull Up	Break Down	Inertia			
(lb-ft)	(% FLT)	(% FLT)	(% FLT)	(lb-ft²)			
7.35	215	165	235	0.15			

Safe Stall Time(s)		Sound	Bearin	Approx. Motor Weight	
Cold	Hot	Pressure	Bearin	95	Approx. Motor Weight
Cold Hot		dB(A) @ 1M	DE	NDE	(lbs)
32	22	-	6305ZZC3 6305ZZC3		66

\*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	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0		
Engr. Date	6/17/2025	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011		



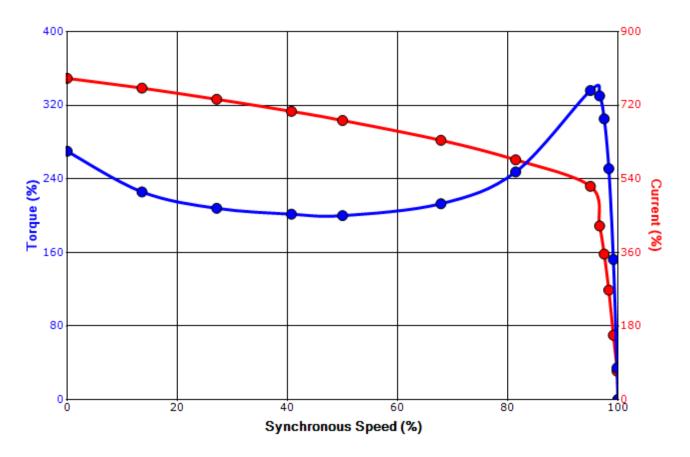
Issued Date	6/19/2025	Transmit #	
Issued By	dschoeck	Issued Rev	

#### SPEED TORQUE/CURRENT CURVE

Model: 0024SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
2	1.5	4	1750	145TC	230/460	60	3	5.6/2.8
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	86.5	В		40 C
Looked Dates	Rotor wk <sup>2</sup>	Torque						
Locked Rotor Amps	Inertia	Full Load	Locked	Rotor	Pull Up	)	Break	Down
Amps	(lb-ft²)	(lb-ft)	(%	(%)			(%	<b>%</b> )
22	0.15	6.00	27	270			33	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	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0		
Engr. Date	6/17/2025	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011		



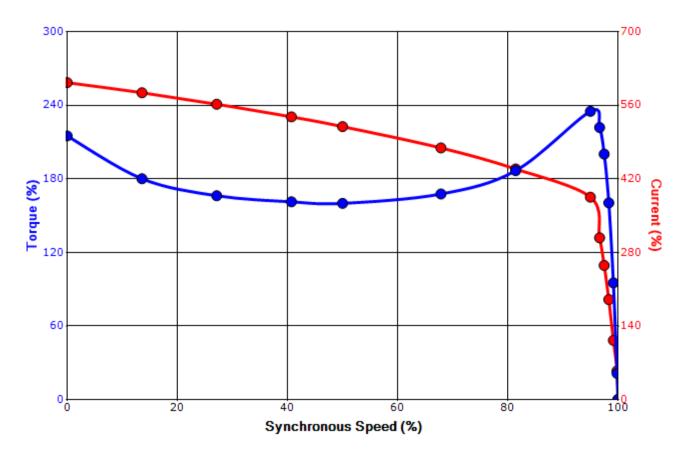
Issued Date	6/19/2025	Transmit #	
Issued By	dschoeck	Issued Rev	

#### SPEED TORQUE/CURRENT CURVE

Model: 0024SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
2	1.5	4	1430	145TC	190/380	50	3	6.6/3.3
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	83.5	-		40 C
Looked Deter	Rotor wk <sup>2</sup>	Torque						
Locked Rotor	Inertia	Full Load	Locked	Rotor	Pull Up		Break	Down
Amps	(lb-ft²)	(lb-ft)	(%	(%)			(%	<b>6</b> )
34	0.15	7.35	21	5	165		23	35

# Design Values





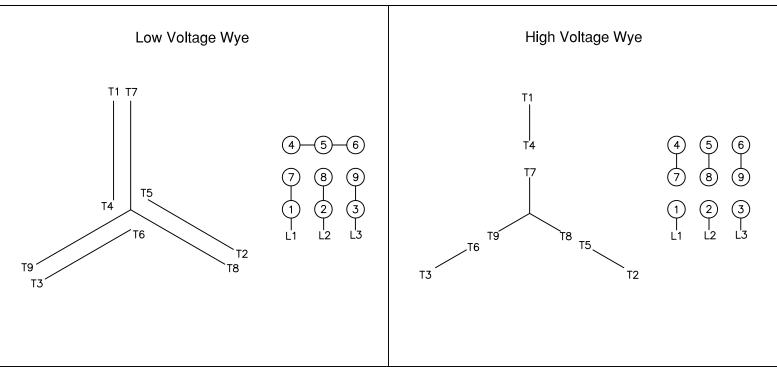
Customer	wk² Load Inertia (Ib-f	2) -
Customer PO	Load Typ	е -
Sales Order	Voltage (%	6) 100
Project #	Accel. Tim	е -

Tag:

TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.							
Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0		
Engr. Date	6/17/2025	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011		

# Motor Connection Diagrams 9 Leads

### Across-the-Line Starting / Running Connections



Switch L1 and L2 to reverse rotation

By: R. Murillo Date: 4/9/08 Checked: MDC Date: 5/17/11 Revision 0



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

#### **SPARE PARTS LIST\***

Model: 0024SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
2	1.5	4	1750	145TC	230/460	60	3	5.6/2.8
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	86.5	В		40 C

 Bearings DE
 6305ZZC3 / 25BC03JPP3OA

 Bearings NDE
 6305ZZC3 / 25BC03JPP3OA

\*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	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1125 / 0					
Engr. Date	6/17/2025	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011					