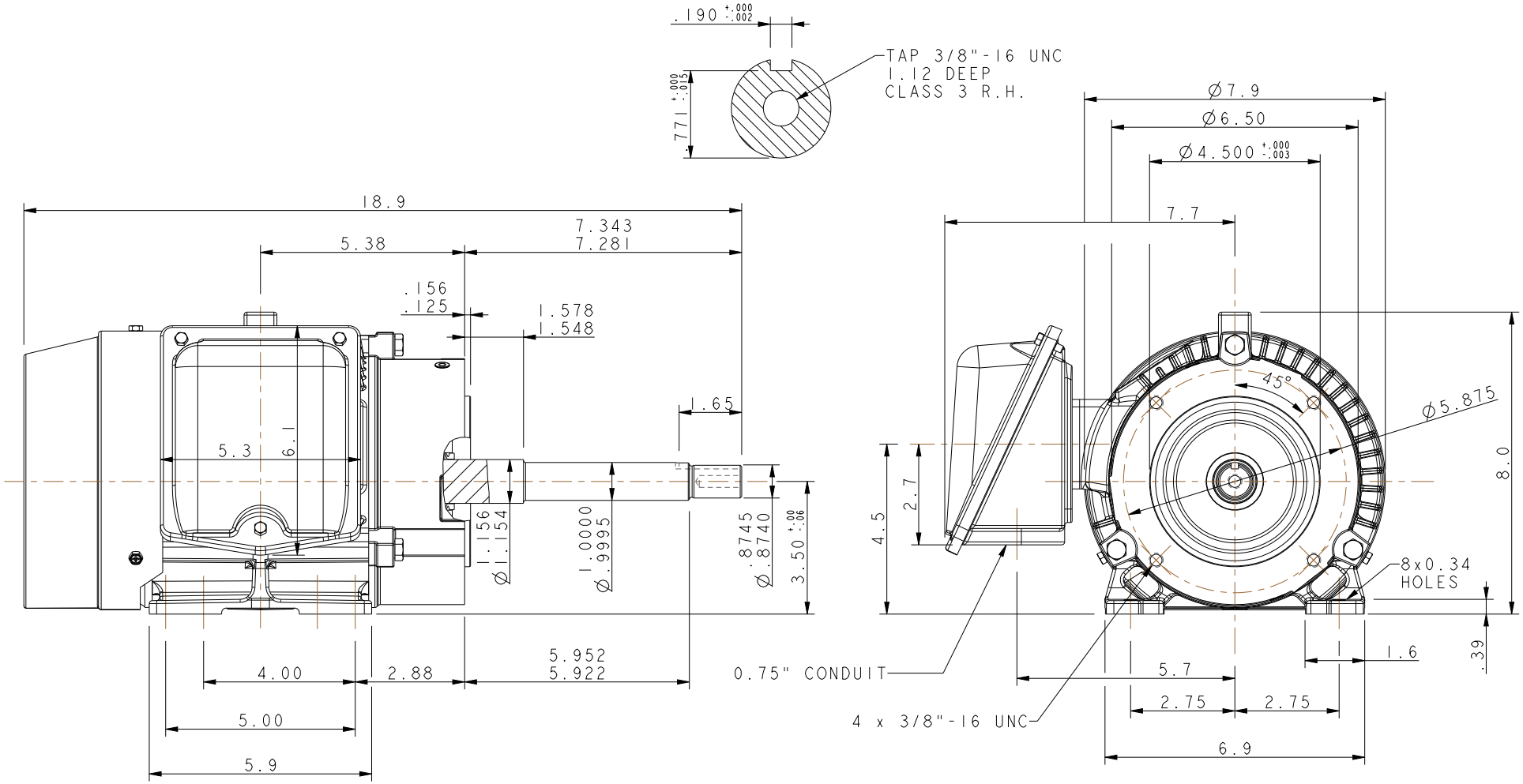


UNITS: INCHES	NOTES:
ROTATION FROM NDE	1. MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
X CCW CW	2. STANDARD PRODUCT USES BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE.
	3. KEY DIMENSIONS EQUAL 0.188"x 0.188"x 1.65"(MOTOR SUPPLIED WITH KEY)

☐ PRELIMINARY

DO NOT USE FOR CONSTRUCTION, INSTALLATION, OR APPLICATION PURPOSES UNLESS THE DRAWING IS MARKED AS CERTIFIED

☒ CERTIFIED

TOSHIBA SEVERE DUTY EQP Global SD

www.toshiba.com/tic

TOSHIBA INTERNATIONAL CORPORATION

TOTALLY ENCLOSED FAN COOLED HORIZONTAL FOOT MOUNTED 3 PHASE INDUCTION MOTOR 143JP/145JP F1 ASSEMBLY

DRAWING #: MDSLV159-01

REV. DATE: 10/13/22 **REV. #:** 5 **PER.:** M. O'DOWD

REV. DESCRIP.: UPDATED TOLERANCES

Issued Date	6/20/2025	Transmit #	
Issued By	dschoeck	Issued Rev	

TOSHIBA
Leading Innovation >>>

TYPICAL MOTOR PERFORMANCE DATA

Model: 0024SDJR41P-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
2	1.5	4	1750	145JP	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	B		40 C

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				Rotor wk² Inertia
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	(lb-ft²)
6.00	270	205	335	0.15

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight
Cold	Hot		DE	NDE	(lbs)
32	27	-	6305ZZC3	6305ZZC3	58

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

Motor Options:
Mounting:Footed,Shaft:JP Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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	6/20/2025	Transmit #	
Issued By	dschoeck	Issued Rev	

TOSHIBA
Leading Innovation >>>

TYPICAL MOTOR PERFORMANCE DATA

Model: 0024SDJR41P-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
2	1.5	4	1430	145JP	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				Rotor wk² Inertia
Full Load (lb-ft)	**Locked Rotor (% FLT)**	**Pull Up (% FLT)**	**Break Down (% FLT)**	**(lb-ft²)**
7.35	215	165	235	0.15

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight
Cold	**Hot**		**DE**	**NDE**	**(lbs)**
32	22	-	6305ZZC3	6305ZZC3	58

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

Motor Options:
Mounting:Footed,Shaft:JP Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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	6/20/2025	Transmit #	
Issued By	dschoeck	Issued Rev	

TOSHIBA
Leading Innovation >>>

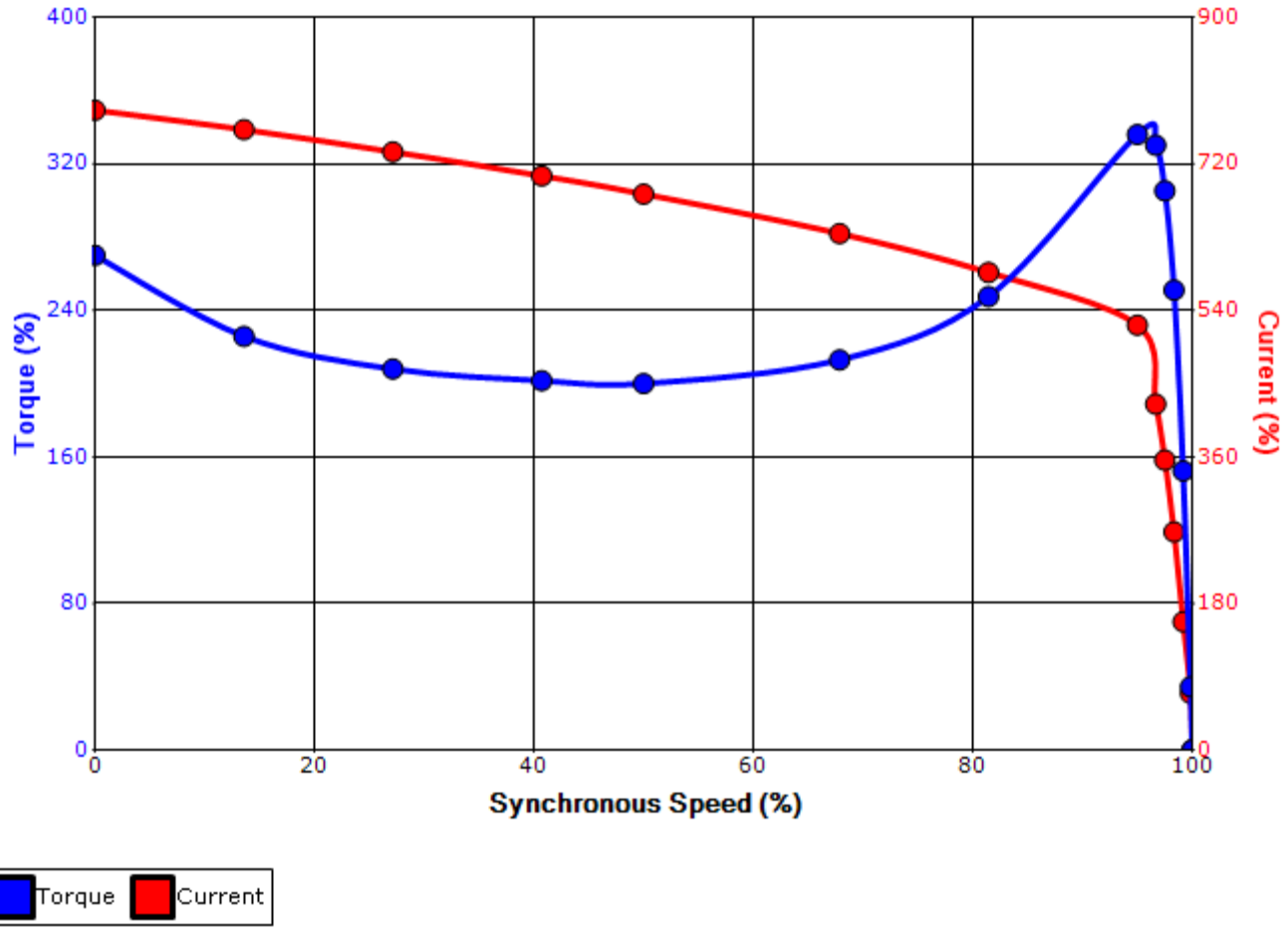
SPEED TORQUE/CURRENT CURVE

Model: 0024SDJR41P-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
2	1.5	4	1750	145JP	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	B		40 C

Locked Rotor Amps	Rotor wk² Inertia (lb-ft²)	Torque			
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)	Break Down (%)
22	0.15	6.00	270	205	335

Design Values



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

Tag:

All characteristics are average expected values.

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	6/20/2025	Transmit #	
Issued By	dschoeck	Issued Rev	

TOSHIBA
Leading Innovation >>>

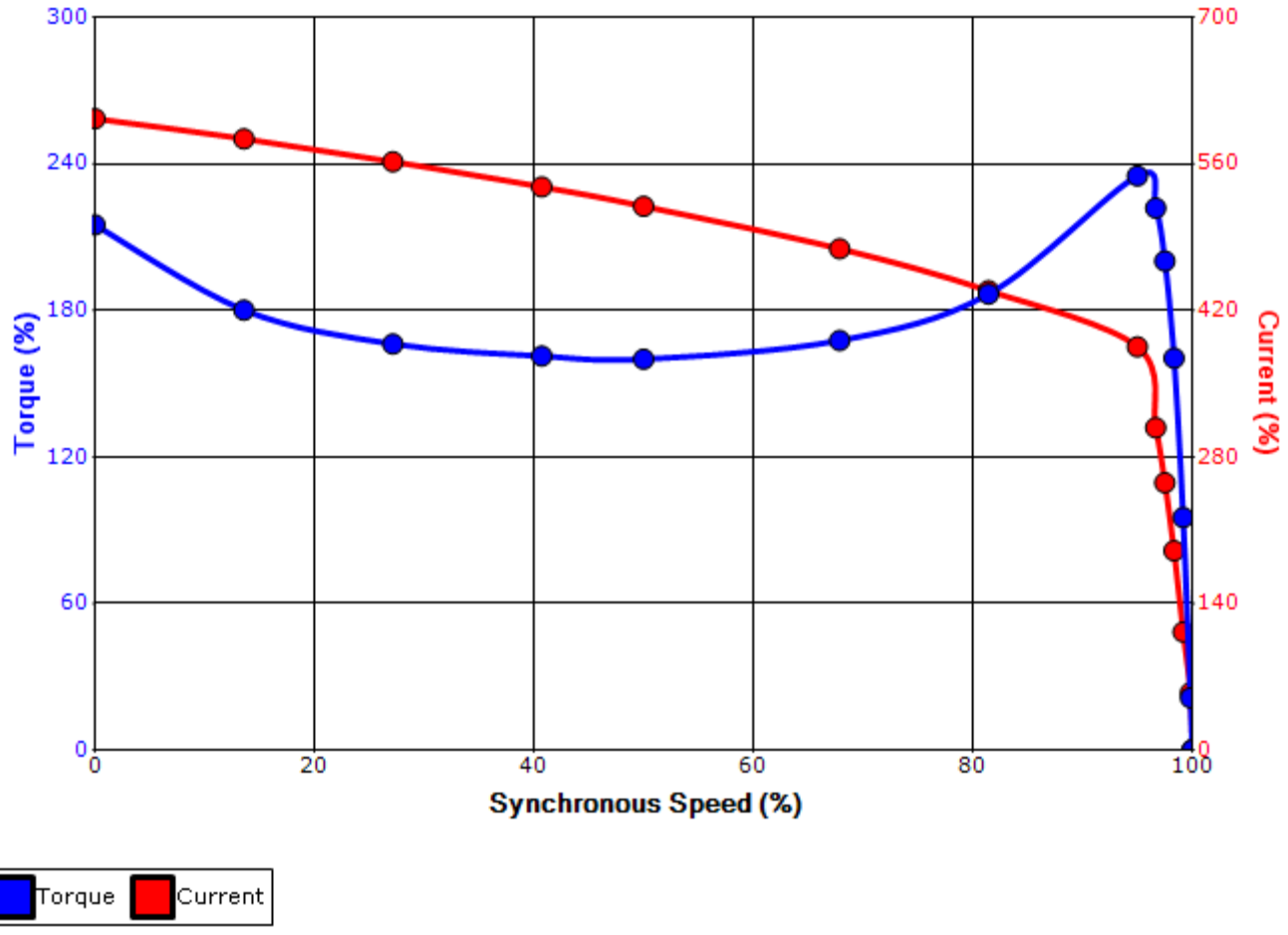
SPEED TORQUE/CURRENT CURVE

Model: 0024SDJR41P-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
2	1.5	4	1430	145JP	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

Locked Rotor Amps	Rotor wk² Inertia (lb-ft²)	Torque			
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)	Break Down (%)
34	0.15	7.35	215	165	235

Design Values



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

Tag:

All characteristics are average expected values.

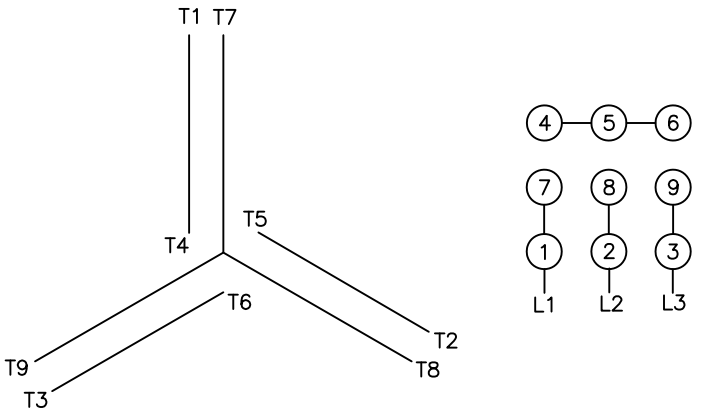
TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.

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

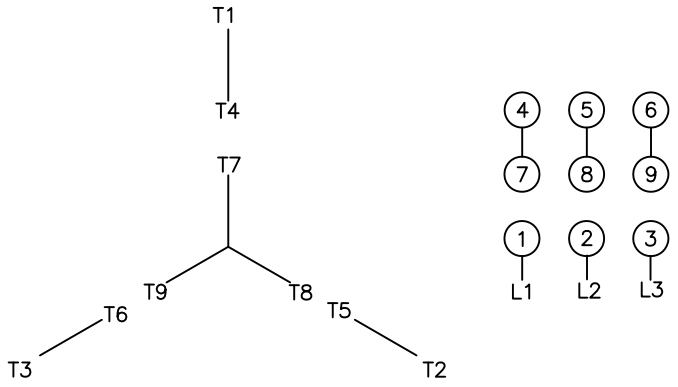
Motor Connection Diagrams
9 Leads

Across-the-Line Starting / Running Connections

Low Voltage Wye



High Voltage Wye



Switch L1 and L2 to reverse rotation

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

Issued Date:	6/20/2025	**Transmit #:**	
Issued By:	dschoeck	**Issued Rev:**	

TOSHIBA
Leading Innovation >>>

SPARE PARTS LIST*

Model: 0024SDJR41P-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
2	1.5	4	1750	145JP	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	B		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:

All characteristics are average expected values.

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