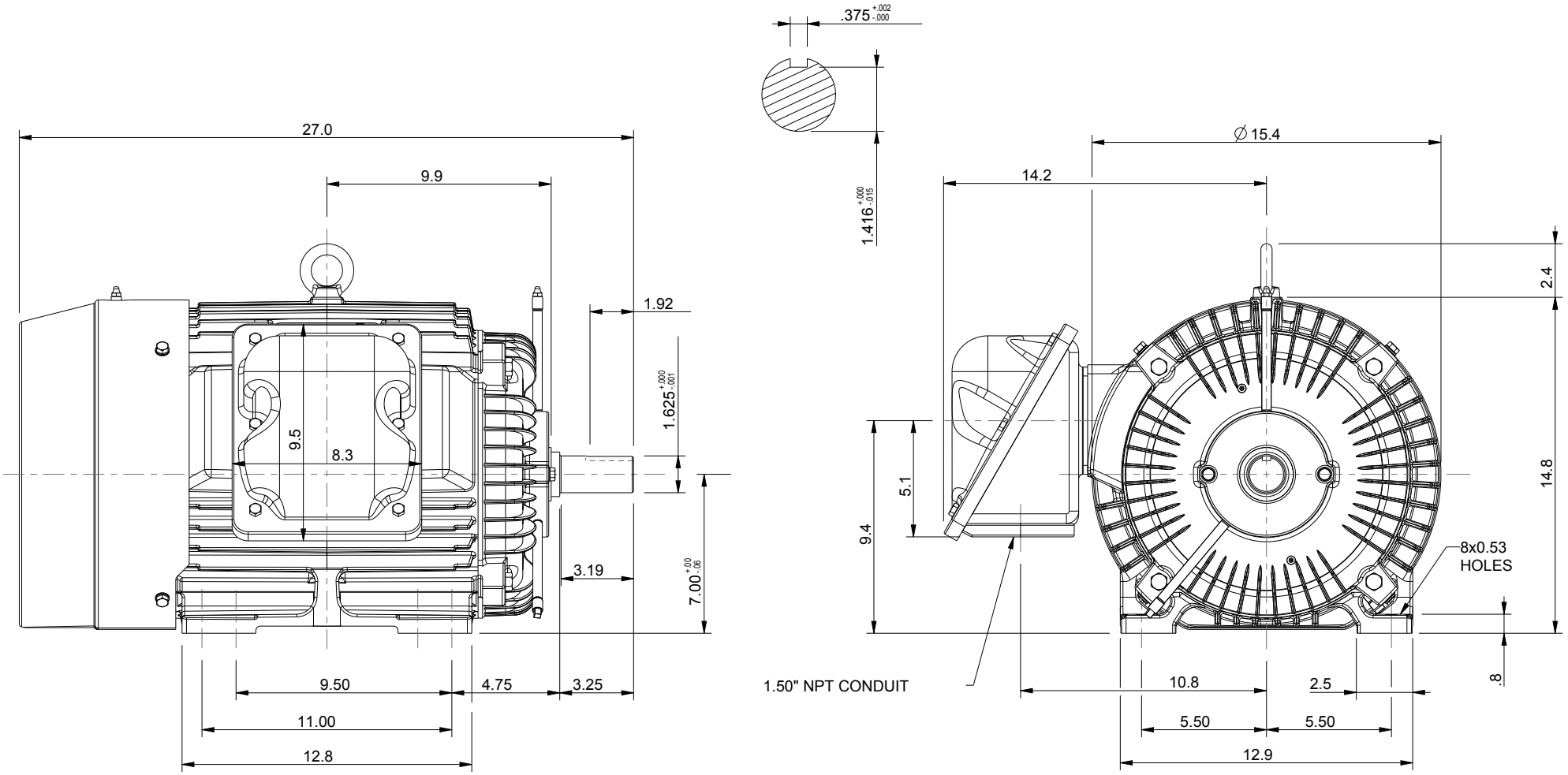


UNITS: INCHES
ROTATION FROM NDE
X CCW CW

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 1.88" (MOTOR SUPPLIED WITH KEY)

[ ] PRELIMINARY

[X] 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
284TS-286TS F1 ASSEMBLY

DRAWING #: MDSLV002-05

REV. DATE: 07/05/18 REV. #: 0 PER.: M. O'DOWD

REV. DESCRIP.:

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

TOSHIBA
Leading Innovation >>>

TYPICAL MOTOR PERFORMANCE DATA

Model: 0302SDSR41B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	2	3540	286TS	230/460	60	3	70/35

Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	91.7	B		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	30.00	22.4	35	91.9	88.9
¾ Load	22.50	16.8	27	91.0	86.5
½ Load	15.00	11.2	19.9	88.9	80.7
¼ Load	7.50	5.6	14.0	80.9	62.0
No Load			9.2		11.0
Locked Rotor			217		35.6

Torque				Rotor wk² Inertia
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	(lb-ft²)
44.5	215	195	265	3.58

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight
Cold	Hot		DE	NDE	(lbs)
35	15	-	6310ZC3	6310ZC3	439

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

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

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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

Engineering	aacosta	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	4/19/2012	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

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

TOSHIBA
Leading Innovation >>>

TYPICAL MOTOR PERFORMANCE DATA

Model: 0302SDSR41B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	2	2920	286TS	190/380	50	3	84/42
Enclosure	**IP**	**Ins. Class**	**S.F.**	**Duty**	**NEMA Nom. Eff.**	**NEMA Design**	**kVA Code**	**Ambient (°C)**
TEFC	55	F	1.0	CONT	91.0	B		40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	30.00	22.4	42	92.4	88.0
¾ Load	22.50	16.8	32	93.3	85.9
½ Load	15.00	11.2	23	93.3	80.1
¼ Load	7.50	5.6	15.0	82.0	68.7
No Load			9.0		8.3
Locked Rotor			287		31.8

Torque				Rotor wk² Inertia
Full Load (lb-ft)	**Locked Rotor (% FLT)**	**Pull Up (% FLT)**	**Break Down (% FLT)**	**(lb-ft²)**
54.0	165	145	220	3.58

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight
Cold	**Hot**		**DE**	**NDE**	**(lbs)**
28	11	-	6310ZC3	6310ZC3	439

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

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

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

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

Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 0
Engr. Date	6/17/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

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

TOSHIBA
Leading Innovation >>>

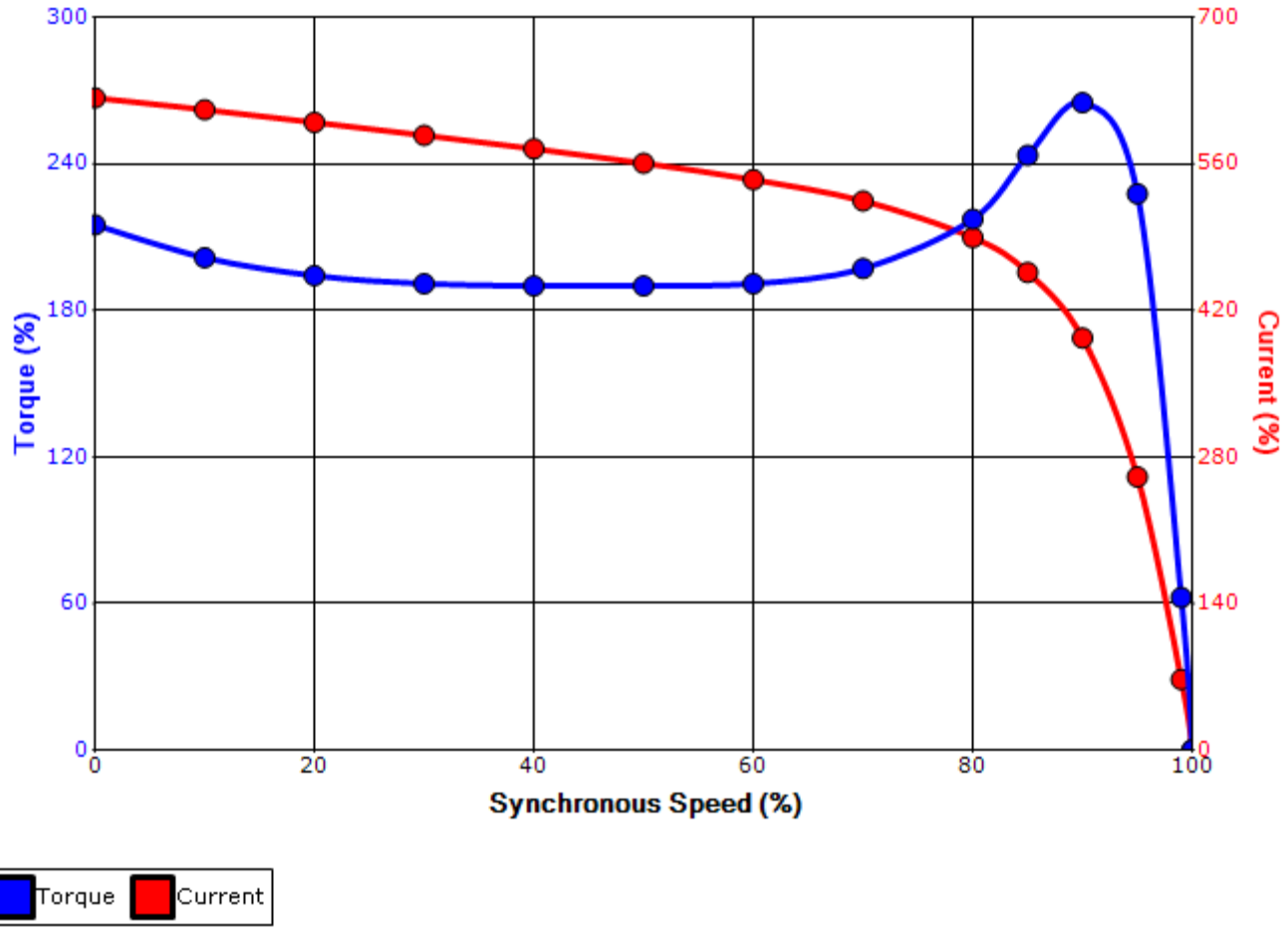
SPEED TORQUE/CURRENT CURVE

Model: 0302SDSR41B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	2	3540	286TS	230/460	60	3	70/35
Enclosure	**IP**	**Ins. Class**	**S.F.**	**Duty**	**NEMA Nom. Eff.**	**NEMA Design**	**kVA Code**	**Ambient (°C)**
TEFC	55	F	1.15	CONT	91.7	B		40 C

Locked Rotor Amps	Rotor wk² Inertia (lb-ft²)	Torque			
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)	Break Down (%)
217	3.58	44.5	215	195	265

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	aacosta	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	4/19/2012	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

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

TOSHIBA
Leading Innovation >>>

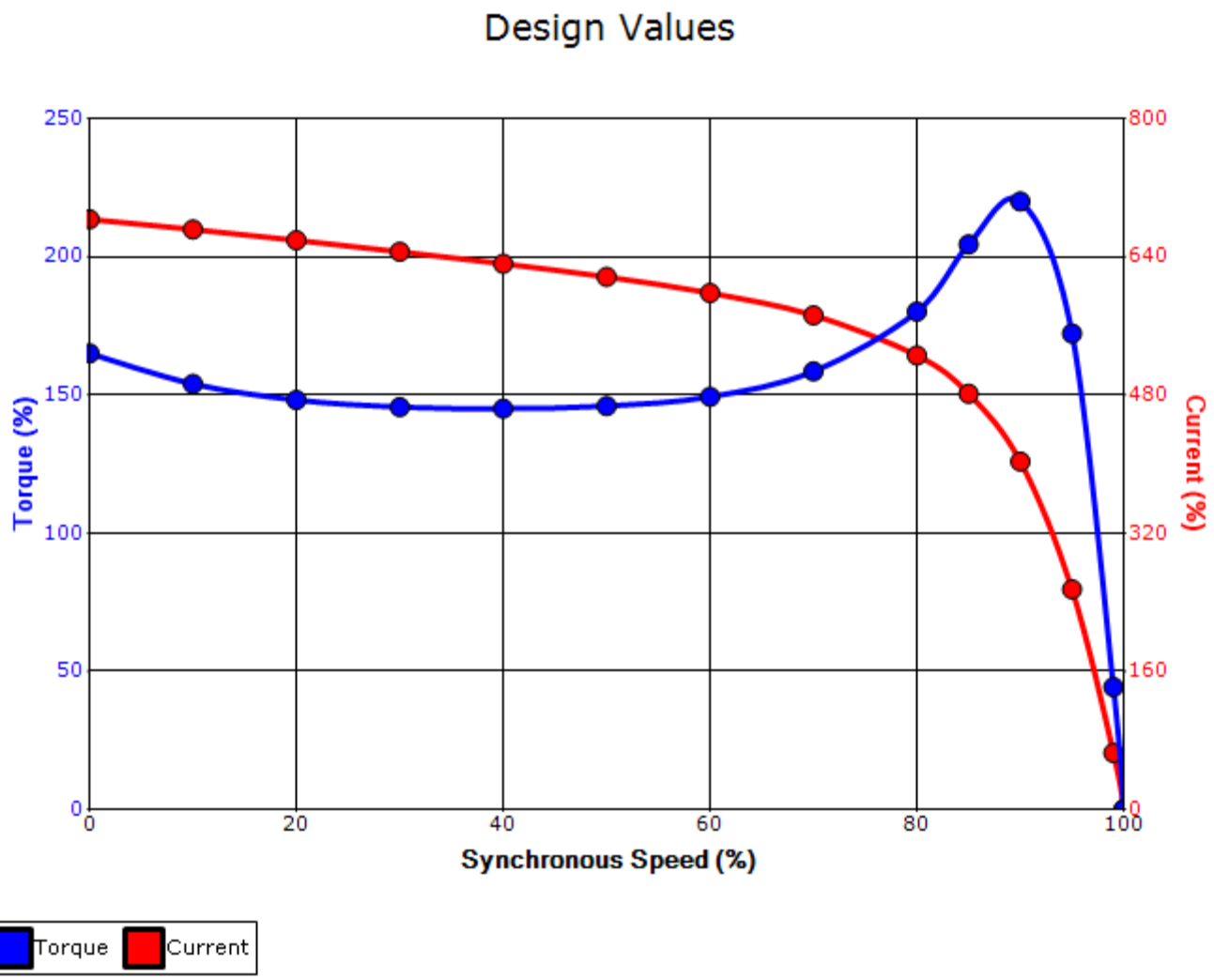
SPEED TORQUE/CURRENT CURVE

Model: 0302SDSR41B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	2	2920	286TS	190/380	50	3	84/42

Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	91.0	B		40 C

Locked Rotor Amps	Rotor wk² Inertia (lb-ft²)	Torque			
		Full Load (lb-ft)	Locked Rotor (%)	Pull Up (%)	Break Down (%)
287	3.58	54.0	165	145	220



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

Tag:

All characteristics are average expected values.

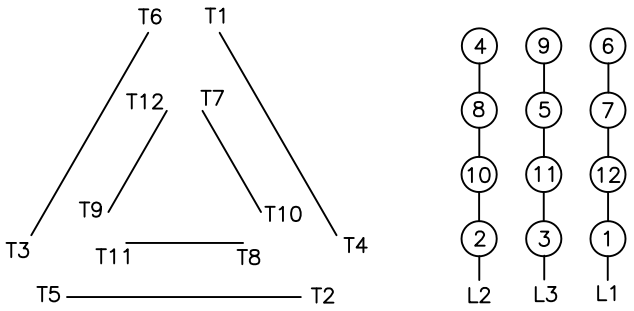
TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.

Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121 / 0
Engr. Date	6/17/2014	Doc. Approved By	M. Campbell	Doc. Issued	6/8/2011

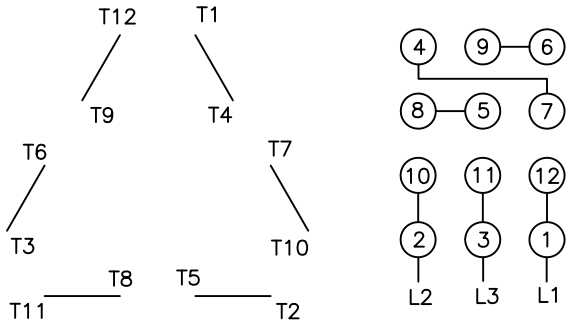
Motor Connection Diagrams
12 Leads

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.

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

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SPARE PARTS LIST*

Model: 0302SDSR41B-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
30	22	2	3540	286TS	230/460	60	3	70/35
Enclosure	**IP**	**Ins. Class**	**S.F.**	**Duty**	**NEMA Nom. Eff.**	**NEMA Design**	**kVA Code**	**Ambient (°C)**
TEFC	55	F	1.15	CONT	91.7	B		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 #	

Tag:

All characteristics are average expected values.

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

Engineering	aacosta	**Doc. Written By**	D. Suarez	**Doc.# / Rev**	MPCF-1125 / 0
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