

ROTATION: CCW  
VIEW FROM: ODE

UNIT: mm

TOSHIBA RESERVES THE RIGHT TO MAKE CHANGES OF TECHNICAL IMPROVEMENT WITHOUT NOTICE. DO NOT USE FOR CONSTRUCTION, INSTALLATION, OR APPLICATION PURPOSES UNLESS THE DRAWING IS CERTIFIED.

B3-FOOT MOUNTED MOTOR  
OL DRAWING IEC GLOBAL

TYPE: 4-6P -  
FRAME: 225S

TOLERANCES  
400V ±2.0  
X.X ±0.5  
X.XX ±0.1

3HFN000171

**TOSHIBA**  
TOSHIBA INTERNATIONAL CORPORATION

MAXIMUM MOTOR WEIGHT  
-- lbs.  
-- kgs.

01	Change to fancover	T.Danh	Feb-08-18	Q.Hung
NO	REVISION	DRAWN BY	DATE	CHECK

**EQP Global SD**  
**XT SERIES**

DRAWN BY: HIEN, NGUYEN  
CHECK BY: B.X.QUYNH  
APPROVED BY: JAY BUGBEE  
www.toshiba.com/ind

**TOSHIBA INTERNATIONAL CORPORATION**  
**Industrial Division / Houston Motor Plant**

**SQUIRREL CAGE INDUCTION MOTOR**  
**PERFORMANCE SPECIFICATIONS**

INDEX	MPCF-1033
SHEET NO.	1 of 1
ISSUED	7/31/13
SUPERSEDES	11/8/96
REVISION	2
WRITTEN BY	MDC
APPROVED BY	PAA

CUSTOMER: -  
TIC SR No.: -

**MOTOR NAMEPLATE DATA**

H.P.: -	VOLTS: 400	3 PH / 50 Hz	S. RPM: 1500
FRAME: 225S	ENCL: TEFC	FLAMPS: 82	FLRPM: 1480
FORM: FBK1	S.F.: -	IEC DESIGN NE	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0454SDMW7FS-P		kW: 45	
NOM. EFF.: 94.2	MIN. EFF.: -	cosØ 0.83	

**AMPERAGE**

LOCKED ROTOR: 760

**TORQUES**

FULL LOAD (lb-ft.): 214  
LOCKED ROTOR (%): 220  
BREAK DOWN (%): 280

**\*\*BEARINGS:**

DRIVE END: REFER TO NP  
OPPOSITE DRIVE END: REFER TO NP

**EFFICIENCY**

FULL LOAD: 95.0  
3/4 LOAD: 94.5  
1/2 LOAD: 93.0

**POWER FACTOR**

FULL LOAD: 83.4  
3/4 LOAD: 80.4  
1/2 LOAD: 72.9

ALL CHARACTERISTICS ARE AVERAGE EXPECTED VALUES BASED UPON RATED VOLTAGE,  
FREQUENCY AND SINEWAVE POWER INPUT.

THE DECLARED LOCKED ROTOR CURRENT HAS A TOLERANCE OF 20%.

\* TEMPERATURE RISE WILL BE CONSISTENT WITH INSULATION, AMBIENT AND SERVICE FACTOR AS  
DEFINED BY NEMA-MG-12 OR -20.

\*\* BEARINGS ARE THE ONLY RECOMMENDED SPARE PART(S).

**CERTIFIED BY:** Zichao Xie

**DATE:** 10/21/2019

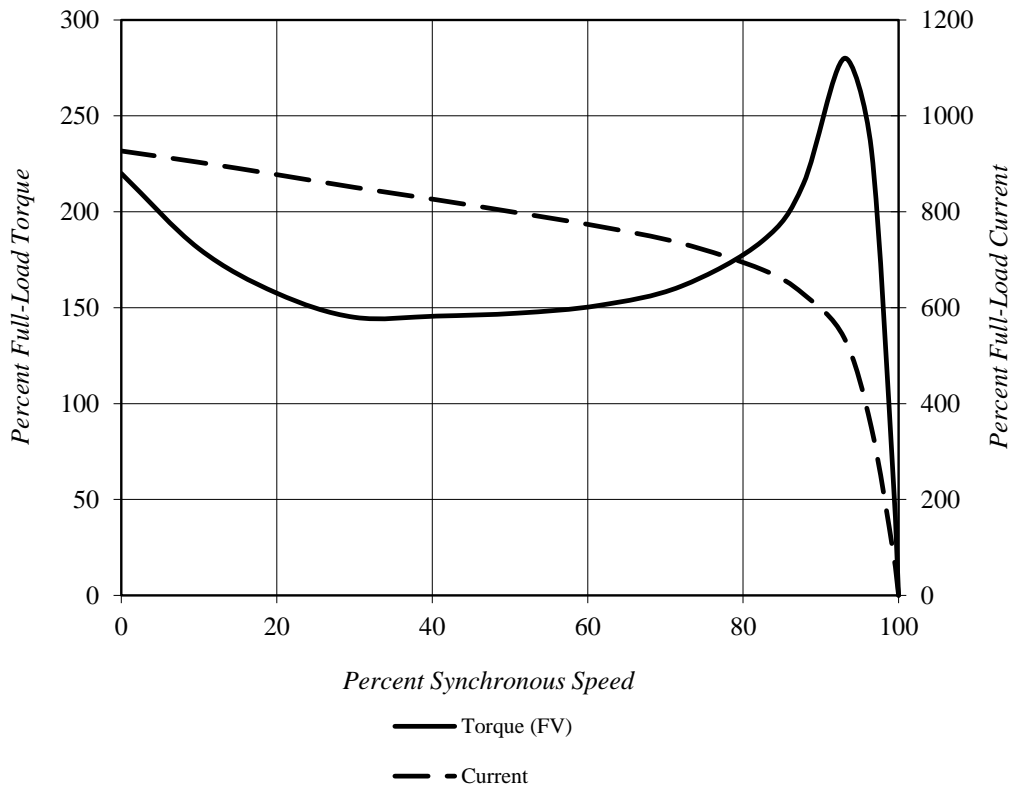
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0454SDMW7FS-P			<b>FLAmps:</b>	82
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	400 V	<b>Frame:</b>	225S
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	45	<b>Rotor Inertia:</b>	15.5 lb-ft <sup>2</sup>	<b>Date:</b>	10/21/2019
<b>FLRPM:</b>	1480	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4045 (45kW)

<b>Locked Rotor Amps:</b>	760 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	220%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	280%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	214 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
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**D.E.Curve #:** GH4045 (45kW)

**Prepared by:** Zichao Xie

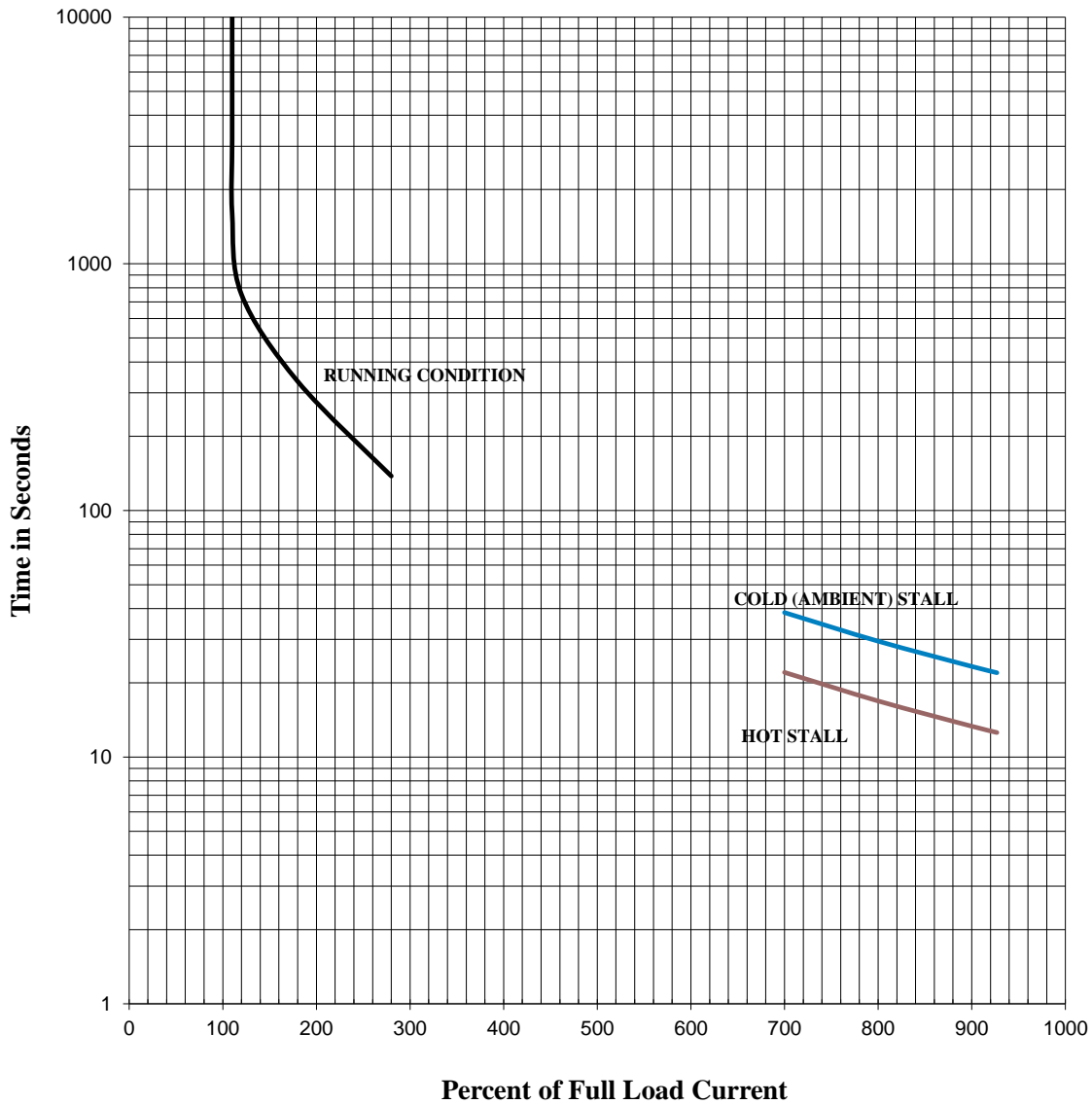
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0454SDMW7FS-P			<b>FLAmps:</b>	82
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	400 V	<b>Frame:</b>	225S
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	45	<b>Rotor Inertia:</b>	15.5 lb-ft <sup>2</sup>	<b>Date:</b>	10/21/2019
<b>FLRPM:</b>	1480	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4045 (45kW)



**Comments:** PROJECT -  
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**D.E.Curve #:** GH4045 (45kW)

**Prepared by:** Zichao Xie

**Checked by:**

<b>TOSHIBA INTERNATIONAL CORPORATION</b> Industrial Division / Houston Motor Plant  <b>SQUIRREL CAGE INDUCTION MOTOR</b> <b>PERFORMANCE SPECIFICATIONS</b>	INDEX	MPCF-1033
	SHEET NO.	1 of 1
	ISSUED	7/31/13
	SUPERSEDES	11/8/96
	REVISION	2
	WRITTEN BY	MDC
	APPROVED BY	PAA

CUSTOMER: -  
TIC SR No.: -

MOTOR NAMEPLATE DATA			
H.P.: -	VOLTS: 415	3 PH / 50 Hz	S. RPM: 1500
FRAME: 225S	ENCL: TEFC	FLAMPS: 80	FLRPM: 1480
FORM: FBK1	S.F.: -	IEC DESIGN NE	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0454SDMW7FS-P		kW: 45	
NOM. EFF.: 94.2	MIN. EFF.: -	cosØ 0.82	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 794	FULL LOAD (lb-ft.): 213	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 240	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 300	

EFFICIENCY	POWER FACTOR
FULL LOAD: 95.1	FULL LOAD: 82.1
3/4 LOAD: 94.5	3/4 LOAD: 78.3
1/2 LOAD: 92.9	1/2 LOAD: 69.5

ALL CHARACTERISTICS ARE AVERAGE EXPECTED VALUES BASED UPON RATED VOLTAGE, FREQUENCY AND SINEWAVE POWER INPUT.  
THE DECLARED LOCKED ROTOR CURRENT HAS A TOLERANCE OF 20%.  
\* TEMPERATURE RISE WILL BE CONSISTENT WITH INSULATION, AMBIENT AND SERVICE FACTOR AS DEFINED BY NEMA-MG-12 OR -20.  
\*\* BEARINGS ARE THE ONLY RECOMMENDED SPARE PART(S).

**CERTIFIED BY:** Zichao Xie  
**DATE:** 10/21/2019

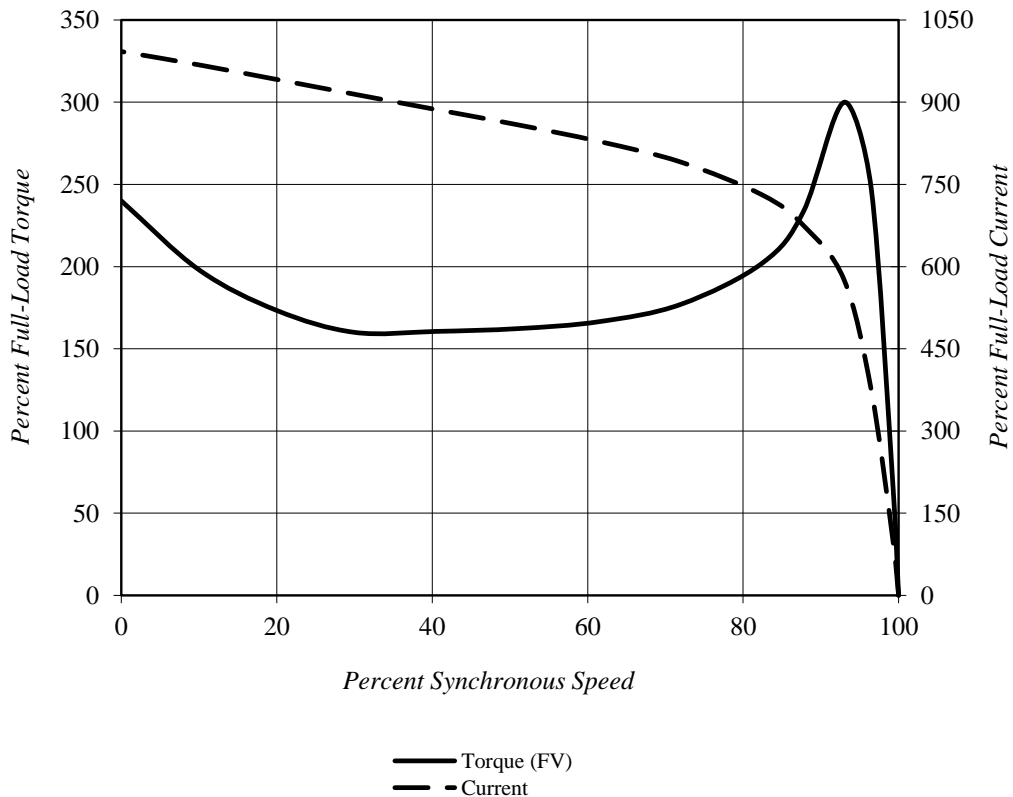
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0454SDMW7FS-P			<b>FLAmps:</b>	80
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	415 V	<b>Frame:</b>	225S
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	45	<b>Rotor Inertia:</b>	15.5 lb-ft <sup>2</sup>	<b>Date:</b>	10/21/2019
<b>FLRPM:</b>	1480	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4045 (45kW)

<b>Locked Rotor Amps:</b>	794 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	240%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	300%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	213 lb-ft		

### Design Values



**Comments:** PROJECT -  
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**D.E. Curve #:** GH4045 (45kW)

**Prepared by:** Zichao Xie

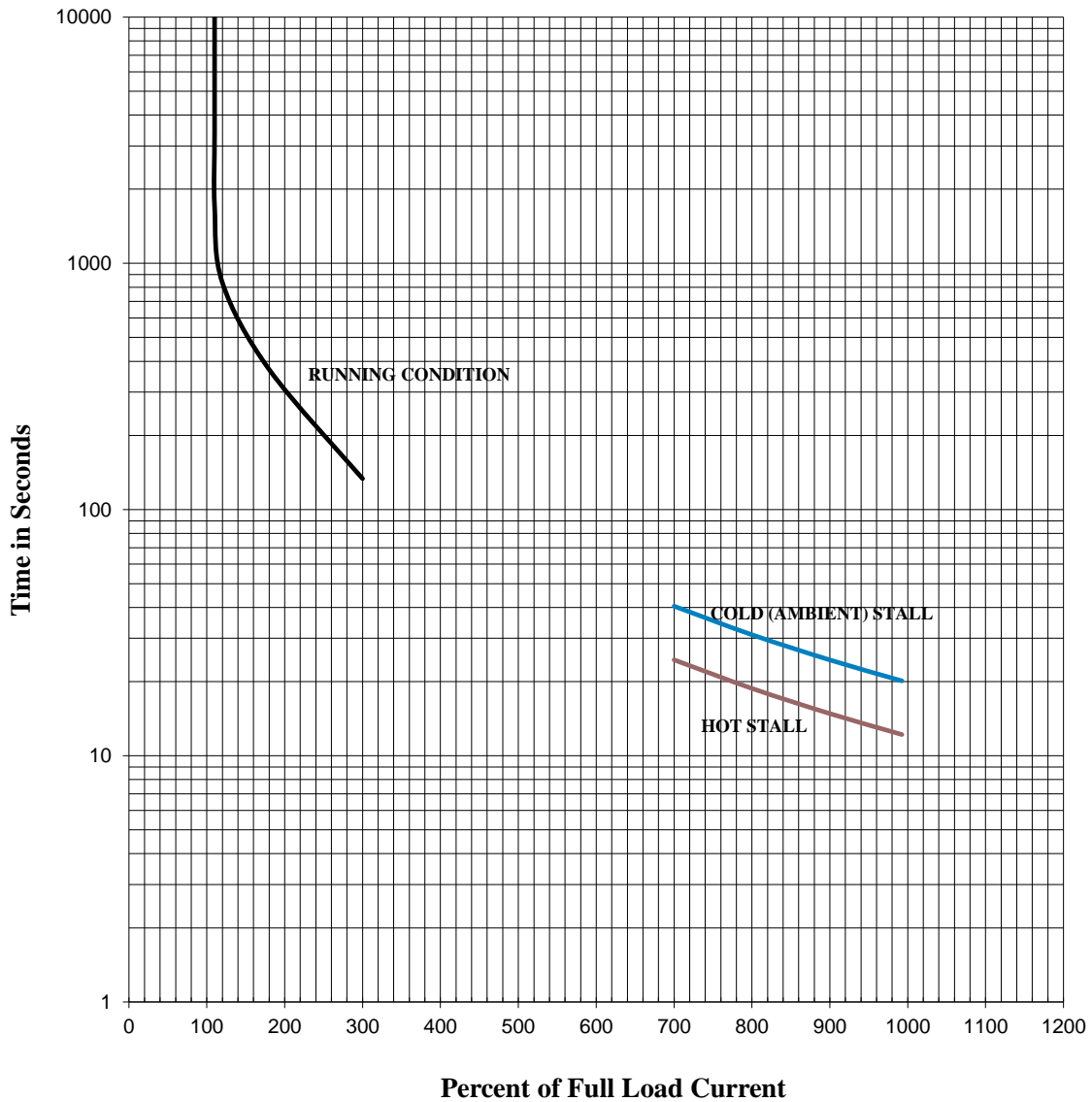
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0454SDMW7FS-P			<b>FLAmps:</b>	80
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	415 V	<b>Frame:</b>	225S
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	45	<b>Rotor Inertia:</b>	15.5 lb-ft <sup>2</sup>	<b>Date:</b>	10/21/2019
<b>FLRPM:</b>	1480	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4045 (45kW)



**Comments:** PROJECT -  
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**D.E. Curve #:** GH4045 (45kW)

**Prepared by:** Zichao Xie

**Checked by:**

<b>TOSHIBA INTERNATIONAL CORPORATION</b> Industrial Division / Houston Motor Plant  <b>SQUIRREL CAGE INDUCTION MOTOR</b> <b>PERFORMANCE SPECIFICATIONS</b>	INDEX	MPCF-1033
	SHEET NO.	1 of 1
	ISSUED	7/31/13
	SUPERSEDES	11/8/96
	REVISION	2
	WRITTEN BY	MDC
	APPROVED BY	PAA

CUSTOMER: -  
TIC SR No.: -

MOTOR NAMEPLATE DATA			
H.P.: -	VOLTS: 380	3 PH / 50 Hz	S. RPM: 1500
FRAME: 225S	ENCL: TEFC	FLAMPS: 85	FLRPM: 1480
FORM: FBK1	S.F.: -	IEC DESIGN NE	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0454SDMW7FS-P		kW: 45	
NOM. EFF.: 94.2	MIN. EFF.: -	cosØ 0.84	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 714	FULL LOAD (lb-ft.): 214	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 195	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 255	

EFFICIENCY	POWER FACTOR
FULL LOAD: 94.7	FULL LOAD: 84.7
3/4 LOAD: 94.3	3/4 LOAD: 82.7
1/2 LOAD: 93.0	1/2 LOAD: 76.8

ALL CHARACTERISTICS ARE AVERAGE EXPECTED VALUES BASED UPON RATED VOLTAGE, FREQUENCY AND SINEWAVE POWER INPUT.  
THE DECLARED LOCKED ROTOR CURRENT HAS A TOLERANCE OF 20%.  
\* TEMPERATURE RISE WILL BE CONSISTENT WITH INSULATION, AMBIENT AND SERVICE FACTOR AS DEFINED BY NEMA-MG-12 OR -20.  
\*\* BEARINGS ARE THE ONLY RECOMMENDED SPARE PART(S).

**CERTIFIED BY:** Zichao Xie  
**DATE:** 10/21/2019



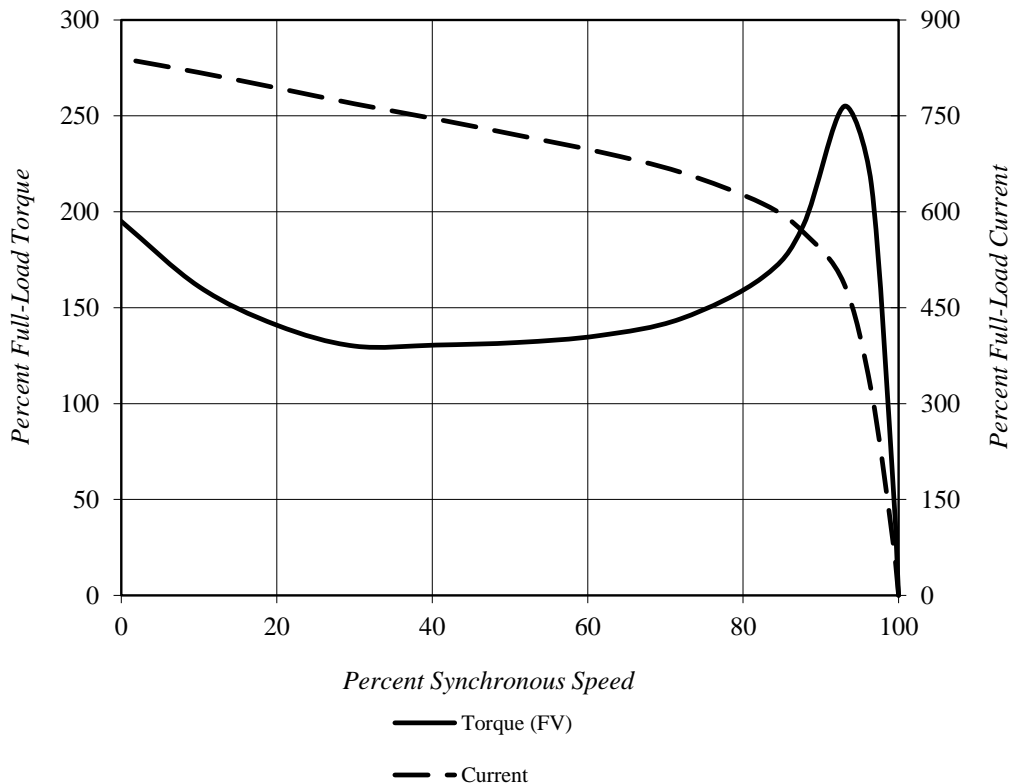
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0454SDMW7FS-P			<b>FLAmps:</b>	85
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	380 V	<b>Frame:</b>	225S
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	45	<b>Rotor Inertia:</b>	15.5 lb-ft <sup>2</sup>	<b>Date:</b>	10/21/2019
<b>FLRPM:</b>	1480	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4045 (45kW)

<b>Locked Rotor Amps:</b>	714 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	195%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	255%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	214 lb-ft		

### Design Values



**Comments:** PROJECT -  
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**D.E.Curve #:** GH4045 (45kW)

**Prepared by:** Zichao Xie

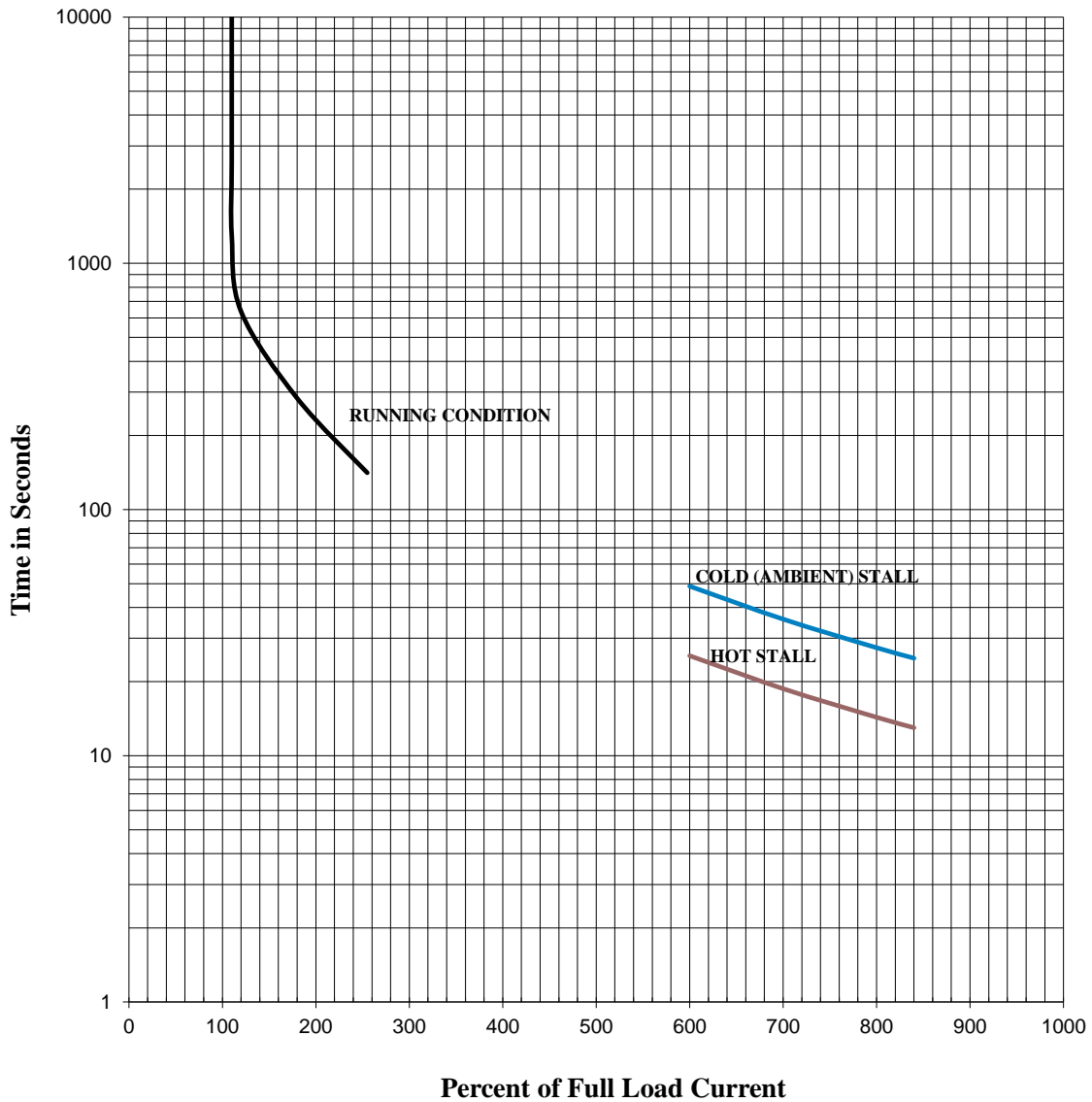
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0454SDMW7FS-P			<b>FLAmps:</b>	85
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	380 V	<b>Frame:</b>	225S
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	45	<b>Rotor Inertia:</b>	15.5 lb-ft <sup>2</sup>	<b>Date:</b>	10/21/2019
<b>FLRPM:</b>	1480	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4045 (45kW)



**Comments:** PROJECT \_\_\_\_\_  
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**D.E. Curve #:** GH4045 (45kW)

**Prepared by:** Zichao Xie

**Checked by:**

**TOSHIBA INTERNATIONAL CORPORATION**  
**Industrial Division / Houston Motor Plant**

**SQUIRREL CAGE INDUCTION MOTOR**  
**PERFORMANCE SPECIFICATIONS**

INDEX	MPCF-1033
SHEET NO.	1 of 1
ISSUED	7/31/13
SUPERSEDES	11/8/96
REVISION	2
WRITTEN BY	MDC
APPROVED BY	PAA

CUSTOMER: -  
TIC SR No.: -

**MOTOR NAMEPLATE DATA**

H.P.: 60	VOLTS: 460	3 PH / 60 Hz	S. RPM: 1800
FRAME: 225S	ENCL: TEFC	FLAMPS: 73	FLRPM: 1785
FORM: FBK1	S.F.: 1.15	NEMA DESIGN: A	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: L	DUTY: Cont.
MODEL No.: 0454SDMW7FS-P		kW: 45	
NOM. EFF.: 95.0	MIN. EFF.: -	P.F.: 81.0	

**AMPERAGE**

LOCKED ROTOR: 735

**TORQUES**

FULL LOAD (lb-ft.): 177  
LOCKED ROTOR (%): 245  
BREAK DOWN (%): 310

**\*\*BEARINGS:**

DRIVE END: REFER TO NP  
OPPOSITE DRIVE END: REFER TO NP

**EFFICIENCY**

FULL LOAD: 95.2  
3/4 LOAD: 94.5  
1/2 LOAD: 92.6

**POWER FACTOR**

FULL LOAD: 81.4  
3/4 LOAD: 78.2  
1/2 LOAD: 70.4

ALL CHARACTERISTICS ARE AVERAGE EXPECTED VALUES BASED UPON RATED VOLTAGE,  
FREQUENCY AND SINEWAVE POWER INPUT.

THE DECLARED LOCKED ROTOR CURRENT HAS A TOLERANCE OF 20%.

\* TEMPERATURE RISE WILL BE CONSISTENT WITH INSULATION, AMBIENT AND SERVICE FACTOR AS  
DEFINED BY NEMA-MG-12 OR -20.

\*\* BEARINGS ARE THE ONLY RECOMMENDED SPARE PART(S).

**CERTIFIED BY:** Zichao Xie

**DATE:** 10/18/2019

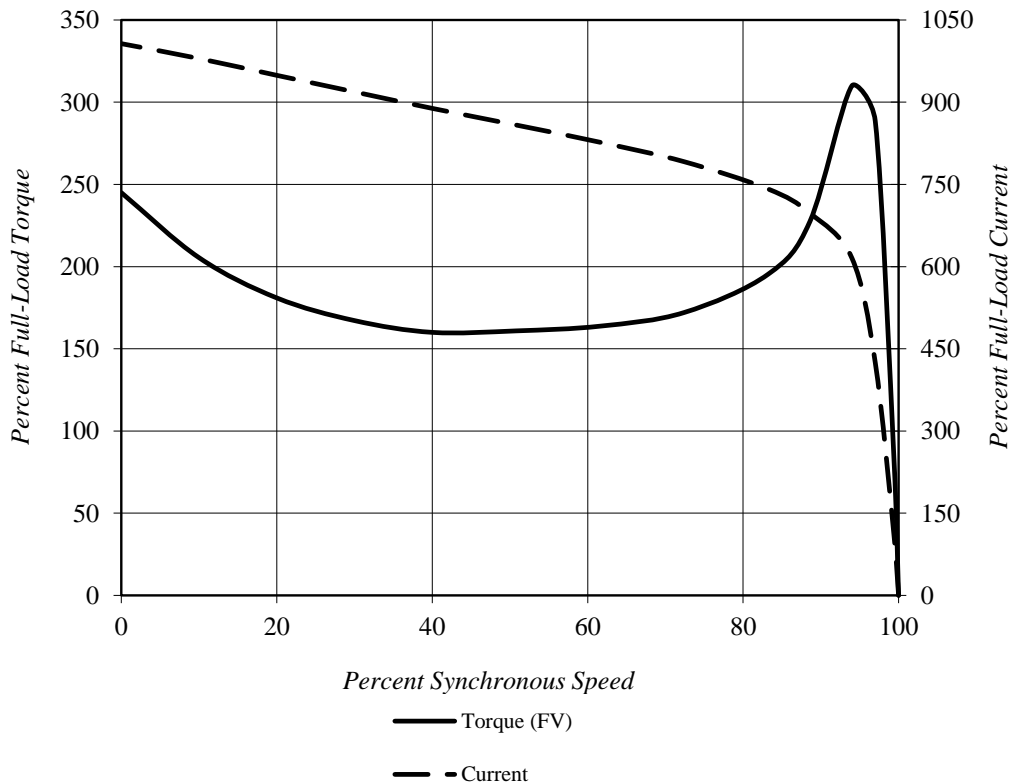
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0454SDMW7FS-P			<b>FLAmps:</b>	73
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	460 V	<b>Frame:</b>	225S
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 60 Hz	<b>Ins. Class:</b>	F
<b>HP:</b>	60	<b>Rotor Inertia:</b>	15.5 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1785	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4045 (45kW)

<b>Locked Rotor Amps:</b>	735 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	245%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	310%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	177 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
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**D.E.Curve #:** GH4045 (45kW)

**Prepared by:** Zichao Xie

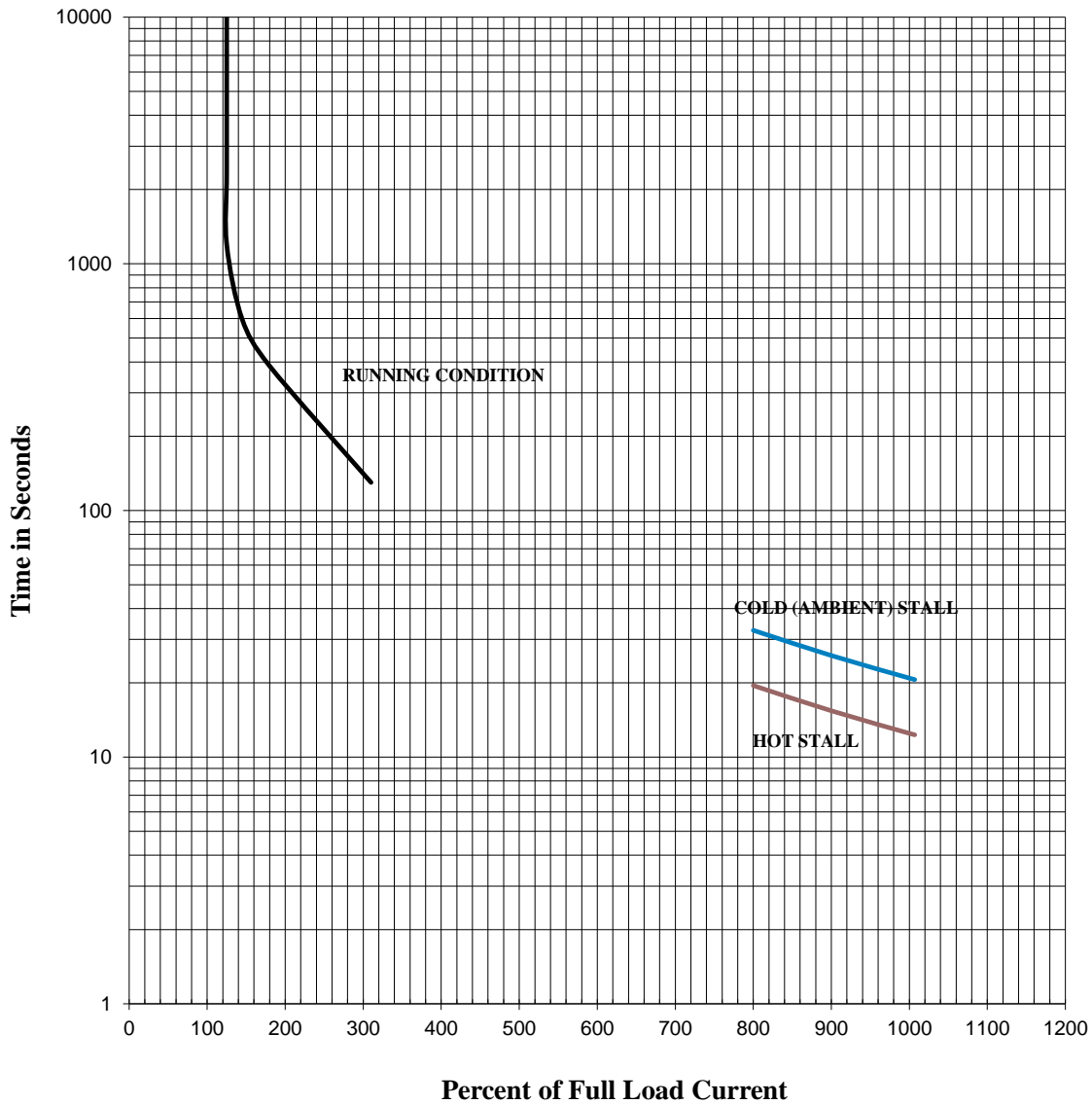
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0454SDMW7FS-P			<b>FLAmps:</b>	73
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	460 V	<b>Frame:</b>	225S
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 60 Hz	<b>Ins. Class:</b>	F
<b>HP:</b>	60	<b>Rotor Inertia:</b>	15.5 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1785	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4045 (45kW)



**Comments:** PROJECT -  
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**D.E. Curve #:** GH4045 (45kW)

<b>Prepared by:</b> Zichao Xie	<b>Checked by:</b>
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