

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  
DL DRAWING IEC GLOBAL  
TYPE: 2-4-6P - 400V  
FRAME: 90L  
3HFN000151

TOLERANCES				
X.	±2.0			
X.X	±0.5			
X.XX	±0.1			
MAXIMUM MOTOR WEIGHT				
- lbs.				
- kgs.				
NO	REVISION	DRAWN BY	DATE	CHECK



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

**TOSHIBA**  
TOSHIBA INTERNATIONAL CORPORATION

<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: 230/400	3 PH / 50 Hz	S. RPM: 1500
FRAME: 90L	ENCL: TEFC	FLAMPS: 4.2/2.4	FLRPM: 1440
FORM: FBK1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: Y114SDMV7FS-PL		kW: 1.1	
NOM. EFF.: 84.1	MIN. EFF.: -	cosØ 0.77	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 29/16.5	FULL LOAD (lb-ft.): 5.5	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 275	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 345	

EFFICIENCY	POWER FACTOR
FULL LOAD: 85.0	FULL LOAD: 77.0
3/4 LOAD: 85.4	3/4 LOAD: 71.3
1/2 LOAD: 83.6	1/2 LOAD: 60.2

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

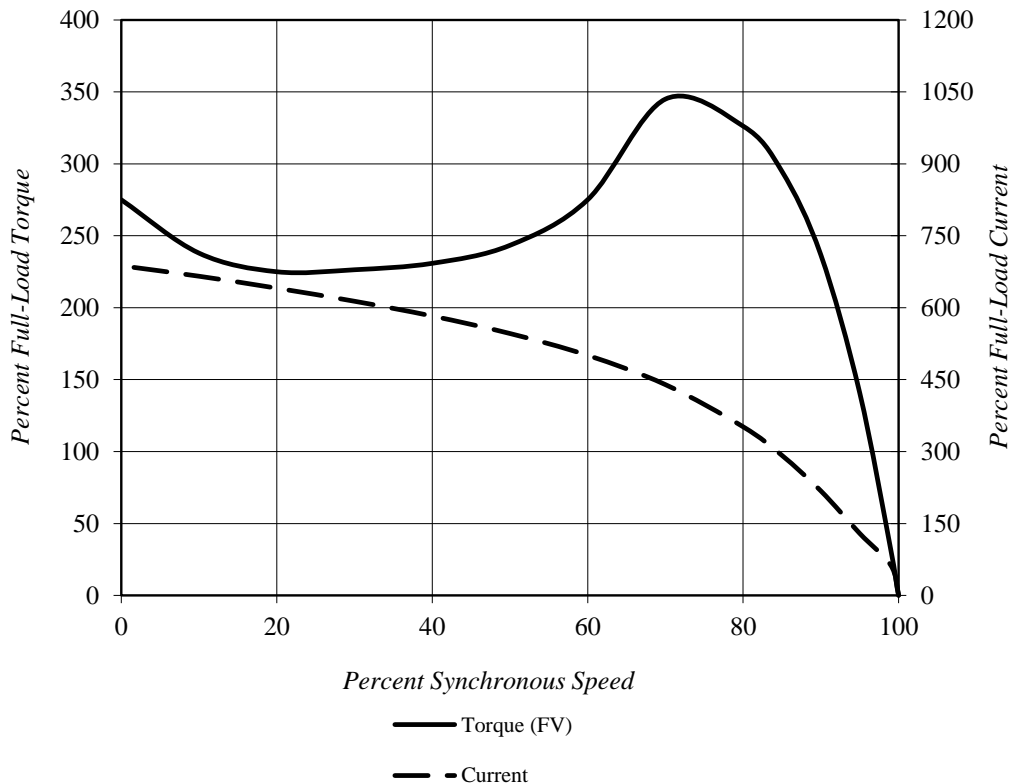
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	Y114SDMV7FS-PL			<b>FLAmps:</b>	4.2/2.4
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	230/400 V	<b>Frame:</b>	90L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	1.1	<b>Rotor Inertia:</b>	0.13 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1440	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4Y11 (1.1kW)

<b>Locked Rotor Amps:</b>	29/16.5 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	275%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	345%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	5.5 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**D.E.Curve #:** GH4Y11 (1.1kW)

**Prepared by:** Zichao Xie

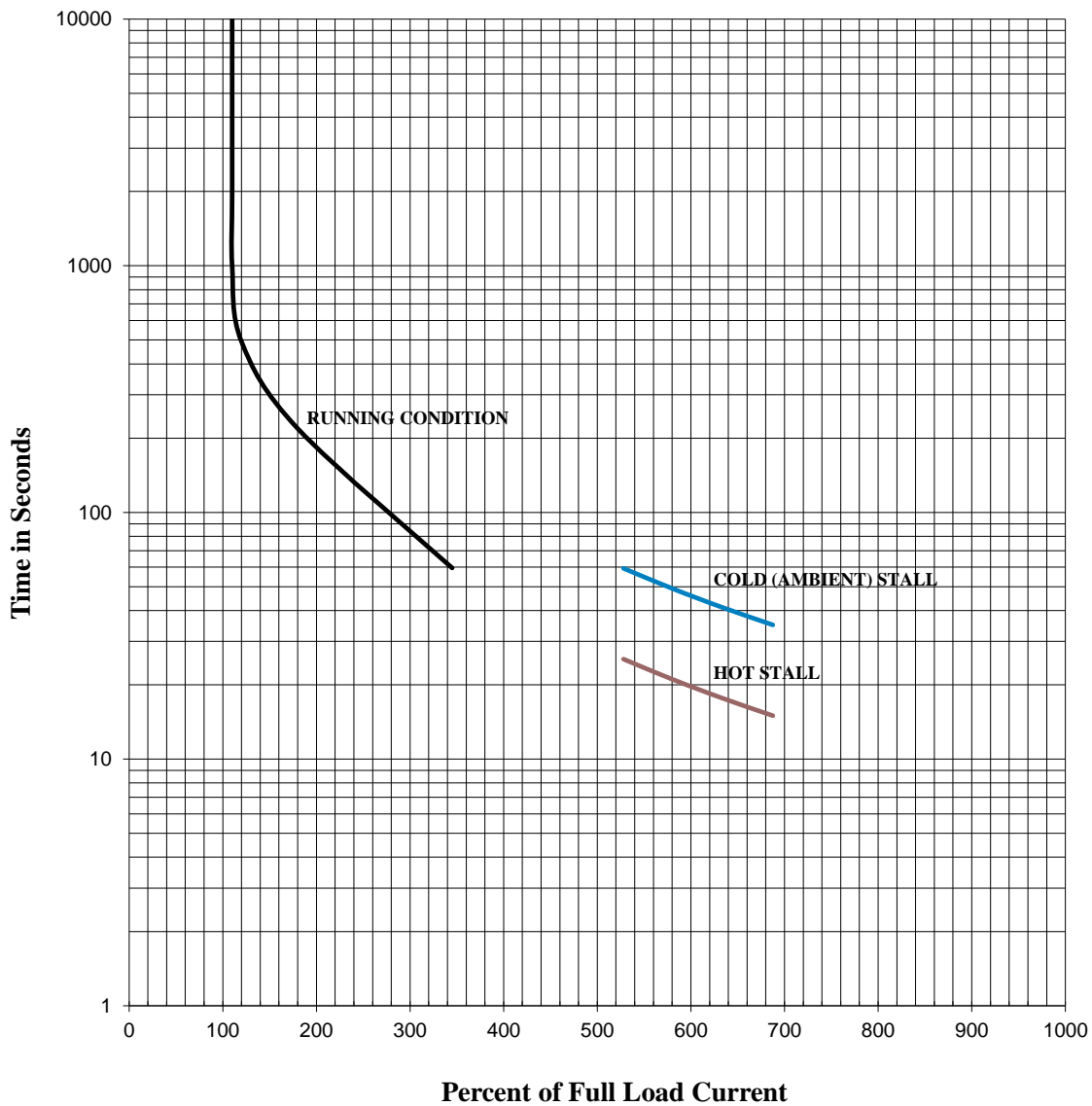
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	Y114SDMV7FS-PL			<b>FLAmps:</b>	4.2/2.4
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	230/400 V	<b>Frame:</b>	90L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	1.1	<b>Rotor Inertia:</b>	0.13 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1440	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4Y11 (1.1kW)



**Comments:** PROJECT \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**D.E.Curve #:** GH4Y11 (1.1kW)

**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.: -	VOLTS: 240/415	3 PH / 50 Hz	S. RPM: 1500
FRAME: 90L	ENCL: TEFC	FLAMPS: 4.2/2.4	FLRPM: 1445
FORM: FBK1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: Y114SDMV7FS-PL		kW: 1.1	
NOM. EFF.: 84.1	MIN. EFF.: -	cosØ 0.74	

**AMPERAGE**

LOCKED ROTOR: 30/17.3

**TORQUES**

FULL LOAD (lb-ft.): 5.4  
 LOCKED ROTOR (%): 305  
 BREAK DOWN (%): 370

**\*\*BEARINGS:**

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

**EFFICIENCY**

FULL LOAD: 85.2  
 3/4 LOAD: 85.2  
 1/2 LOAD: 82.7

**POWER FACTOR**

FULL LOAD: 74.5  
 3/4 LOAD: 67.9  
 1/2 LOAD: 56.0

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

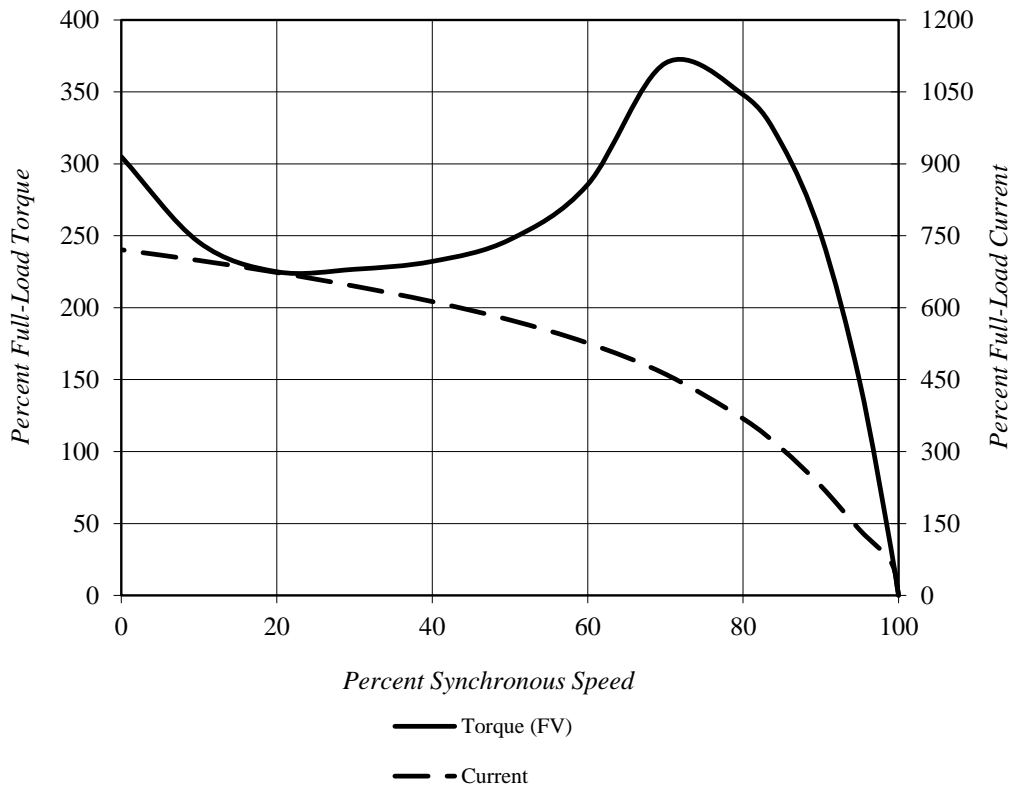
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	Y114SDMV7FS-PL			<b>FLAmps:</b>	4.2/2.4
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	240/415 V	<b>Frame:</b>	90L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	1.1	<b>Rotor Inertia:</b>	0.13 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1445	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4Y11 (1.1kW)

<b>Locked Rotor Amps:</b>	30/17.3 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	305%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	370%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	5.4 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**D.E.Curve #:** GH4Y11 (1.1kW)

**Prepared by:** Zichao Xie

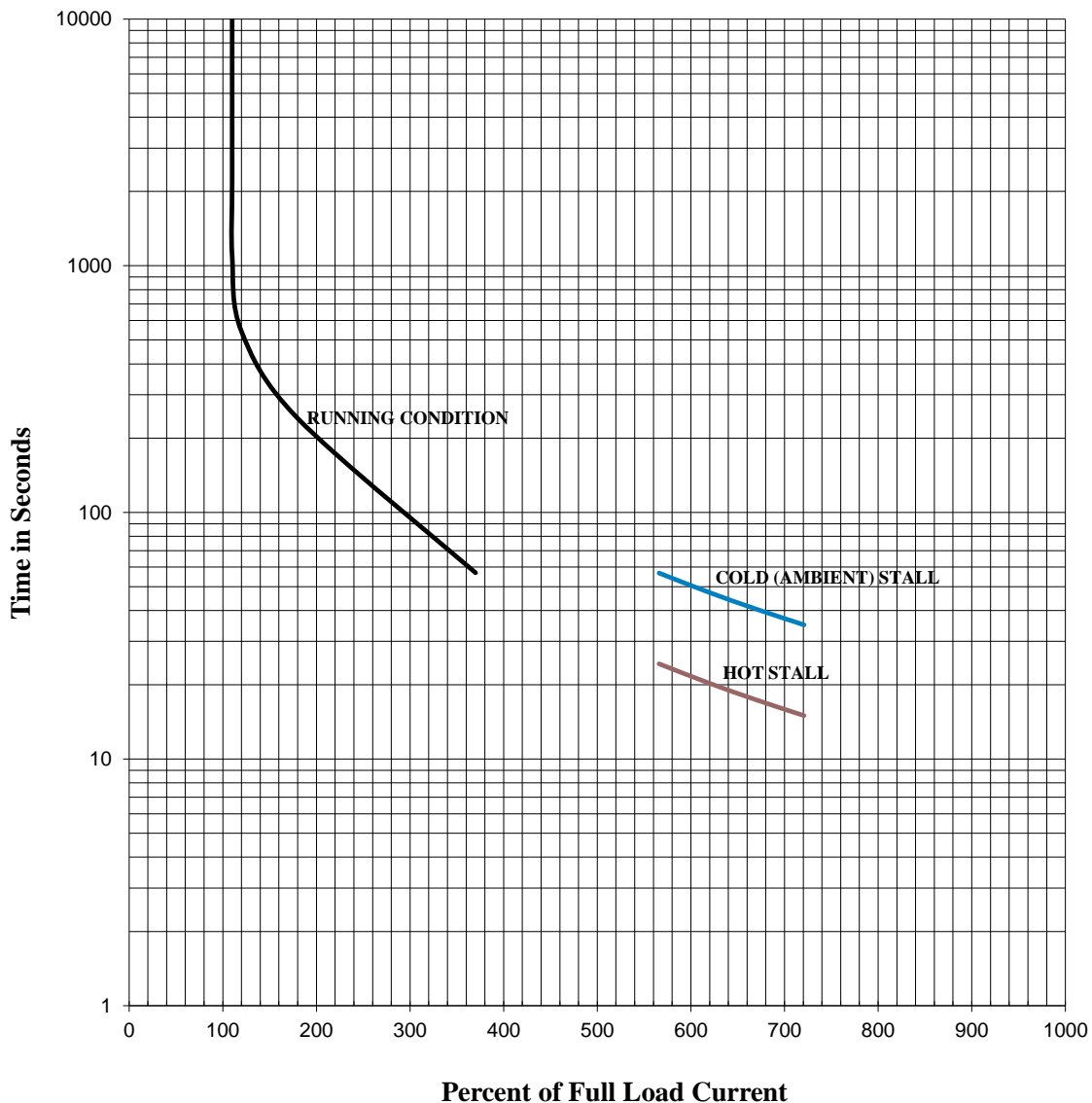
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	Y114SDMV7FS-PL			<b>FLAmps:</b>	4.2/2.4
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	240/415 V	<b>Frame:</b>	90L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	1.1	<b>Rotor Inertia:</b>	0.13 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1445	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4Y11 (1.1kW)



**Comments:** PROJECT \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**D.E.Curve #:** GH4Y11 (1.1kW)

**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.: -	VOLTS: 220/380	3 PH / 50 Hz	S. RPM: 1500
FRAME: 90L	ENCL: TEFC	FLAMPS: 4.3/2.5	FLRPM: 1430
FORM: FBK1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: Y114SDMV7FS-PL		kW: 1.1	
NOM. EFF.: 84.1	MIN. EFF.: -	cosØ 0.79	

**AMPERAGE**

LOCKED ROTOR: 27/15.6

**TORQUES**

FULL LOAD (lb-ft.): 5.5  
LOCKED ROTOR (%): 245  
BREAK DOWN (%): 310

**\*\*BEARINGS:**

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

**EFFICIENCY**

FULL LOAD: 84.1  
3/4 LOAD: 85.3  
1/2 LOAD: 84.2

**POWER FACTOR**

FULL LOAD: 79.6  
3/4 LOAD: 75.0  
1/2 LOAD: 65.3

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



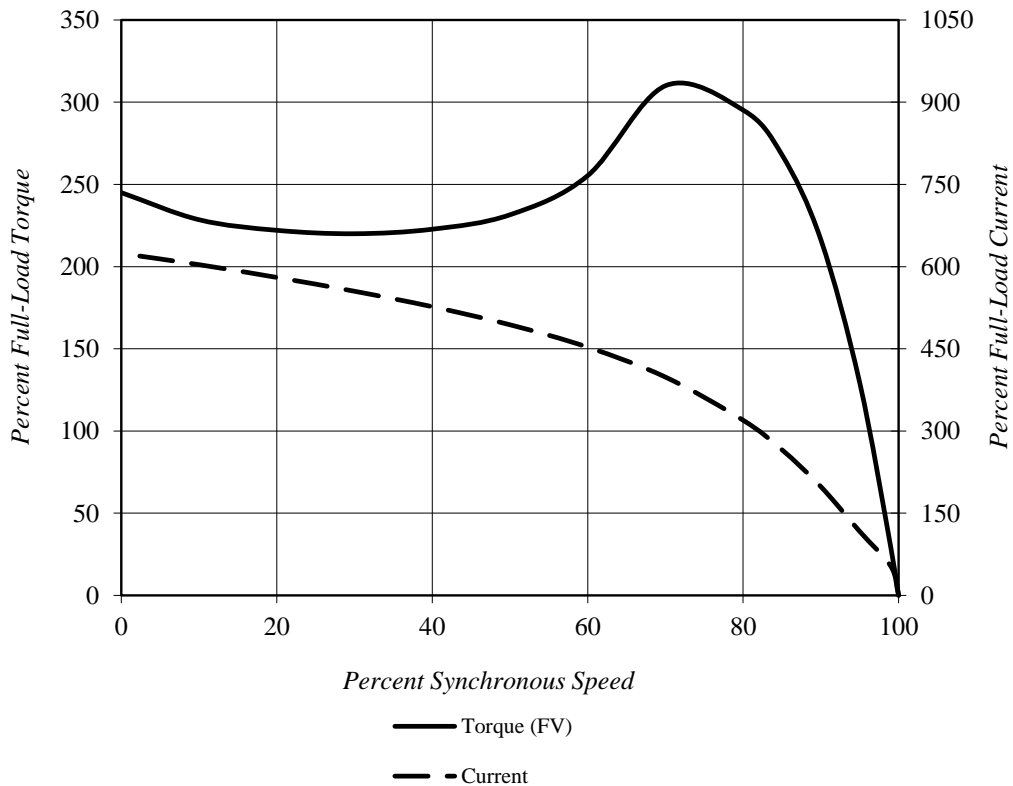
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	Y114SDMV7FS-PL			<b>FLAmps:</b>	4.3/2.5
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	220/380 V	<b>Frame:</b>	90L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	1.1	<b>Rotor Inertia:</b>	0.13 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1430	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4Y11 (1.1kW)

<b>Locked Rotor Amps:</b>	27/15.6 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>	5.5 lb-ft		

### Design Values



**Comments:** PROJECT -  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**D.E.Curve #:** GH4Y11 (1.1kW)

**Prepared by:** Zichao Xie

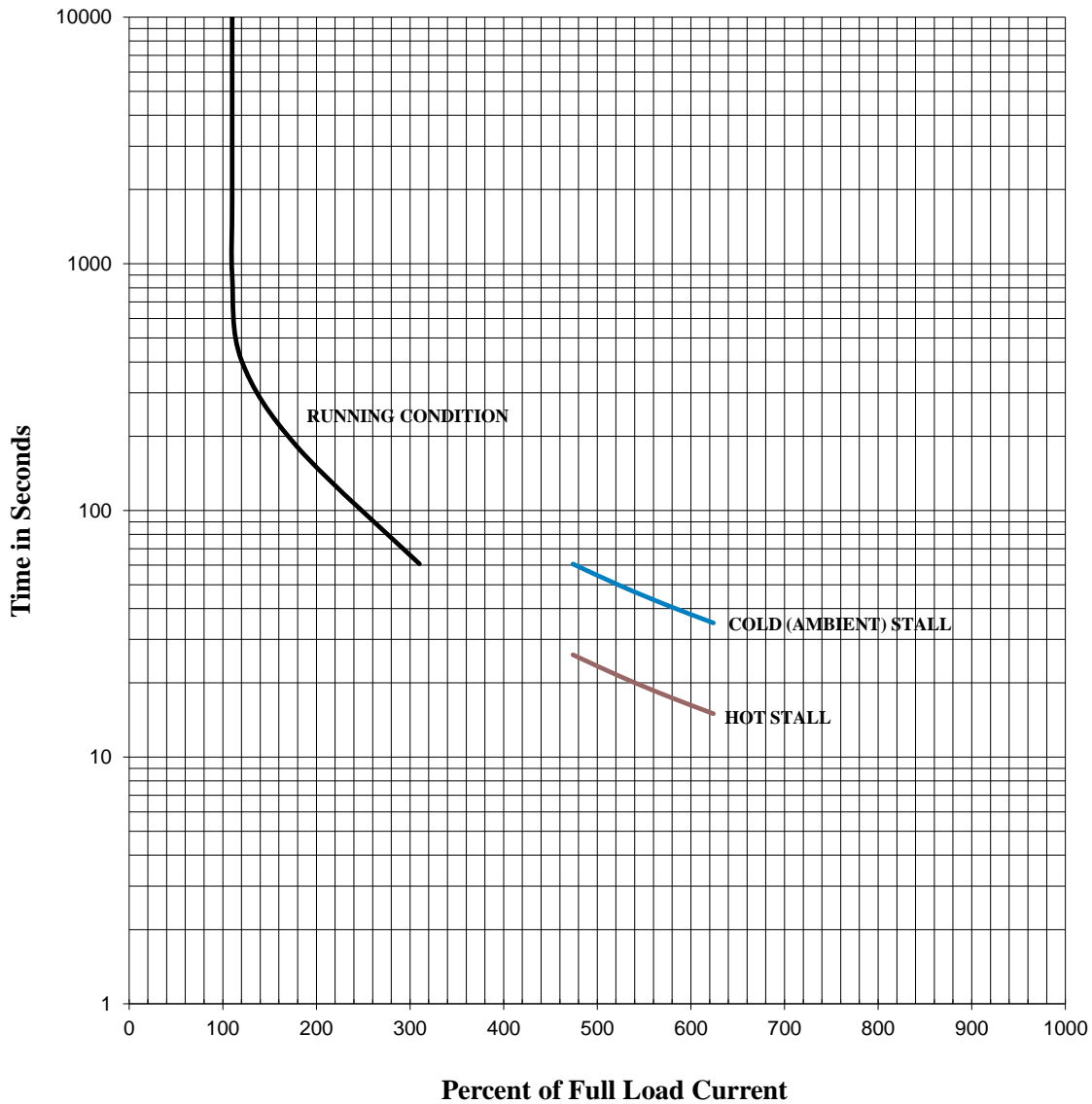
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	Y114SDMV7FS-PL			<b>FLAmps:</b>	4.3/2.5
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	220/380 V	<b>Frame:</b>	90L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	1.1	<b>Rotor Inertia:</b>	0.13 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1430	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4Y11 (1.1kW)



**Comments:** PROJECT -  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**D.E.Curve #:** GH4Y11 (1.1kW)

**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.: 1.5	VOLTS: 460	3 PH / 60 Hz	S. RPM: 1800
FRAME: 90L	ENCL: TEFC	FLAMPS: 2.1	FLRPM: 1750
FORM: FBK1	S.F.: 1.15	NEMA DESIGN: B	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: L	DUTY: Cont.
MODEL No.: Y114SDMV7FS-PL		kW: 1.1	
NOM. EFF.: 86.5	MIN. EFF.: -	P.F.: 74.0	

**AMPERAGE**

LOCKED ROTOR: 17.7

**TORQUES**

FULL LOAD (lb-ft.): 4.5  
LOCKED ROTOR (%): 385  
BREAK DOWN (%): 370

**\*\*BEARINGS:**

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

**EFFICIENCY**

FULL LOAD: 87.3  
3/4 LOAD: 86.8  
1/2 LOAD: 84.1

**POWER FACTOR**

FULL LOAD: 74.1  
3/4 LOAD: 68.2  
1/2 LOAD: 57.2

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

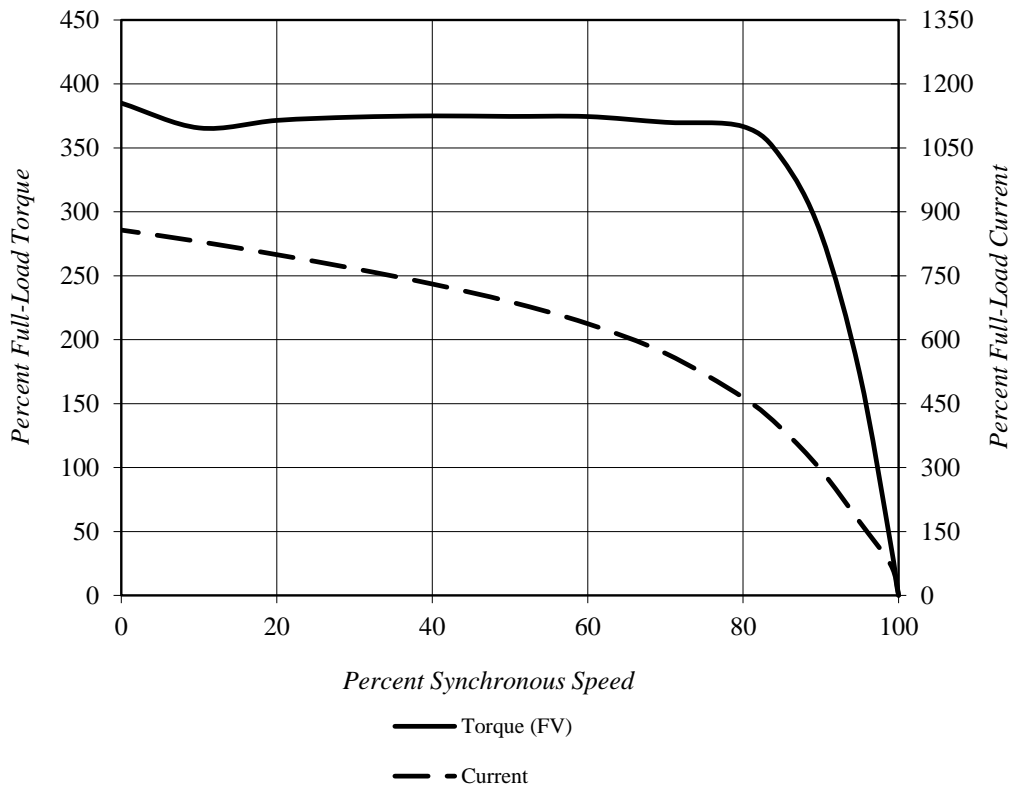
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	Y114SDMV7FS-PL			<b>FLAmps:</b>	2.1
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	460 V	<b>Frame:</b>	90L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 60 Hz	<b>Ins. Class:</b>	F
<b>HP:</b>	1.5	<b>Rotor Inertia:</b>	0.13 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1750	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4Y11 (1.1kW)

<b>Locked Rotor Amps:</b>	17.7 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	385%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	370%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	4.5 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**D.E.Curve #:** GH4Y11 (1.1kW)

**Prepared by:** Zichao Xie

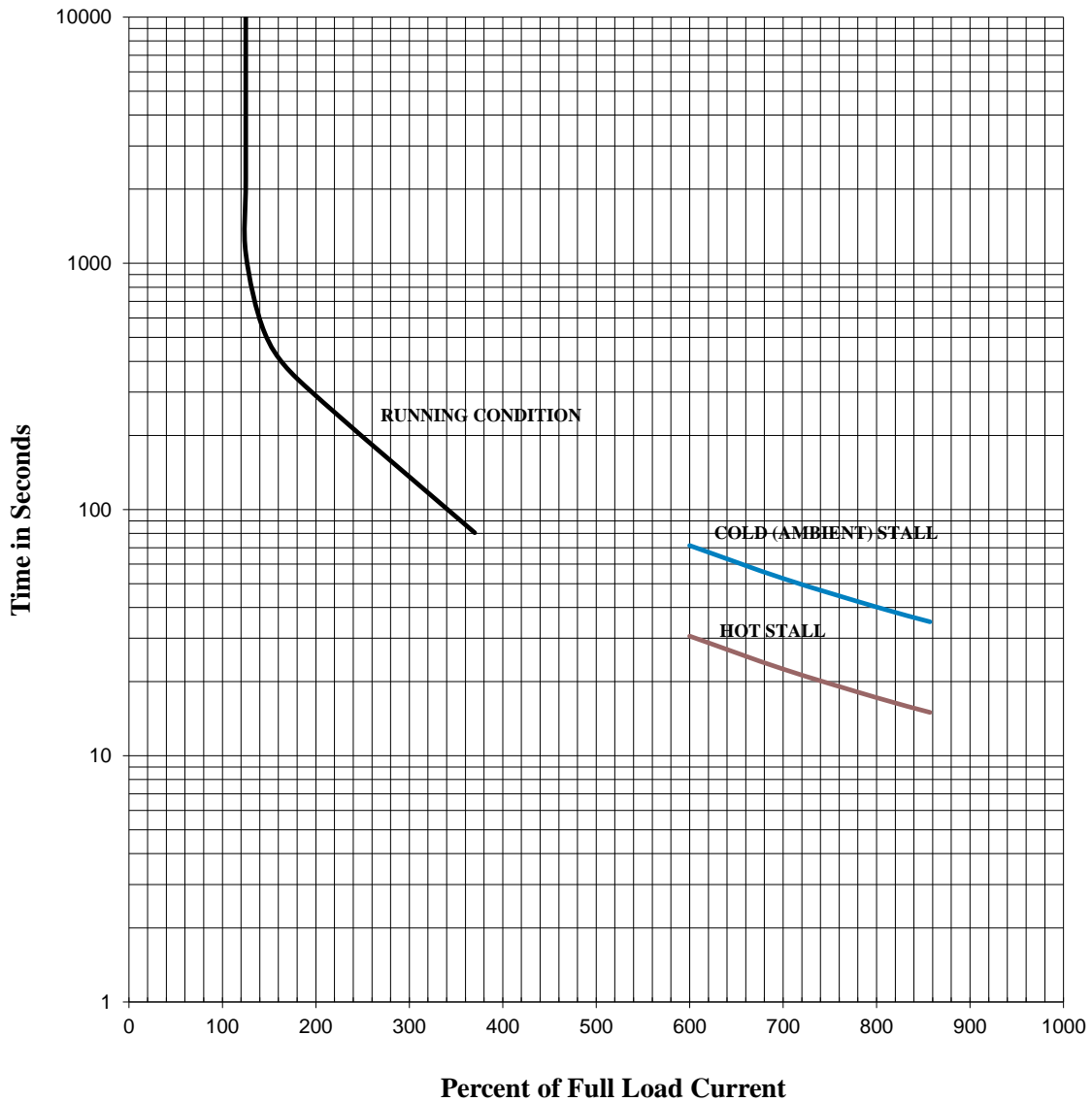
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	Y114SDMV7FS-PL			<b>FLAmps:</b>	2.1
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	460 V	<b>Frame:</b>	90L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 60 Hz	<b>Ins. Class:</b>	F
<b>HP:</b>	1.5	<b>Rotor Inertia:</b>	0.13 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1750	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4Y11 (1.1kW)



**Comments:** PROJECT -  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**D.E. Curve #:** GH4Y11 (1.1kW)

**Prepared by:** Zichao Xie

**Checked by:**