

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.

B35-FLANGE MOTOR OL DRAWING IEC GLOBAL	TYPE: 2-4-6P - 400V
	FRAME: 160M
3HFN000235	
TOSHIBA TOSHIBA INTERNATIONAL CORPORATION	

TOLERANCES	
X.	±2.0
X.X	±0.5
X.XX	±0.1
MAXIMUM MOTOR WEIGHT	
- lbs.	
- kgs.	

REVISION	DRAWN BY	DATE	CHECK
01	T.Danh	Sep-10-18	B.Quynh
NO			

**EQP Global SD**  
XT SERIES

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

<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: 400	3 PH / 50 Hz	S. RPM: 1500
FRAME: 160M	ENCL: TEFC	FLAMPS: 22	FLRPM: 1470
FORM: FBKL1	S.F.: -	IEC DESIGN NE	INSUL CLASS: F
TYPE: IKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0114SDMW7GS-PL		kW: 11	
NOM. EFF.: 91.4	MIN. EFF.: -	cosØ 0.77	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 191	FULL LOAD (lb-ft.): 52	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 350	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 395	

EFFICIENCY	POWER FACTOR
FULL LOAD: 92.0	FULL LOAD: 77.2
3/4 LOAD: 91.4	3/4 LOAD: 71.4
1/2 LOAD: 89.3	1/2 LOAD: 60.0

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

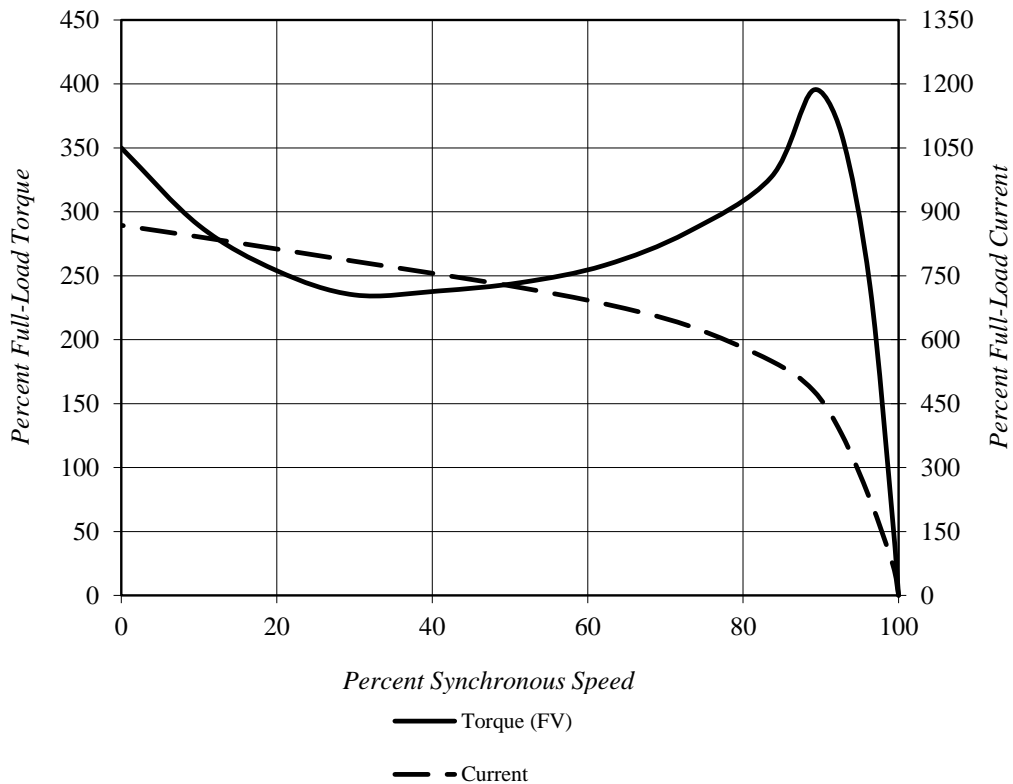
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0114SDMW7GS-PL			<b>FLAmps:</b>	22
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	400 V	<b>Frame:</b>	160M
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	11	<b>Rotor Inertia:</b>	2.4 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1470	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4011 (11kW)

<b>Locked Rotor Amps:</b>	191 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	350%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	395%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	52 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
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**D.E.Curve #:** GH4011 (11kW)

**Prepared by:** Zichao Xie

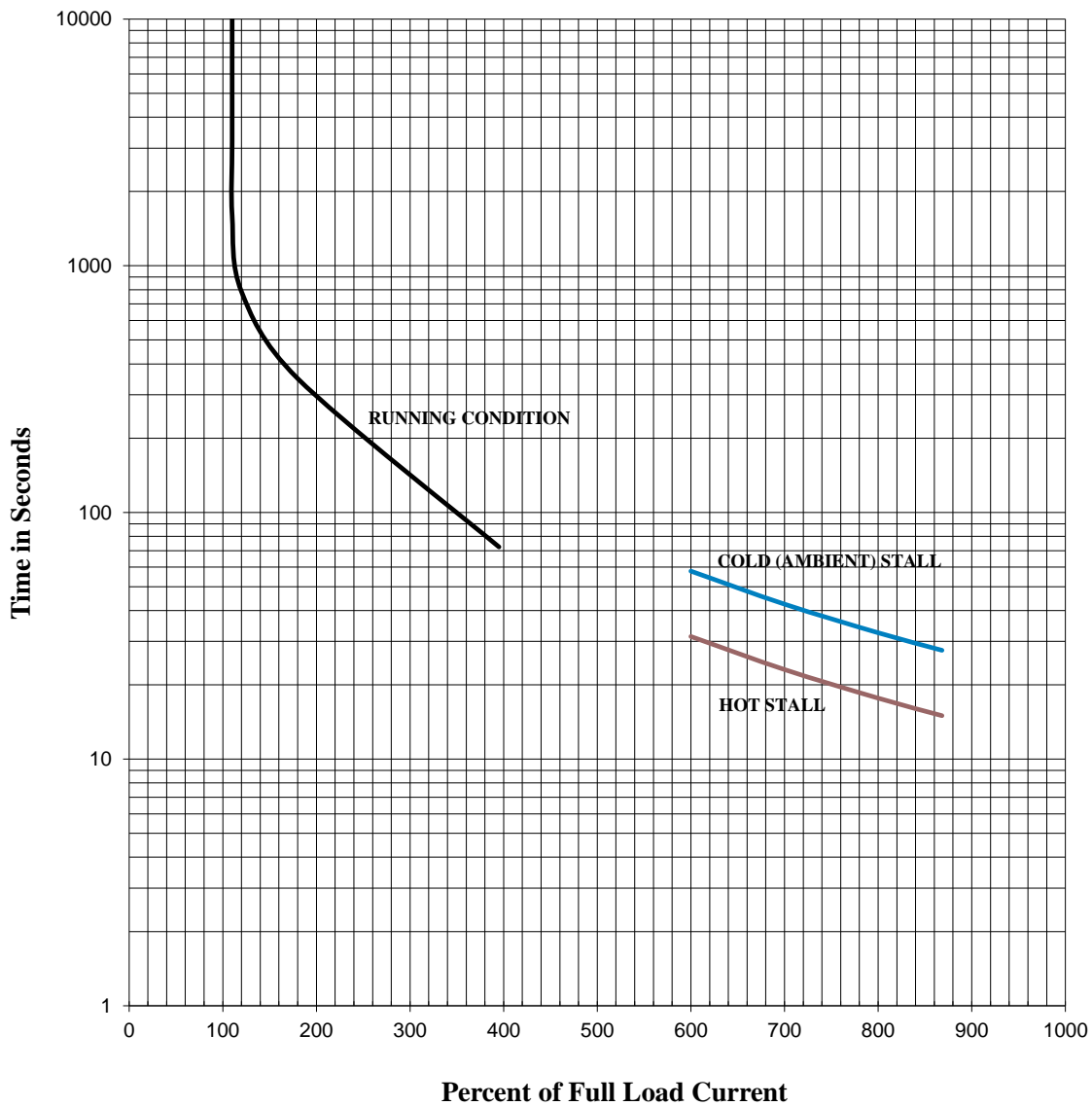
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0114SDMW7GS-PL			<b>FLAmps:</b>	22
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	400 V	<b>Frame:</b>	160M
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	11	<b>Rotor Inertia:</b>	2.4 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1470	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4011 (11kW)



**Comments:** PROJECT -  
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**D.E. Curve #:** GH4011 (11kW)

**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: 160M	ENCL: TEFC	FLAMPS: 22	FLRPM: 1470
FORM: FBKL1	S.F.: -	IEC DESIGN NE	INSUL CLASS: F
TYPE: IKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0114SDMW7GS-PL		kW: 11	
NOM. EFF.: 91.4	MIN. EFF.: -	cosØ 0.75	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 199	FULL LOAD (lb-ft.): 52	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 400	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 420	

EFFICIENCY	POWER FACTOR
FULL LOAD: 92.1	FULL LOAD: 75.2
3/4 LOAD: 91.3	3/4 LOAD: 68.3
1/2 LOAD: 89.0	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

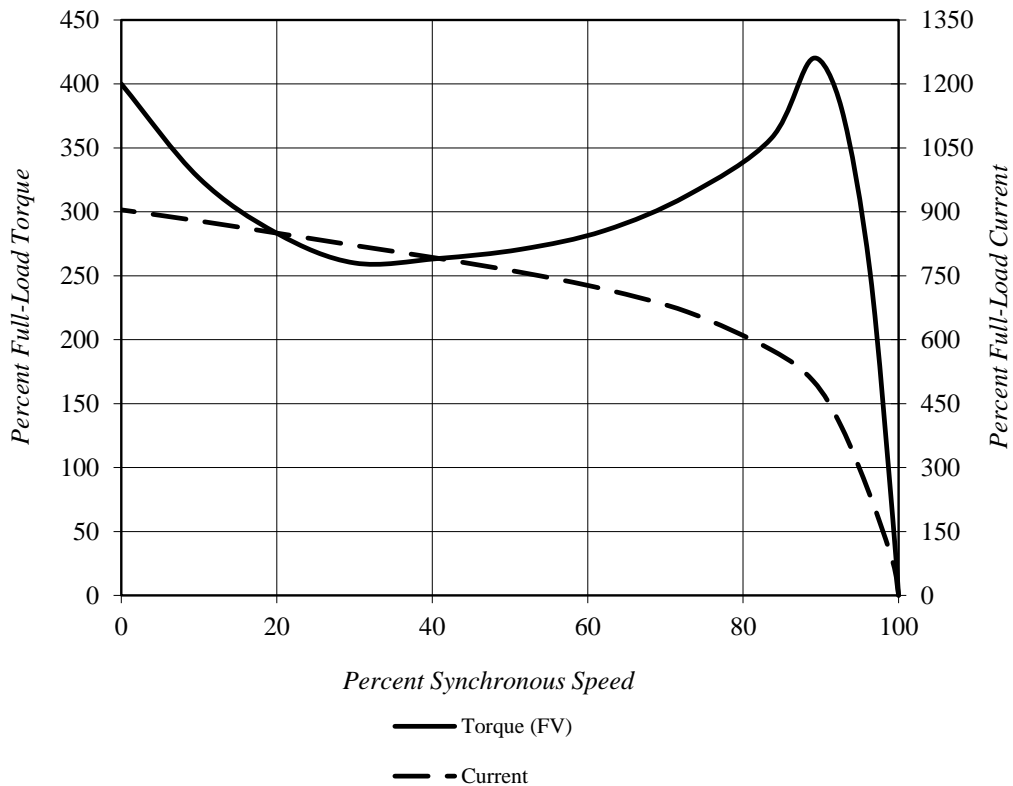
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0114SDMW7GS-PL			<b>FLAmps:</b>	22
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	415 V	<b>Frame:</b>	160M
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	11	<b>Rotor Inertia:</b>	2.4 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1470	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4011 (11kW)

<b>Locked Rotor Amps:</b>	199 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	400%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	420%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	52 lb-ft		

### Design Values



**Comments:** PROJECT -  
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**D.E.Curve #:** GH4011 (11kW)

**Prepared by:** Zichao Xie

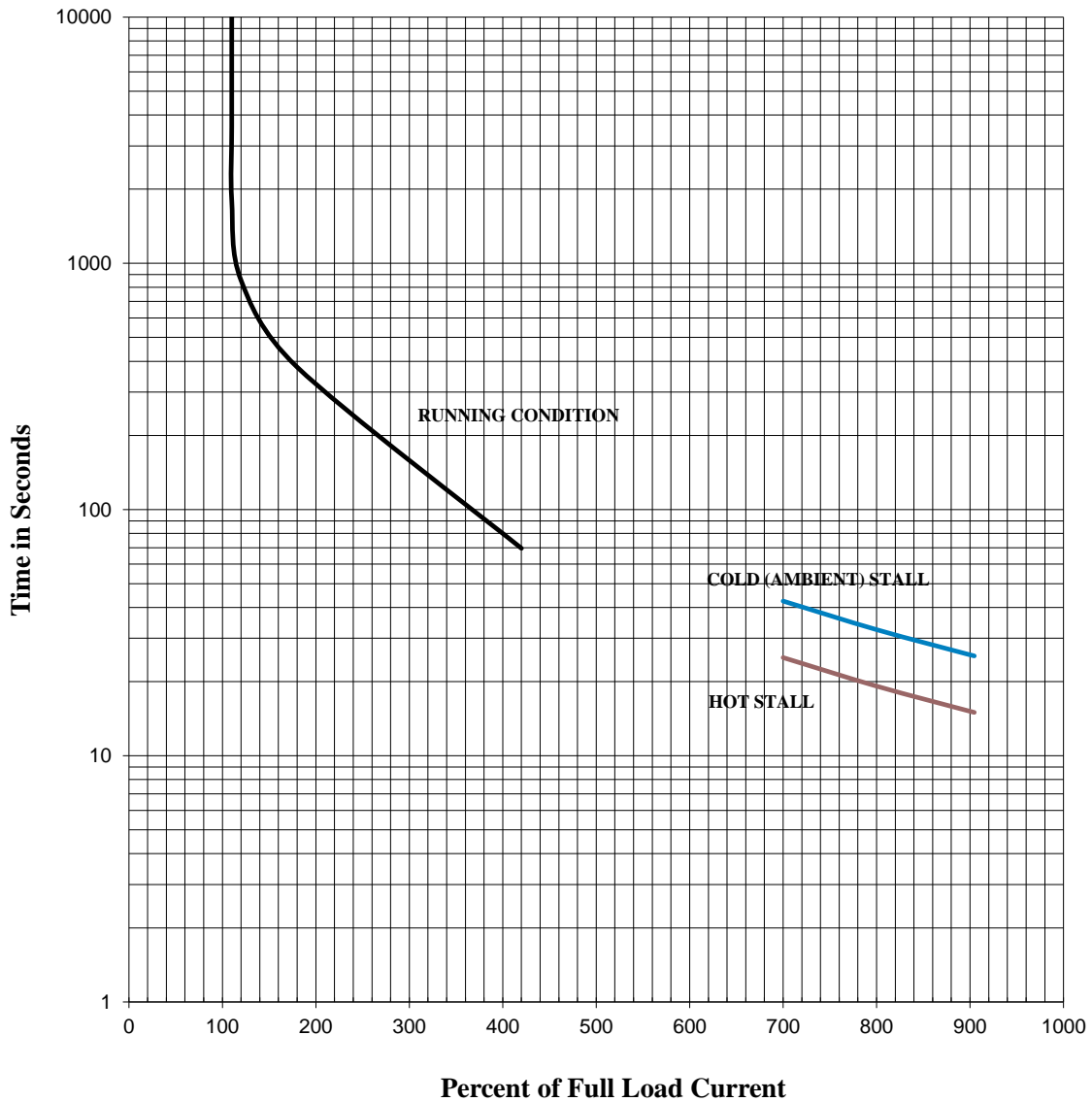
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# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0114SDMW7GS-PL			<b>FLAmps:</b>	22
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	415 V	<b>Frame:</b>	160M
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	11	<b>Rotor Inertia:</b>	2.4 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1470	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4011 (11kW)



**Comments:** PROJECT -  
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**D.E.Curve #:** GH4011 (11kW)

**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: 380	3 PH / 50 Hz	S. RPM: 1500
FRAME: 160M	ENCL: TEFC	FLAMPS: 23	FLRPM: 1465
FORM: FBKL1	S.F.: -	IEC DESIGN NE	INSUL CLASS: F
TYPE: IKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0114SDMW7GS-PL		kW: 11	
NOM. EFF.: 91.4	MIN. EFF.: -	cosØ 0.81	

**AMPERAGE**

LOCKED ROTOR: 180

**TORQUES**

FULL LOAD (lb-ft.): 53  
LOCKED ROTOR (%): 325  
BREAK DOWN (%): 360

**\*\*BEARINGS:**

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

**EFFICIENCY**

FULL LOAD: 91.5  
3/4 LOAD: 91.1  
1/2 LOAD: 89.4

**POWER FACTOR**

FULL LOAD: 81.0  
3/4 LOAD: 76.5  
1/2 LOAD: 66.7

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



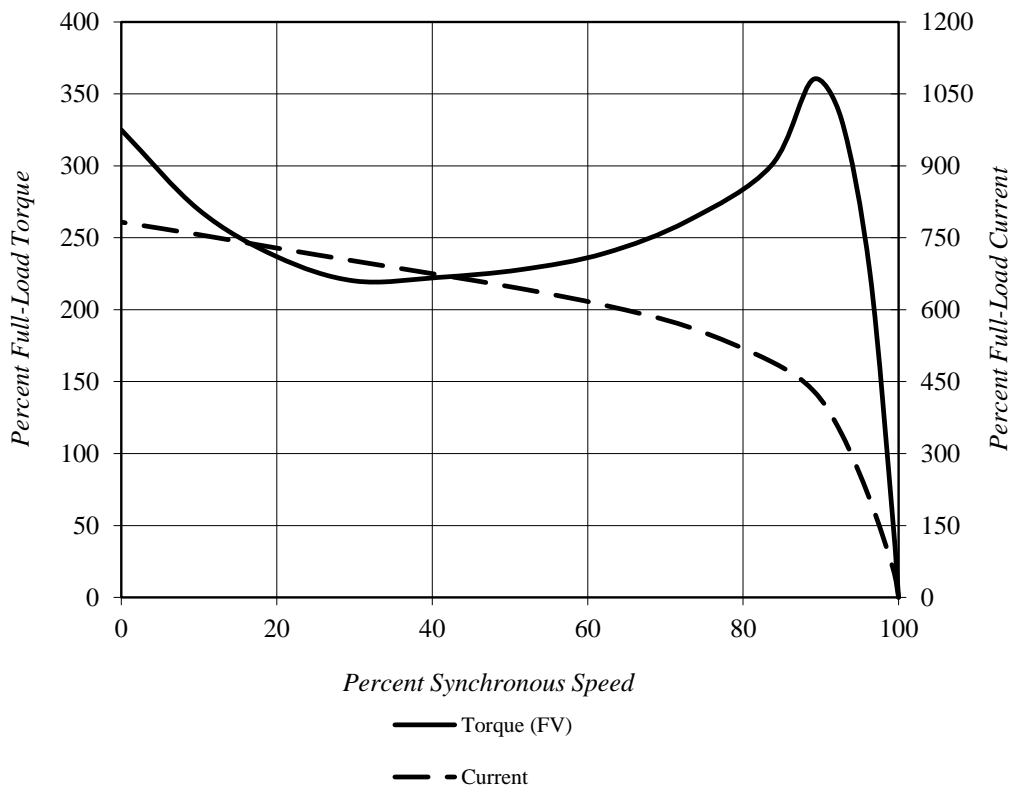
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0114SDMW7GS-PL			<b>FLAmps:</b>	23
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	380 V	<b>Frame:</b>	160M
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	11	<b>Rotor Inertia:</b>	2.4 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1465	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4011 (11kW)

<b>Locked Rotor Amps:</b>	180 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	325%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	360%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	53 lb-ft		

### Design Values



**Comments:** PROJECT -  
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**Prepared by:** Zichao Xie

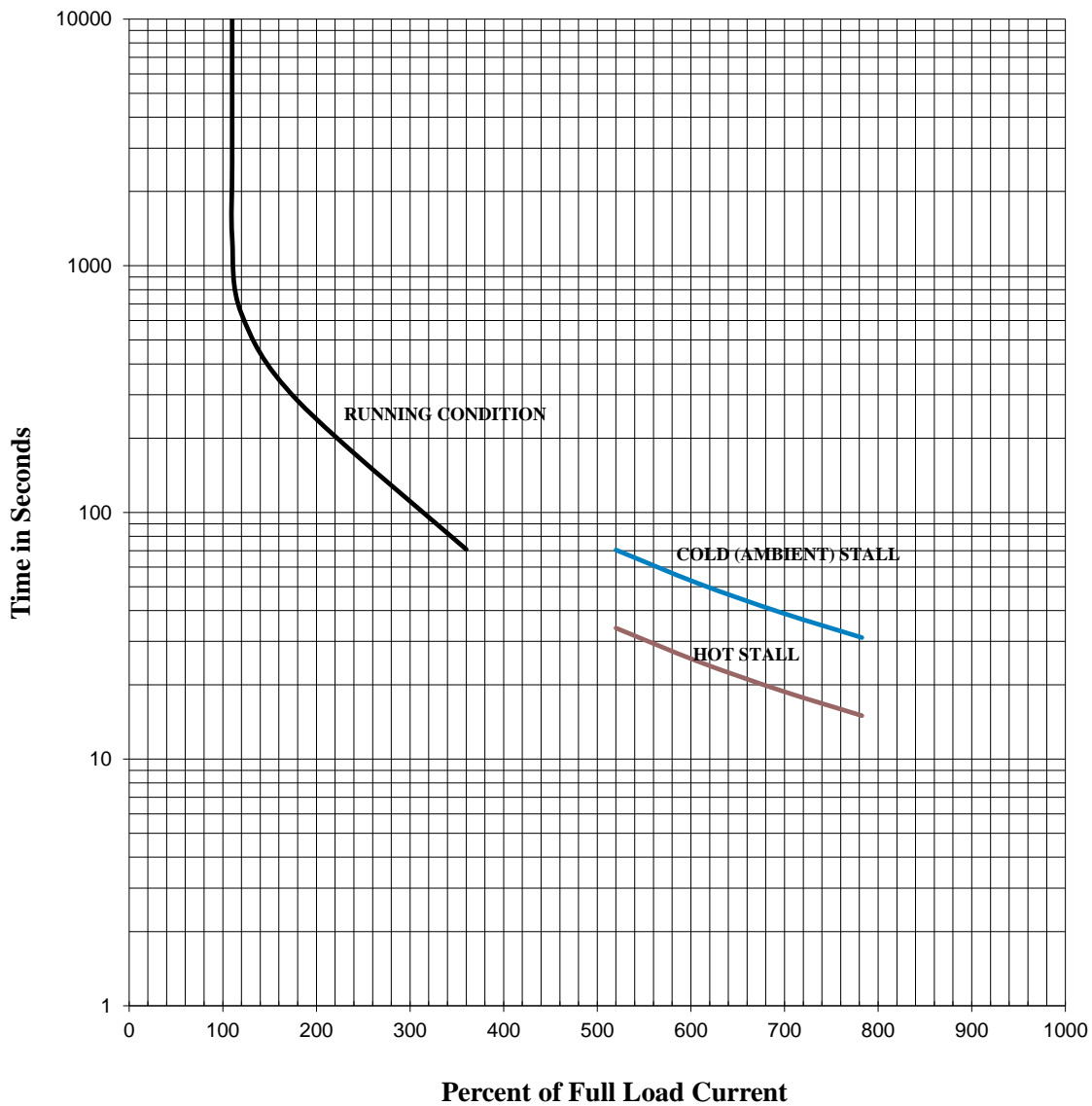
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# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0114SDMW7GS-PL			<b>FLAmps:</b>	23
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	380 V	<b>Frame:</b>	160M
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	11	<b>Rotor Inertia:</b>	2.4 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1465	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4011 (11kW)



**Comments:** PROJECT -  
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**D.E.Curve #:** GH4011 (11kW)

**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.: 15	VOLTS: 460	3 PH / 60 Hz	S. RPM: 1800
FRAME: 160M	ENCL: TEFC	FLAMPS: 19.4	FLRPM: 1775
FORM: FBKL1	S.F.: 1.15	NEMA DESIGN: A	INSUL CLASS: F
TYPE: IKKH	AMB.: 40°C	CODE: L	DUTY: Cont.
MODEL No.: 0114SDMW7GS-PL		kW: 11	
NOM. EFF.: 92.4	MIN. EFF.: -	P.F.: 76.5	

**AMPERAGE**

LOCKED ROTOR: 188

**TORQUES**

FULL LOAD (lb-ft.): 43  
LOCKED ROTOR (%): 430  
BREAK DOWN (%): 430

**\*\*BEARINGS:**

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

**EFFICIENCY**

FULL LOAD: 92.6  
3/4 LOAD: 91.6  
1/2 LOAD: 89.0

**POWER FACTOR**

FULL LOAD: 76.8  
3/4 LOAD: 70.8  
1/2 LOAD: 59.4

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

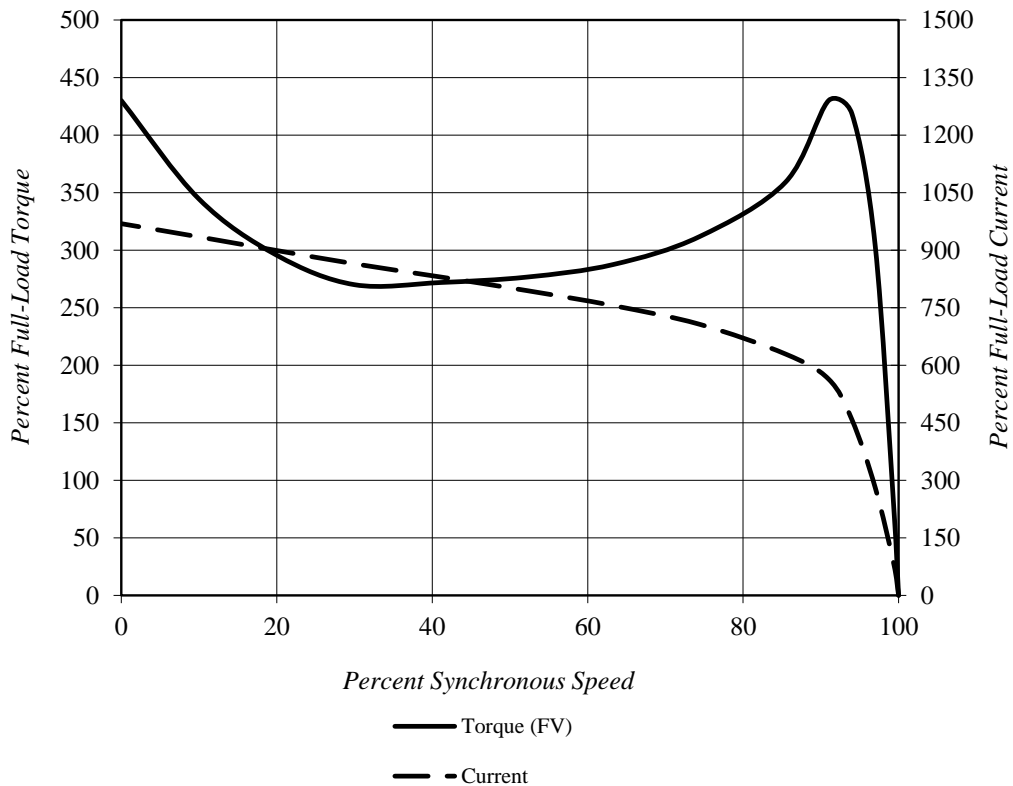
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0114SDMW7GS-PL			<b>FLAmps:</b>	19.4
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	460 V	<b>Frame:</b>	160M
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 60 Hz	<b>Ins. Class:</b>	F
<b>HP:</b>	15	<b>Rotor Inertia:</b>	2.4 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1775	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4011 (11kW)

<b>Locked Rotor Amps:</b>	188 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	430%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	430%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	43 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
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**D.E.Curve #:** GH4011 (11kW)

**Prepared by:** Zichao Xie

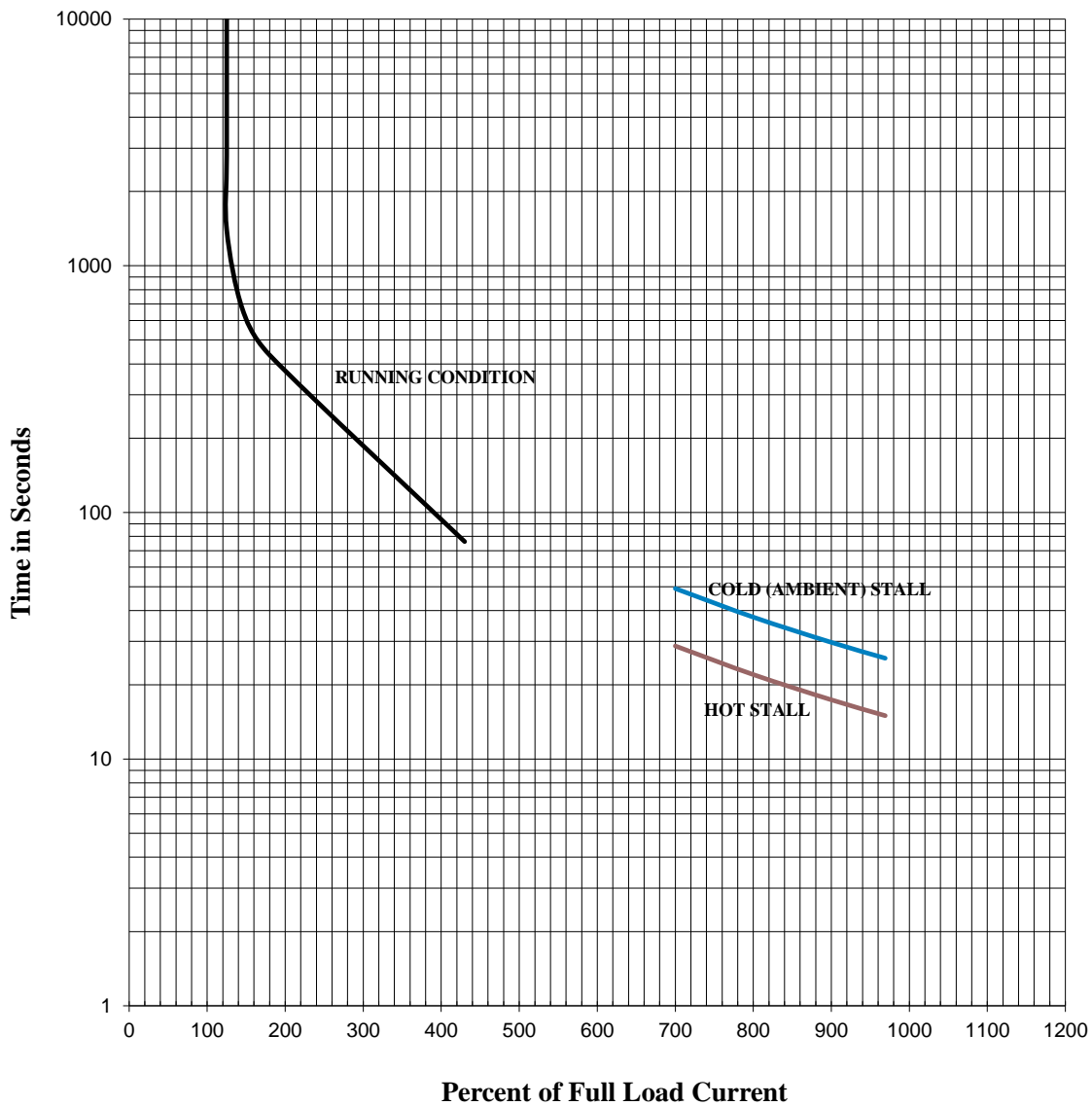
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0114SDMW7GS-PL			<b>FLAmps:</b>	19.4
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	460 V	<b>Frame:</b>	160M
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 60 Hz	<b>Ins. Class:</b>	F
<b>HP:</b>	15	<b>Rotor Inertia:</b>	2.4 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1775	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4011 (11kW)



**Comments:** PROJECT - \_\_\_\_\_  
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**D.E.Curve #:** GH4011 (11kW)

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