

UNIT: mm

ROTATION:  
CCW  
VIEW FROM:  
ODE

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.

B14-FLANGE MOTOR OL DRAWING IEC GLOBAL	TYPE: 2-4-6P - 400V	TOLERANCES					
	FRAME: 160M	X. $\pm 2.0$ XX $\pm 0.5$ XXX $\pm 0.1$					
3HFN000319		MAXIMUM MOTOR WEIGHT					DRAWN BY: HIEN NGUYEN CHECK BY: B.X.QUYNH APPROVED BY: JAY BUGBEE <a href="http://www.toshiba.com/ind">www.toshiba.com/ind</a>
<b>TOSHIBA</b> TOSHIBA INTERNATIONAL CORPORATION		- lbs. - kgs.	NO	REVISION	DRAWN BY	DATE	

**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: 3000
FRAME: 160M	ENCL: TEFC	FLAMPS: 20	FLRPM: 2930
FORM: FCKL1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: IKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0112SDMW7KS-PL		kW: 11	
NOM. EFF.: 91.2	MIN. EFF.: -	cosØ 0.86	

**AMPERAGE**

LOCKED ROTOR: 142

**TORQUES**

FULL LOAD (lb-ft.): 26  
LOCKED ROTOR (%): 235  
BREAK DOWN (%): 305

**\*\*BEARINGS:**

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

**EFFICIENCY**

FULL LOAD: 91.6  
3/4 LOAD: 91.2  
1/2 LOAD: 89.4

**POWER FACTOR**

FULL LOAD: 86.1  
3/4 LOAD: 82.7  
1/2 LOAD: 74.6

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:** 8/5/2020

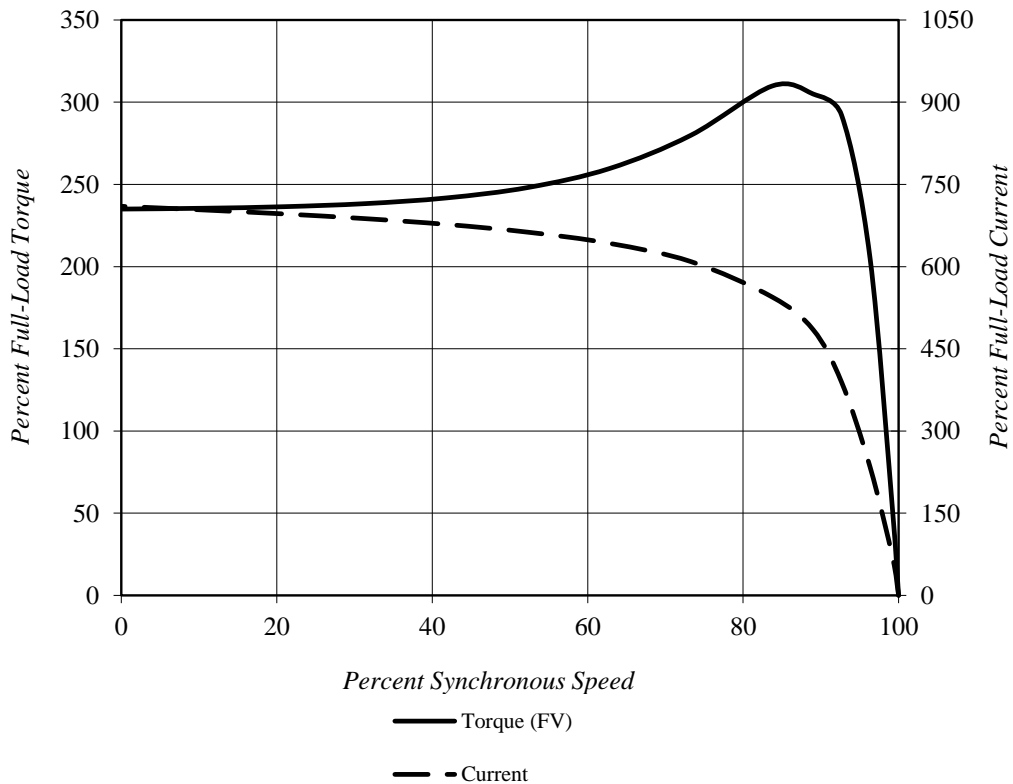
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0112SDMW7KS-PL			<b>FLAmps:</b>	20
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	400 V	<b>Frame:</b>	160M
<b>Pole:</b>	2	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	11	<b>Rotor Inertia:</b>	1.2 lb-ft <sup>2</sup>	<b>Date:</b>	8/5/2020
<b>FLRPM:</b>	2930	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2011 (11kW)

<b>Locked Rotor Amps:</b>	142 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	235%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	305%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	26 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
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**D.E.Curve #:** GH2011 (11kW)

**Prepared by:** Zichao Xie

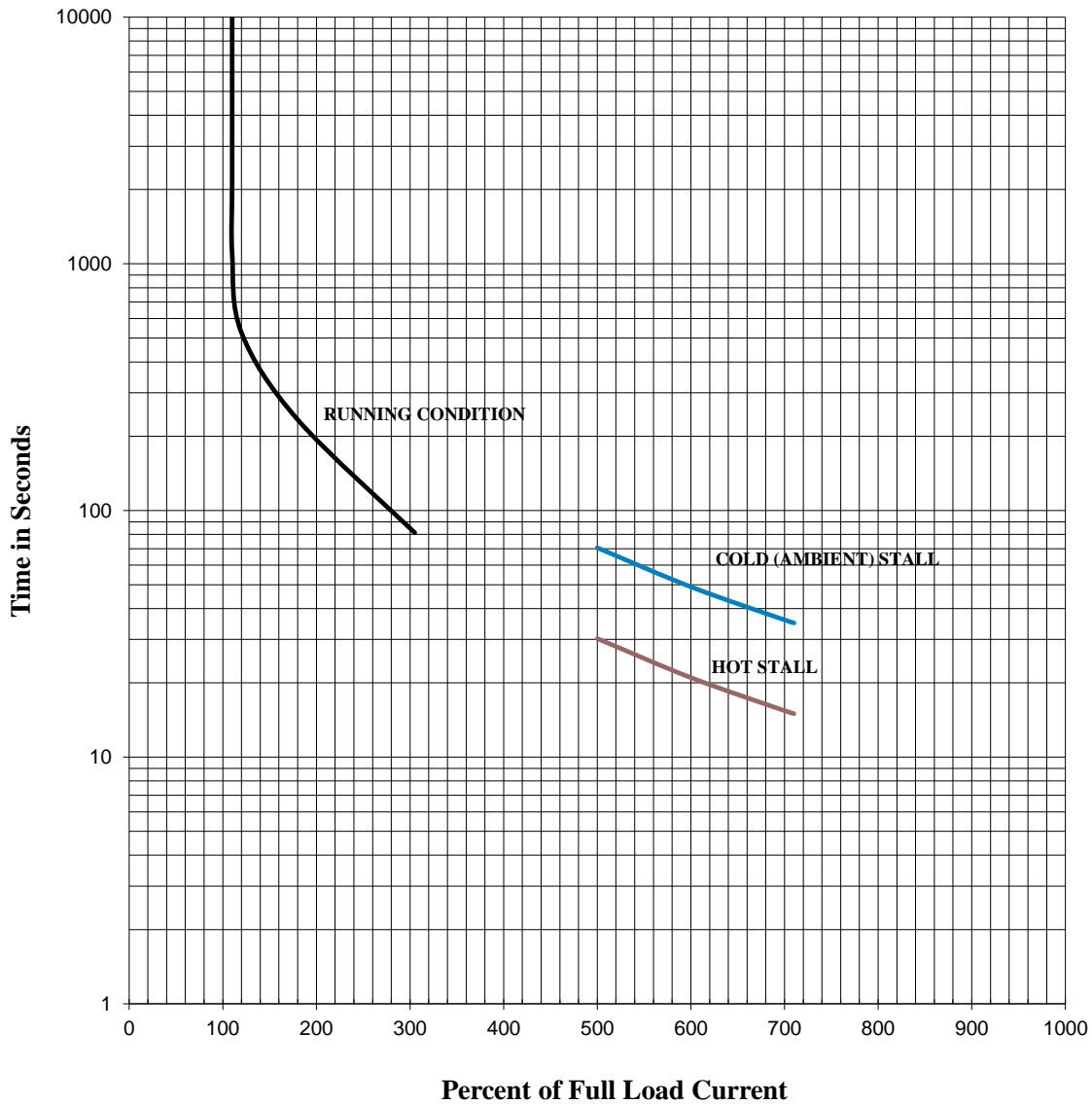
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0112SDMW7KS-PL			<b>FLAmps:</b>	20
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	400 V	<b>Frame:</b>	160M
<b>Pole:</b>	2	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	11	<b>Rotor Inertia:</b>	1.2 lb-ft <sup>2</sup>	<b>Date:</b>	8/5/2020
<b>FLRPM:</b>	2930	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2011 (11kW)



**Comments:** PROJECT -  
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**D.E. Curve #:** GH2011 (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: 3000
FRAME: 160M	ENCL: TEFC	FLAMPS: 19.8	FLRPM: 2935
FORM: FCKL1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: IKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0112SDMW7KS-PL		kW: 11	
NOM. EFF.: 91.2	MIN. EFF.: -	cosØ 0.84	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 147	FULL LOAD (lb-ft.): 26	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 255	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 325	

EFFICIENCY	POWER FACTOR
FULL LOAD: 91.9	FULL LOAD: 84.2
3/4 LOAD: 91.4	3/4 LOAD: 79.8
1/2 LOAD: 89.4	1/2 LOAD: 70.2

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:** 8/5/2020

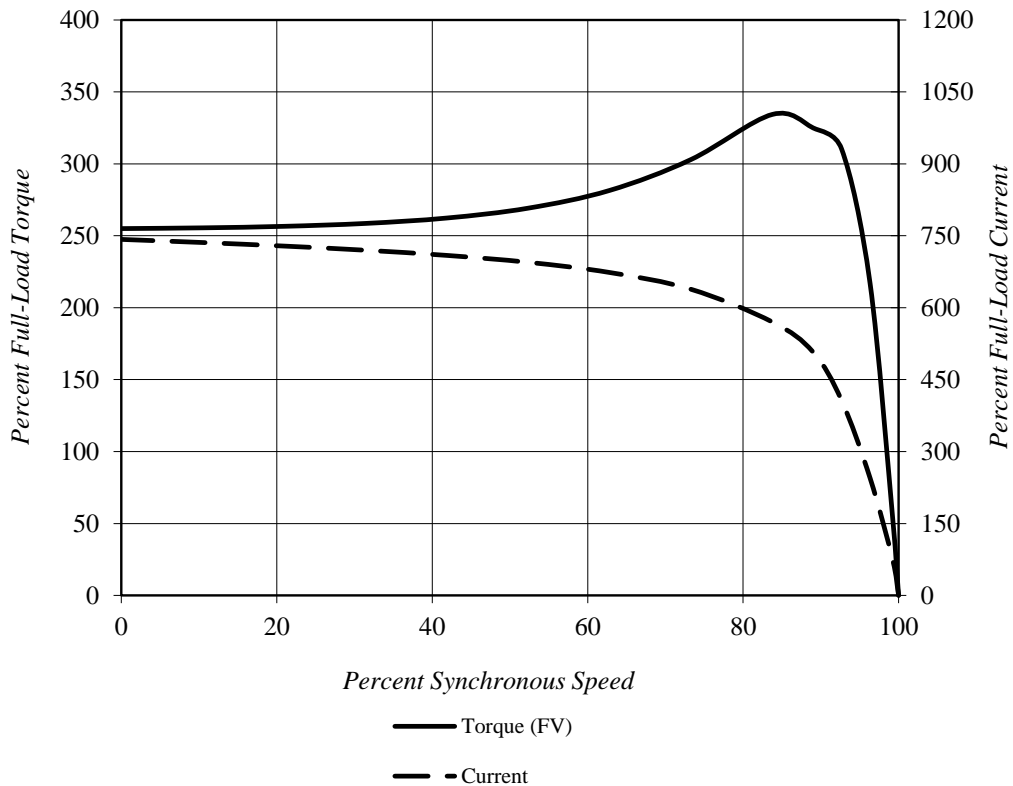
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0112SDMW7KS-PL			<b>FLAmps:</b>	19.8
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	415 V	<b>Frame:</b>	160M
<b>Pole:</b>	2	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	11	<b>Rotor Inertia:</b>	1.2 lb-ft <sup>2</sup>	<b>Date:</b>	8/5/2020
<b>FLRPM:</b>	2935	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2011 (11kW)

<b>Locked Rotor Amps:</b>	147 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	255%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	325%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	26 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
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**D.E.Curve #:** GH2011 (11kW)

**Prepared by:** Zichao Xie

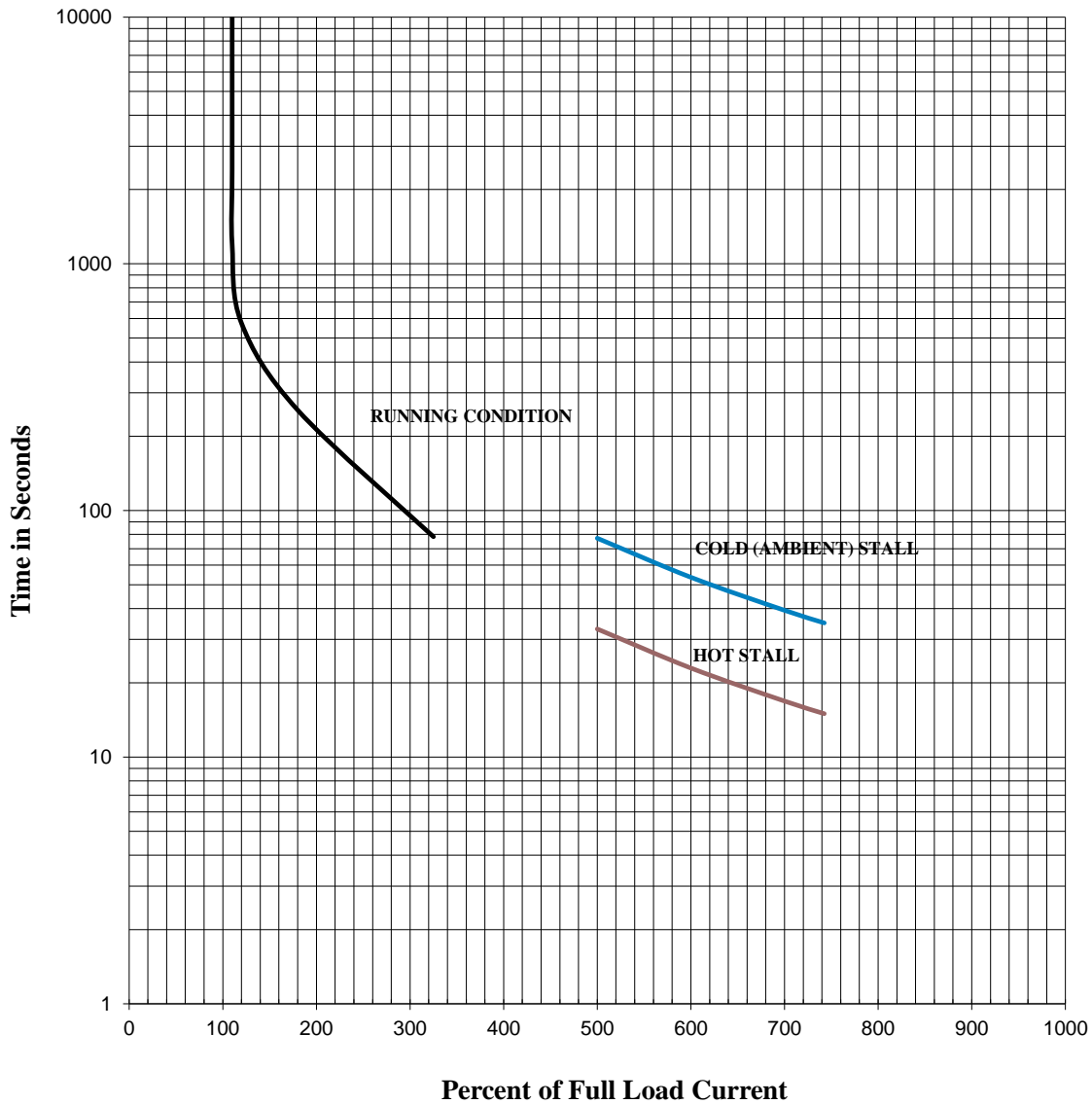
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0112SDMW7KS-PL			<b>FLAmps:</b>	19.8
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	415 V	<b>Frame:</b>	160M
<b>Pole:</b>	2	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	11	<b>Rotor Inertia:</b>	1.2 lb-ft <sup>2</sup>	<b>Date:</b>	8/5/2020
<b>FLRPM:</b>	2935	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2011 (11kW)



**Comments:** PROJECT \_\_\_\_\_  
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**D.E.Curve #:** GH2011 (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: 380	3 PH / 50 Hz	S. RPM: 3000
FRAME: 160M	ENCL: TEFC	FLAMPS: 21	FLRPM: 2925
FORM: FCKL1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: IKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0112SDMW7KS-PL		kW: 11	
NOM. EFF.: 91.2	MIN. EFF.: -	cosØ 0.88	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 134	FULL LOAD (lb-ft.): 26	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 210	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 275	

EFFICIENCY	POWER FACTOR
FULL LOAD: 91.1	FULL LOAD: 88.1
3/4 LOAD: 90.9	3/4 LOAD: 85.9
1/2 LOAD: 89.4	1/2 LOAD: 79.8

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:** 8/5/2020



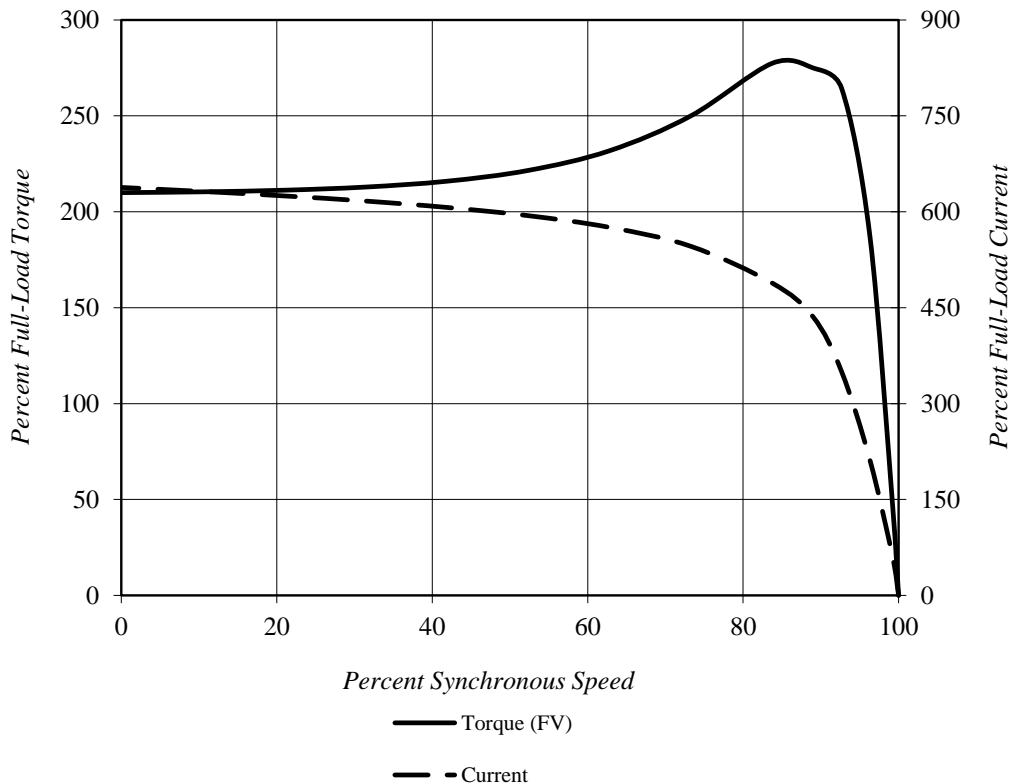
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0112SDMW7KS-PL			<b>FLAmps:</b>	21
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	380 V	<b>Frame:</b>	160M
<b>Pole:</b>	2	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	11	<b>Rotor Inertia:</b>	1.2 lb-ft <sup>2</sup>	<b>Date:</b>	8/5/2020
<b>FLRPM:</b>	2925	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2011 (11kW)

<b>Locked Rotor Amps:</b>	134 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	210%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	275%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	26 lb-ft		

### Design Values



**Comments:** PROJECT -  
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**D.E.Curve #:** GH2011 (11kW)

**Prepared by:** Zichao Xie

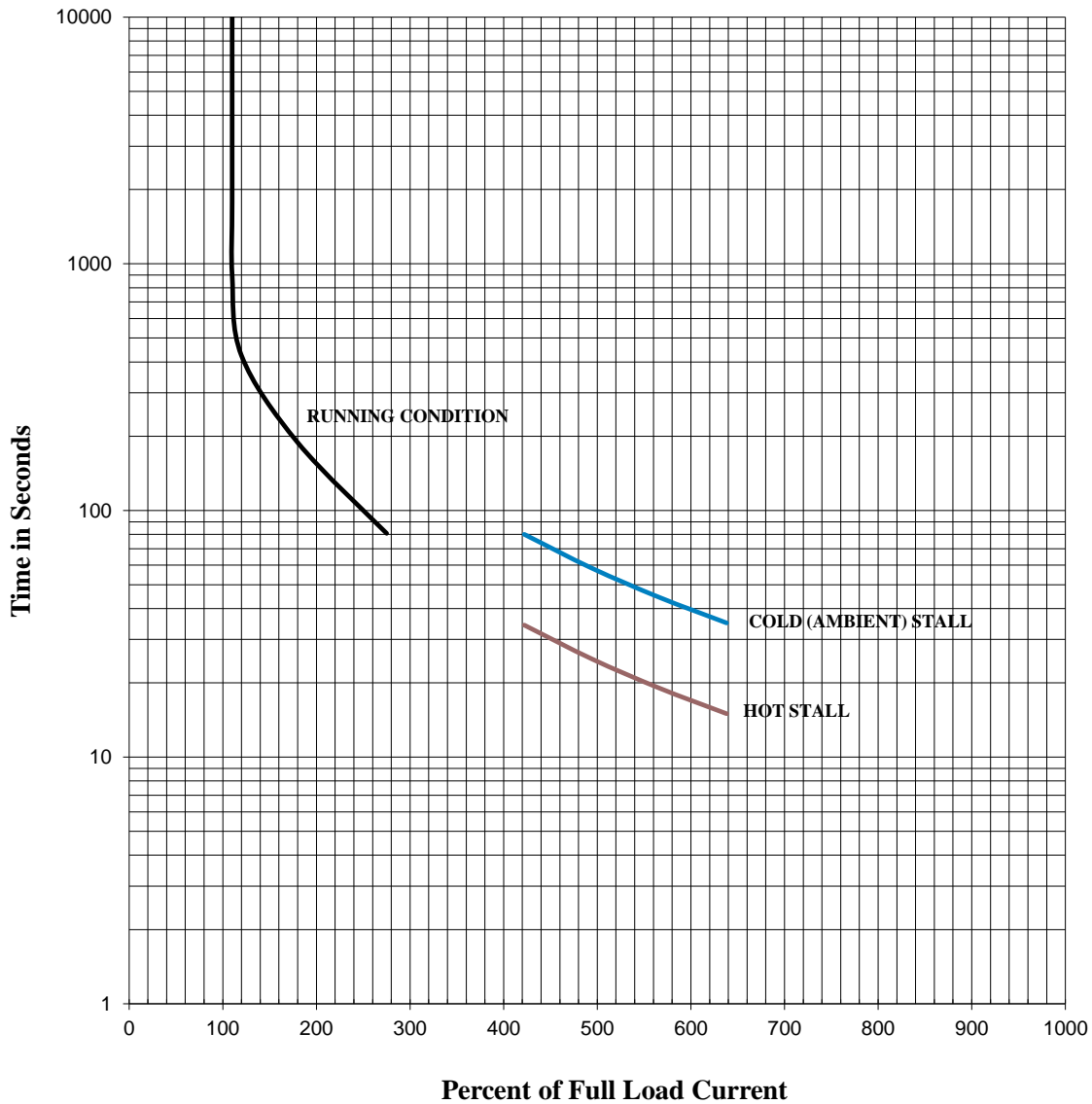
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0112SDMW7KS-PL			<b>FLAmps:</b>	21
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	380 V	<b>Frame:</b>	160M
<b>Pole:</b>	2	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	11	<b>Rotor Inertia:</b>	1.2 lb-ft <sup>2</sup>	<b>Date:</b>	8/5/2020
<b>FLRPM:</b>	2925	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2011 (11kW)



**Comments:** PROJECT -  
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**D.E.Curve #:** GH2011 (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: 3600
FRAME: 160M	ENCL: TEFC	FLAMPS: 17.8	FLRPM: 3550
FORM: FCKL1	S.F.: 1.15	NEMA DESIGN: A	INSUL CLASS: F
TYPE: IKKH	AMB.: 40°C	CODE: J	DUTY: Cont.
MODEL No.: 0112SDMW7KS-PL		kW: 11	
NOM. EFF.: 91.0	MIN. EFF.: -	P.F.: 85.0	

**AMPERAGE**

LOCKED ROTOR: 137

**TORQUES**

FULL LOAD (lb-ft.): 22  
LOCKED ROTOR (%): 275  
BREAK DOWN (%): 390

**\*\*BEARINGS:**

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

**EFFICIENCY**

FULL LOAD: 91.1  
3/4 LOAD: 90.3  
1/2 LOAD: 88.0

**POWER FACTOR**

FULL LOAD: 85.2  
3/4 LOAD: 81.7  
1/2 LOAD: 73.5

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:** 1/8/2020

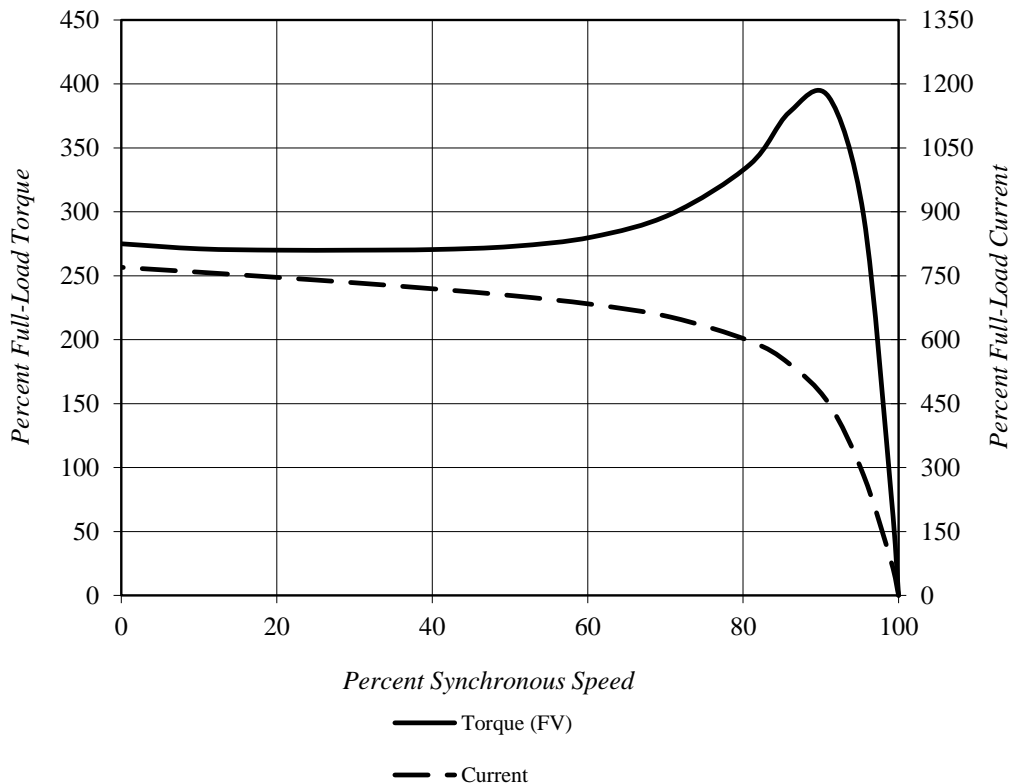
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0112SDMW7KS-PL			<b>FLAmps:</b>	17.8
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	460 V	<b>Frame:</b>	160M
<b>Pole:</b>	2	<b>Frequency:</b>	3 PH / 60 Hz	<b>Ins. Class:</b>	F
<b>HP:</b>	15	<b>Rotor Inertia:</b>	1.2 lb-ft <sup>2</sup>	<b>Date:</b>	1/8/2020
<b>FLRPM:</b>	3550	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2011 (11kW)

<b>Locked Rotor Amps:</b>	137 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	275%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	390%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	22 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
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**D.E.Curve #:** GH2011 (11kW)

**Prepared by:** Zichao Xie

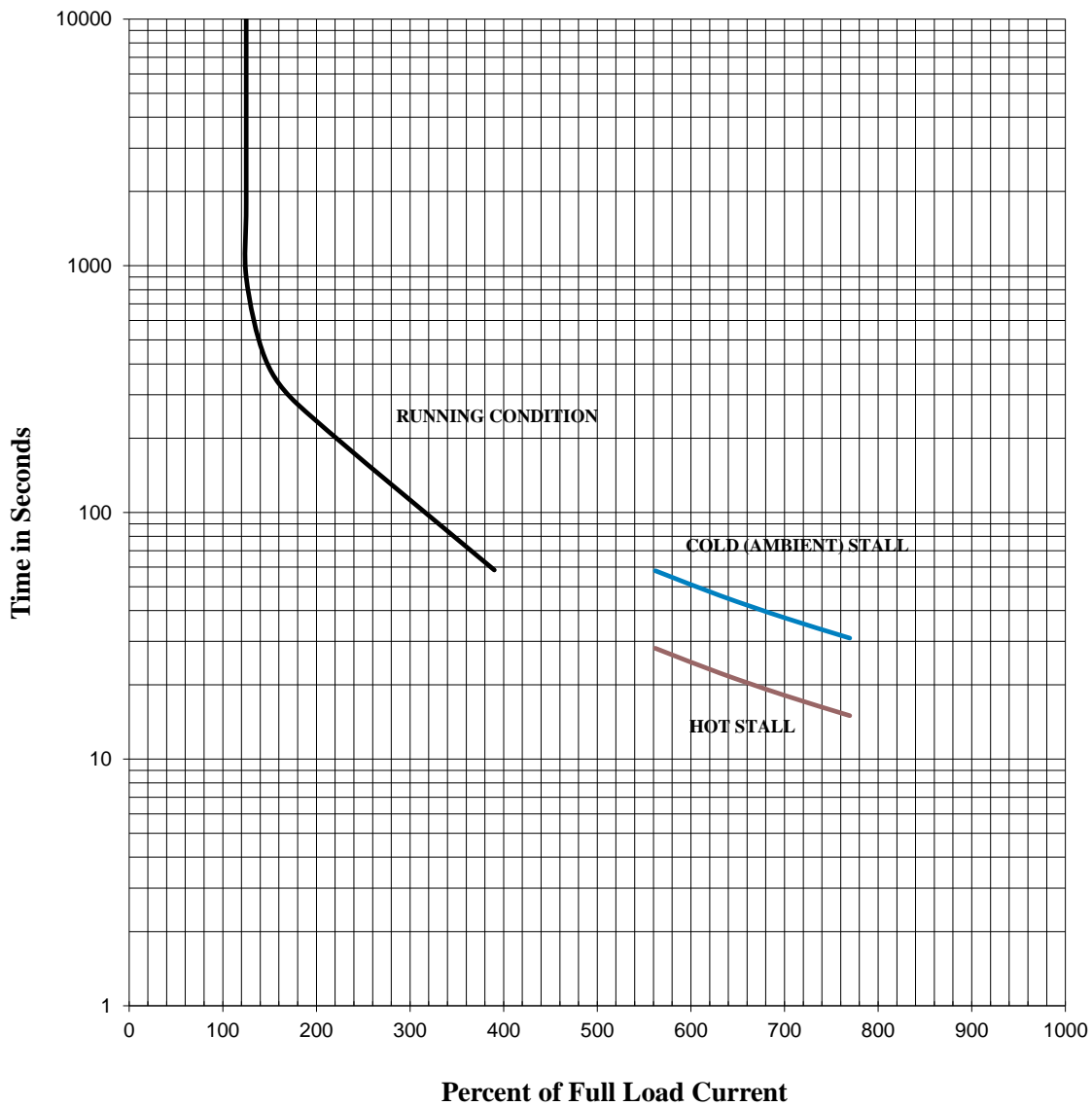
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0112SDMW7KS-PL			<b>FLAmps:</b>	17.8
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	460 V	<b>Frame:</b>	160M
<b>Pole:</b>	2	<b>Frequency:</b>	3 PH / 60 Hz	<b>Ins. Class:</b>	F
<b>HP:</b>	15	<b>Rotor Inertia:</b>	1.2 lb-ft <sup>2</sup>	<b>Date:</b>	1/8/2020
<b>FLRPM:</b>	3550	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2011 (11kW)



**Comments:** PROJECT -  
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**D.E.Curve #:** GH2011 (11kW)

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