

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.

B14-FLANGE MOTOR OL DRAWING IEC GLOBAL		TYPE: 2-4-6P 400V	TOLERANCES							
3HFN000320		FRAME: 160L	X. $\pm 2.0$							
<b>TOSHIBA</b> TOSHIBA INTERNATIONAL CORPORATION		MAXIMUM MOTOR WEIGHT								DRAWN BY: HIEN, NGUYEN CHECK BY: B.X.QUYNH APPROVED BY: JAY BUGBEE <a href="http://www.toshiba.com/find">www.toshiba.com/find</a>
		- lbs. - kgs.		NO	REVISION	DRAWN BY	DATE	CHECK		

<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: 160L	ENCL: TEFC	FLAMPS: 29	FLRPM: 1470
FORM: FBKL1	S.F.: -	IEC DESIGN NE	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0154SDMW7KS-PL		kW: 15	
NOM. EFF.: 92.1	MIN. EFF.: -	cosØ 0.80	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 245	FULL LOAD (lb-ft.): 72	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 330	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 375	

EFFICIENCY	POWER FACTOR
FULL LOAD: 92.3	FULL LOAD: 80.1
3/4 LOAD: 91.9	3/4 LOAD: 75.4
1/2 LOAD: 90.2	1/2 LOAD: 65.4

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

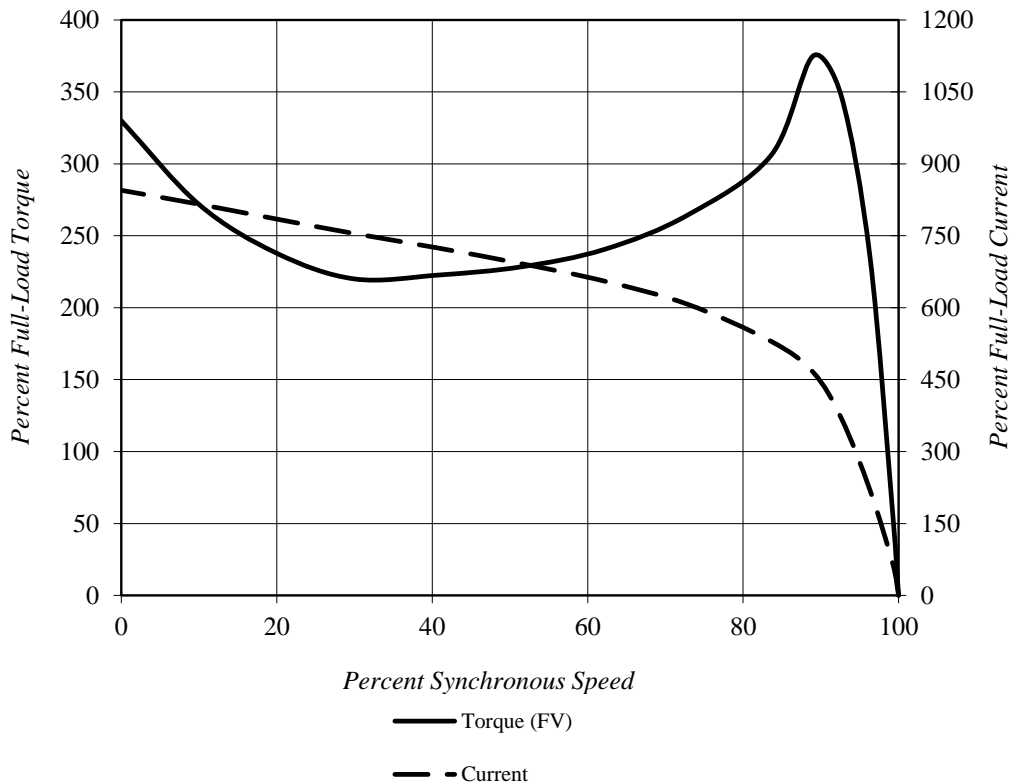
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0154SDMW7KS-PL			<b>FLAmps:</b>	29
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	400 V	<b>Frame:</b>	160L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	15	<b>Rotor Inertia:</b>	3.1 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1470	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4015 (15kW)

<b>Locked Rotor Amps:</b>	245 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	330%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	375%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	72 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
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**D.E.Curve #:** GH4015 (15kW)

**Prepared by:** Zichao Xie

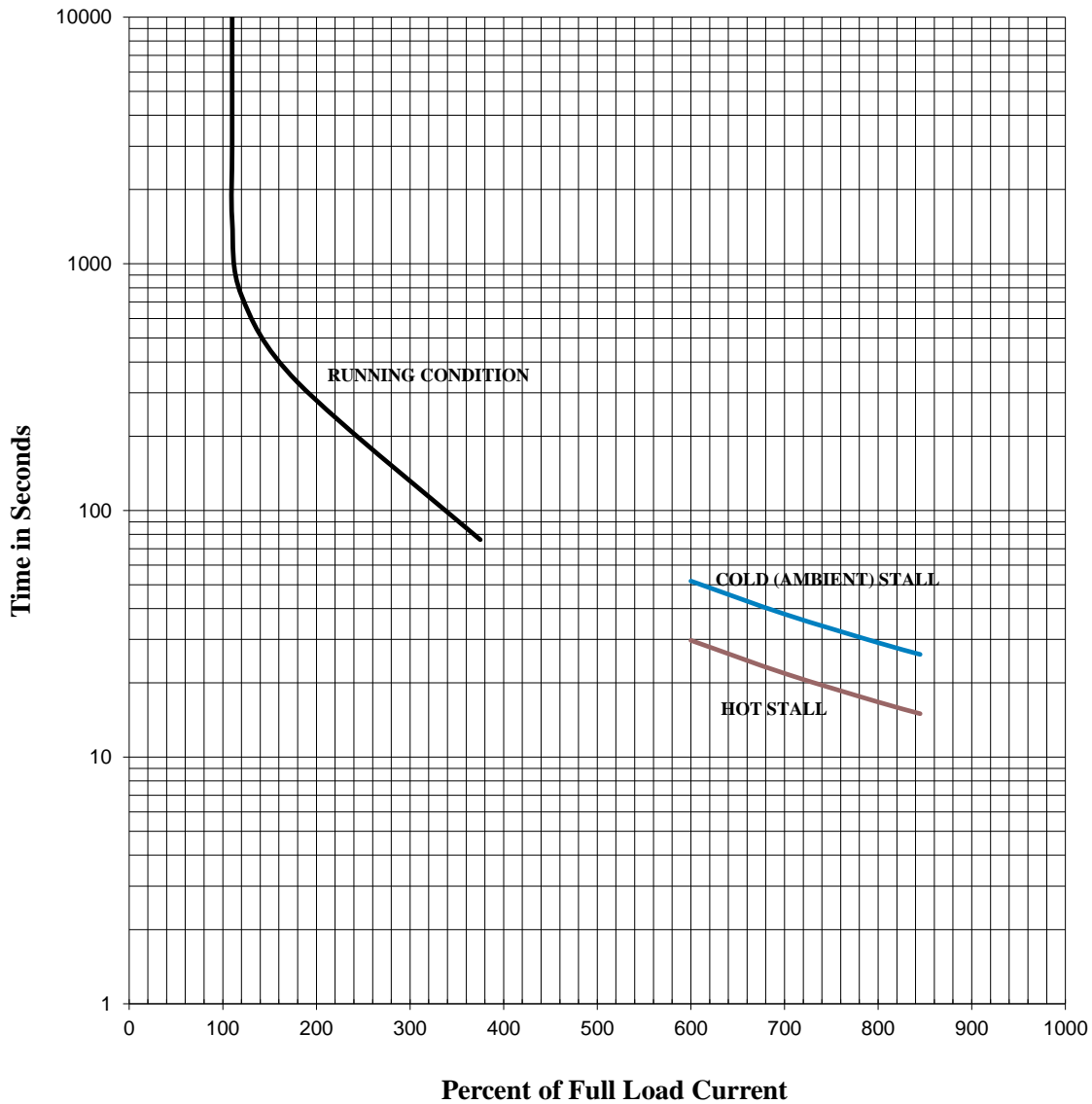
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0154SDMW7KS-PL			<b>FLAmps:</b>	29
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	400 V	<b>Frame:</b>	160L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	15	<b>Rotor Inertia:</b>	3.1 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1470	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4015 (15kW)



**Comments:** PROJECT -  
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**D.E. Curve #:** GH4015 (15kW)

**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: 160L	ENCL: TEFC	FLAMPS: 29	FLRPM: 1470
FORM: FBKL1	S.F.: -	IEC DESIGN NE	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0154SDMW7KS-PL		kW: 15	
NOM. EFF.: 92.1	MIN. EFF.: -	cosØ 0.78	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 256	FULL LOAD (lb-ft.): 72	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 380	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 395	

EFFICIENCY	POWER FACTOR
FULL LOAD: 92.4	FULL LOAD: 78.5
3/4 LOAD: 91.8	3/4 LOAD: 72.8
1/2 LOAD: 89.9	1/2 LOAD: 61.5

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:** 10/18/2019

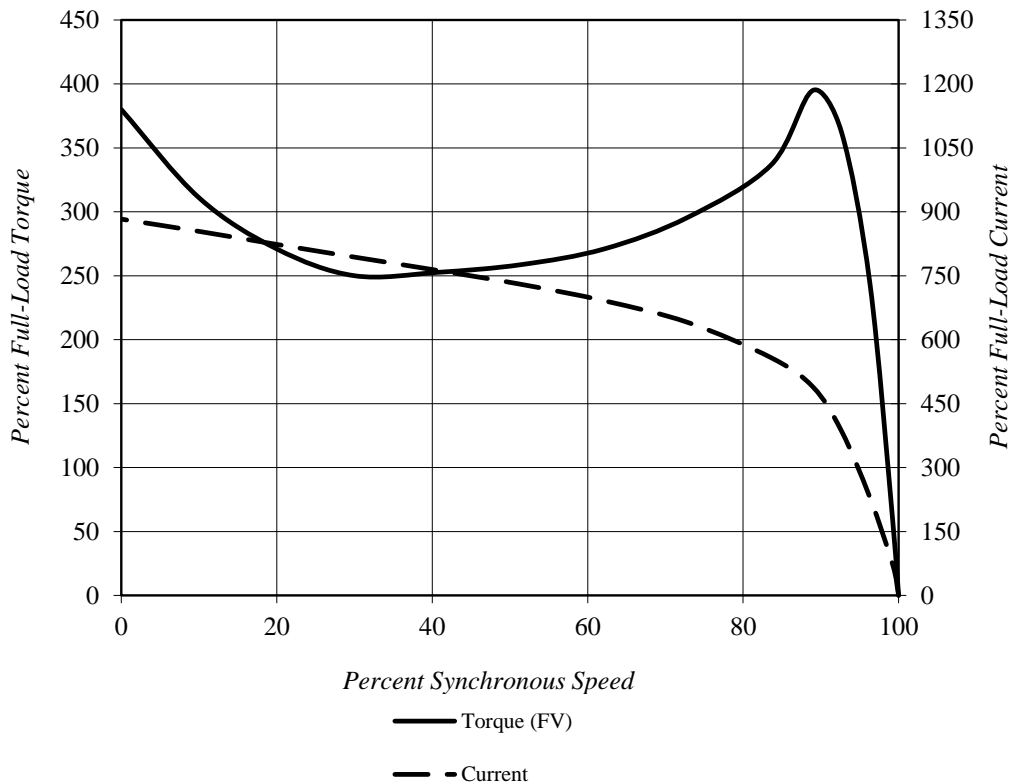
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0154SDMW7KS-PL			<b>FLAmps:</b>	29
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	415 V	<b>Frame:</b>	160L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	15	<b>Rotor Inertia:</b>	3.1 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1470	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4015 (15kW)

<b>Locked Rotor Amps:</b>	256 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	380%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	395%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	72 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
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**D.E.Curve #:** GH4015 (15kW)

**Prepared by:** Zichao Xie

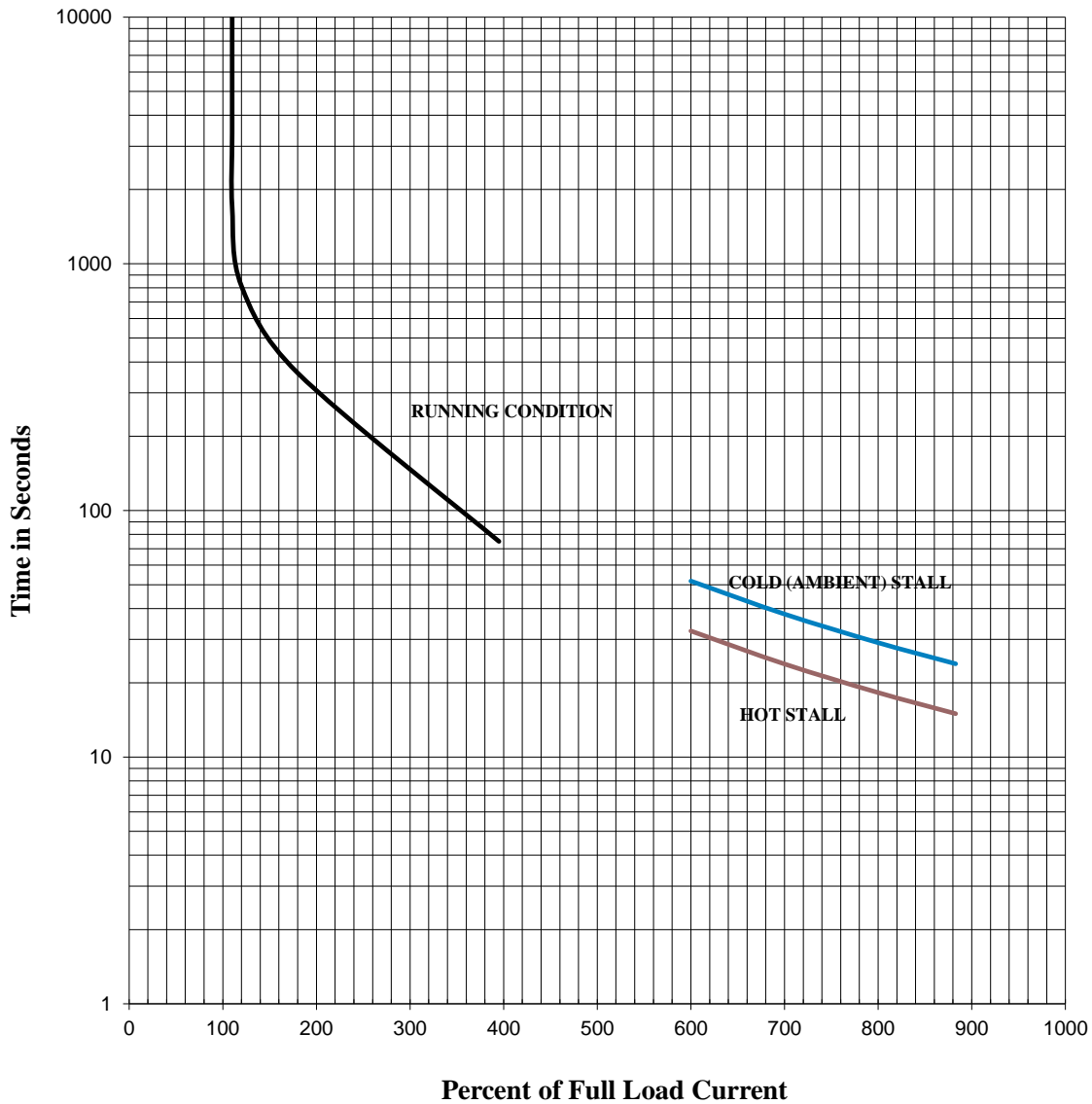
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0154SDMW7KS-PL			<b>FLAmps:</b>	29
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	415 V	<b>Frame:</b>	160L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	15	<b>Rotor Inertia:</b>	3.1 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1470	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4015 (15kW)



**Comments:** PROJECT -  
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**D.E. Curve #:** GH4015 (15kW)

**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: 160L	ENCL: TEFC	FLAMPS: 30	FLRPM: 1465
FORM: FBKL1	S.F.: -	IEC DESIGN NE	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0154SDMW7KS-PL		kW: 15	
NOM. EFF.: 92.1	MIN. EFF.: -	cosØ 0.82	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 231	FULL LOAD (lb-ft.): 72	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 310	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 340	

EFFICIENCY	POWER FACTOR
FULL LOAD: 91.8	FULL LOAD: 82.9
3/4 LOAD: 91.6	3/4 LOAD: 79.3
1/2 LOAD: 90.2	1/2 LOAD: 70.9

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:** 10/18/2019



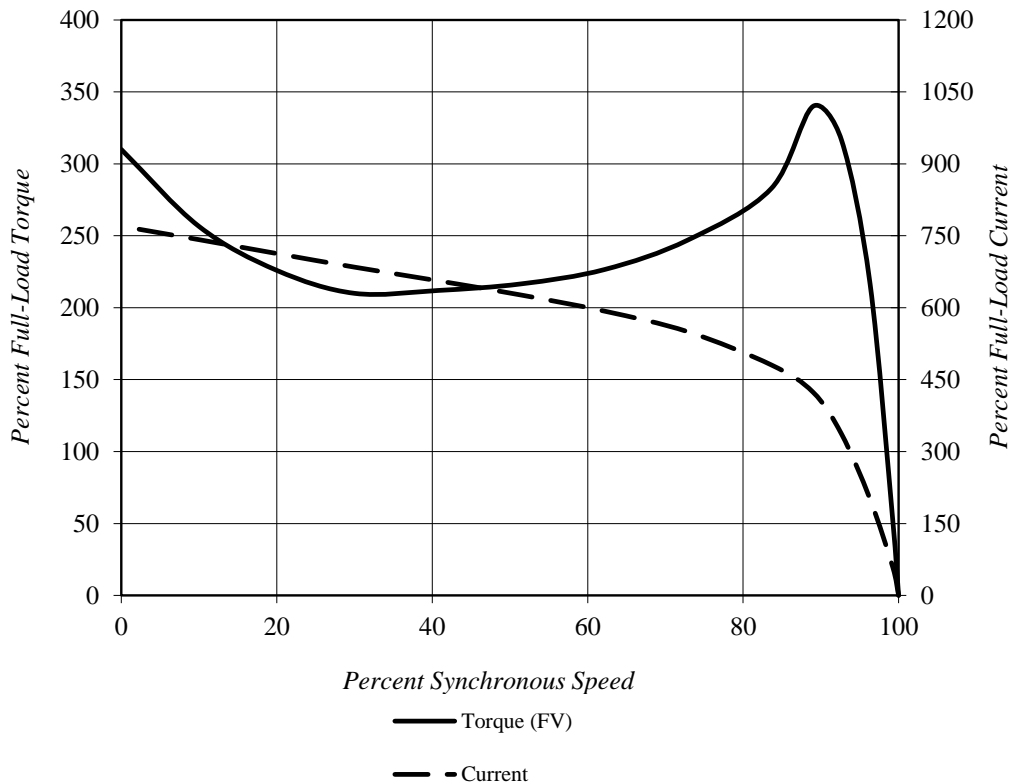
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0154SDMW7KS-PL			<b>FLAmps:</b>	30
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	380 V	<b>Frame:</b>	160L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	15	<b>Rotor Inertia:</b>	3.1 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1465	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4015 (15kW)

<b>Locked Rotor Amps:</b>	231 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	310%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	340%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	72 lb-ft		

### *Design Values*



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**D.E.Curve #:** GH4015 (15kW)

**Prepared by:** Zichao Xie

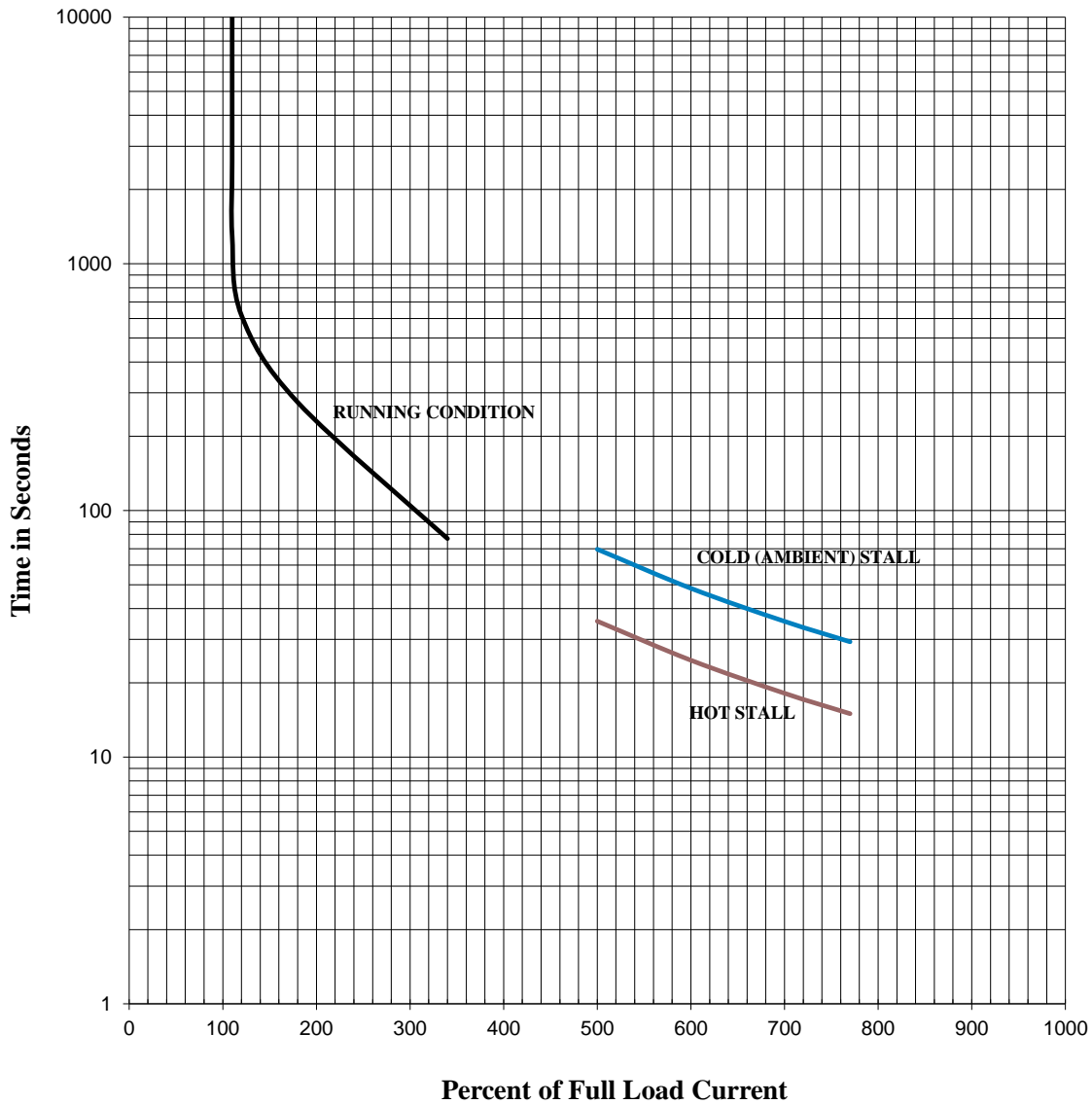
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# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0154SDMW7KS-PL			<b>FLAmps:</b>	30
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	380 V	<b>Frame:</b>	160L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 50 Hz	<b>Ins. Class:</b>	F
<b>KW:</b>	15	<b>Rotor Inertia:</b>	3.1 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1465	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4015 (15kW)



**Comments:** PROJECT -  
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**D.E. Curve #:** GH4015 (15kW)

**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.: 20	VOLTS: 460	3 PH / 60 Hz	S. RPM: 1800
FRAME: 160L	ENCL: TEFC	FLAMPS: 26	FLRPM: 1775
FORM: FBKL1	S.F.: 1.15	NEMA DESIGN: A	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: L	DUTY: Cont.
MODEL No.: 0154SDMW7KS-PL		kW: 15	
NOM. EFF.: 93.0	MIN. EFF.: -	P.F.: 79.0	

**AMPERAGE**

LOCKED ROTOR: 242

**TORQUES**

FULL LOAD (lb-ft.): 59  
LOCKED ROTOR (%): 405  
BREAK DOWN (%): 405

**\*\*BEARINGS:**

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

**EFFICIENCY**

FULL LOAD: 93.0  
3/4 LOAD: 92.2  
1/2 LOAD: 90.0

**POWER FACTOR**

FULL LOAD: 79.4  
3/4 LOAD: 74.4  
1/2 LOAD: 64.1

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

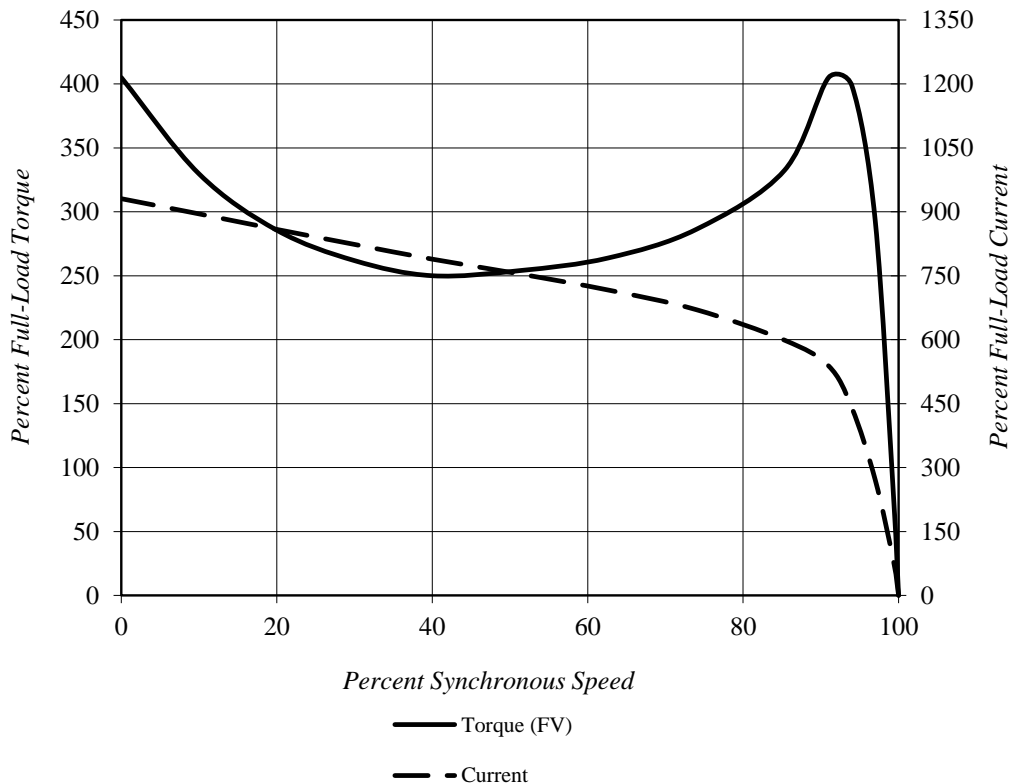
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0154SDMW7KS-PL			<b>FLAmps:</b>	26
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	460 V	<b>Frame:</b>	160L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 60 Hz	<b>Ins. Class:</b>	F
<b>HP:</b>	20	<b>Rotor Inertia:</b>	3.1 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1775	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4015 (15kW)

<b>Locked Rotor Amps:</b>	242 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	405%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	405%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	59 lb-ft		

### Design Values



**Comments:** PROJECT -  
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**D.E.Curve #:** GH4015 (15kW)

**Prepared by:** Zichao Xie

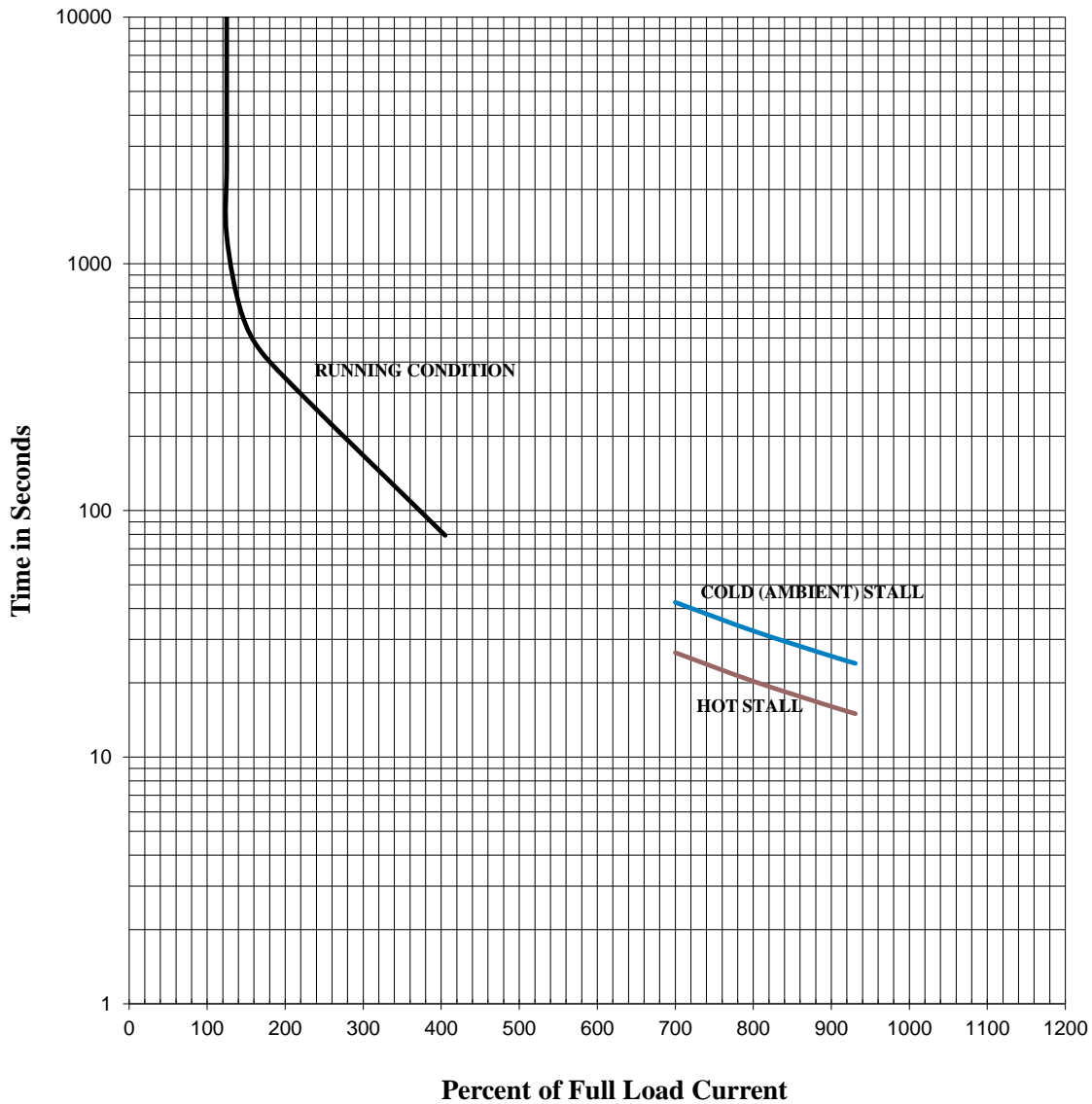
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# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0154SDMW7KS-PL			<b>FLAmps:</b>	26
<b>Enclosure:</b>	TEFC	<b>Voltage:</b>	460 V	<b>Frame:</b>	160L
<b>Pole:</b>	4	<b>Frequency:</b>	3 PH / 60 Hz	<b>Ins. Class:</b>	F
<b>HP:</b>	20	<b>Rotor Inertia:</b>	3.1 lb-ft <sup>2</sup>	<b>Date:</b>	10/18/2019
<b>FLRPM:</b>	1775	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH4015 (15kW)



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