


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							
3HFN000319		FRAME: 160M	X. $\pm 2.0$ XX $\pm 0.5$ XXX $\pm 0.1$							
<b>TOSHIBA</b> TOSHIBA INTERNATIONAL CORPORATION			MAXIMUM MOTOR WEIGHT - lbs. - kgs.							
				NO	REVISION	DRAWN BY	DATE	CHECK		

**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: 28	FLRPM: 2935
FORM: FCKL1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0152SDMW7KS-PL		kW: 15	
NOM. EFF.: 91.9	MIN. EFF.: -	cosØ 0.85	

**AMPERAGE**

LOCKED ROTOR: 214

**TORQUES**

FULL LOAD (lb-ft.): 36  
LOCKED ROTOR (%): 275  
BREAK DOWN (%): 375

**\*\*BEARINGS:**

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

**EFFICIENCY**

FULL LOAD: 92.0  
3/4 LOAD: 91.4  
1/2 LOAD: 89.4

**POWER FACTOR**

FULL LOAD: 85.6  
3/4 LOAD: 81.6  
1/2 LOAD: 72.5

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:** 8/5/2020

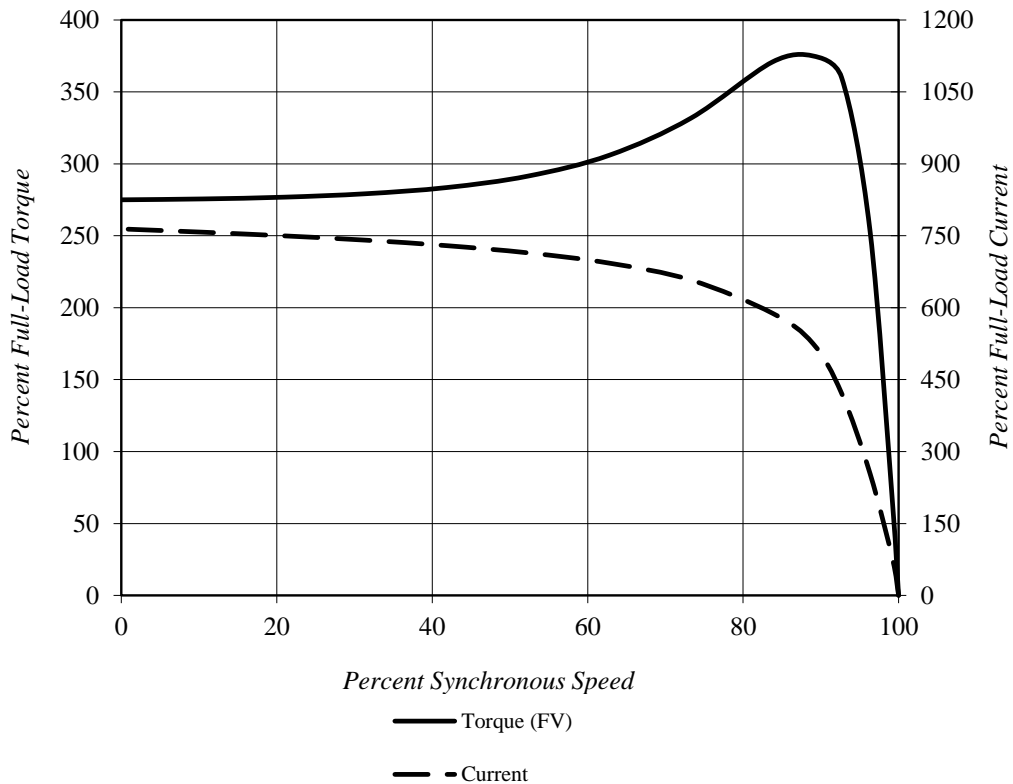
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0152SDMW7KS-PL			<b>FLAmps:</b>	28
<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>	15	<b>Rotor Inertia:</b>	1.5 lb-ft <sup>2</sup>	<b>Date:</b>	8/5/2020
<b>FLRPM:</b>	2935	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2015 (15kW)

<b>Locked Rotor Amps:</b>	214 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	275%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	375%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	36 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
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**D.E.Curve #:** GH2015 (15kW)

**Prepared by:** Zichao Xie

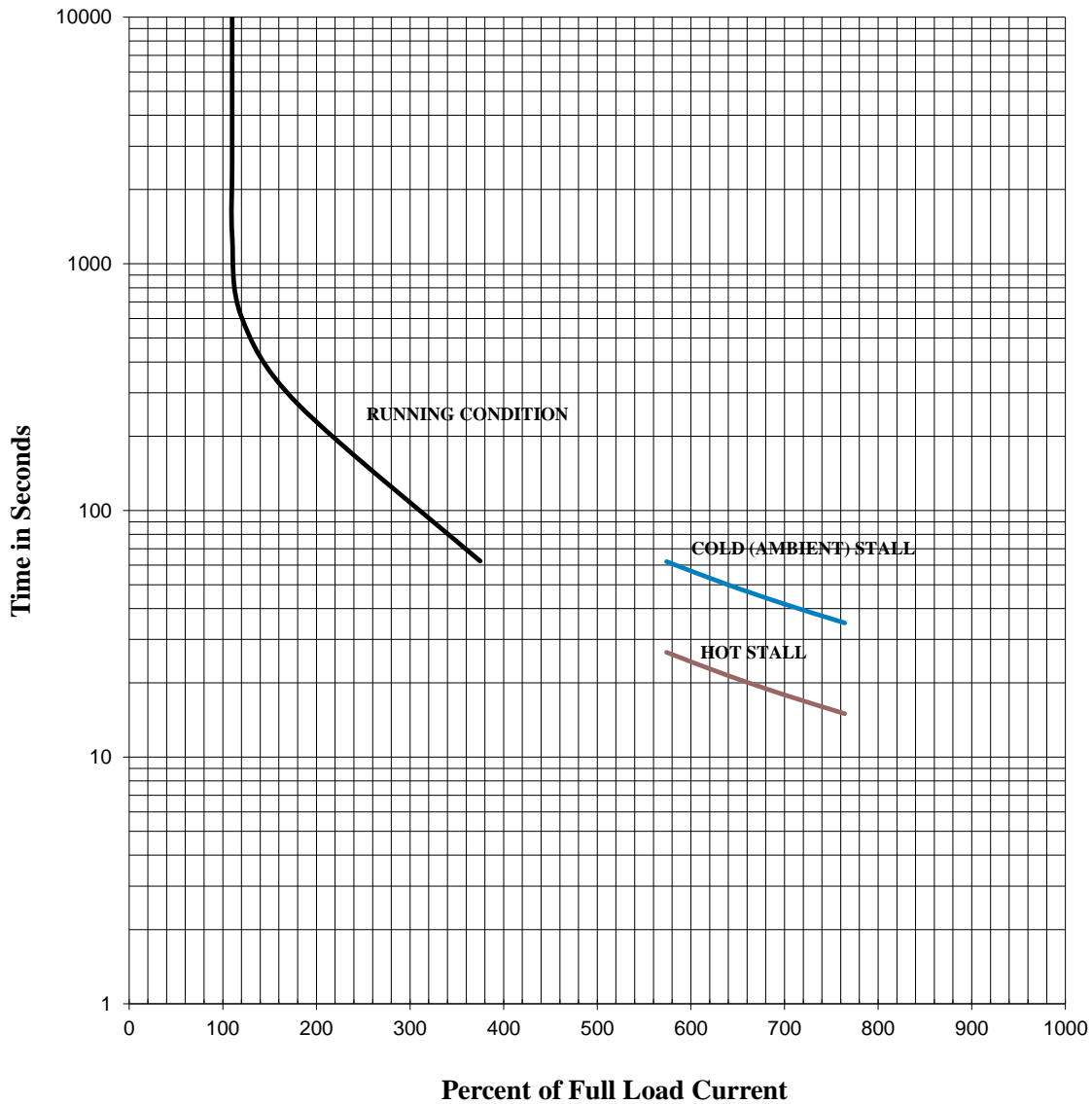
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0152SDMW7KS-PL			<b>FLAmps:</b>	28
<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>	15	<b>Rotor Inertia:</b>	1.5 lb-ft <sup>2</sup>	<b>Date:</b>	8/5/2020
<b>FLRPM:</b>	2935	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2015 (15kW)



**Comments:** PROJECT -  
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**D.E.Curve #:** GH2015 (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: 3000
FRAME: 160M	ENCL: TEFC	FLAMPS: 27	FLRPM: 2940
FORM: FCKL1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0152SDMW7KS-PL		kW: 15	
NOM. EFF.: 91.9	MIN. EFF.: -	cosØ 0.83	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 223	FULL LOAD (lb-ft.): 36	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 300	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 400	

EFFICIENCY	POWER FACTOR
FULL LOAD: 92.3	FULL LOAD: 83.4
3/4 LOAD: 91.6	3/4 LOAD: 78.3
1/2 LOAD: 89.3	1/2 LOAD: 67.9

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:** 8/5/2020

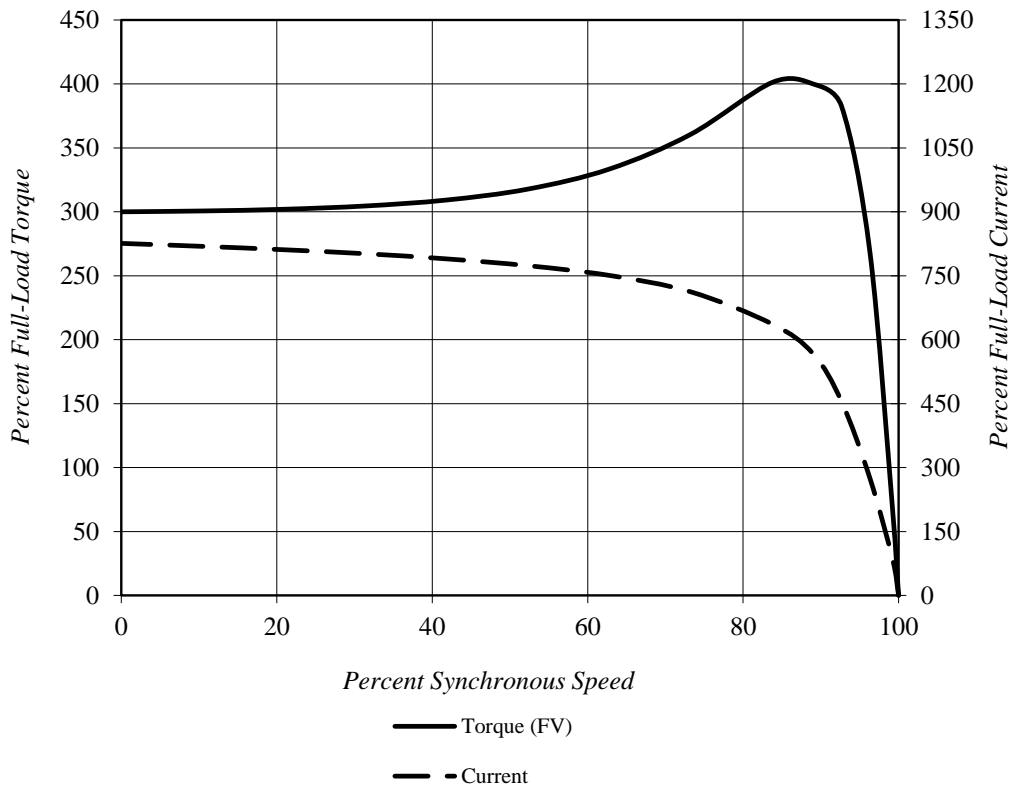
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0152SDMW7KS-PL			<b>FLAmps:</b>	27
<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>	15	<b>Rotor Inertia:</b>	1.5 lb-ft <sup>2</sup>	<b>Date:</b>	8/5/2020
<b>FLRPM:</b>	2940	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2015 (15kW)

<b>Locked Rotor Amps:</b>	223 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	300%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	400%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	36 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
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**D.E. Curve #:** GH2015 (15kW)

**Prepared by:** Zichao Xie

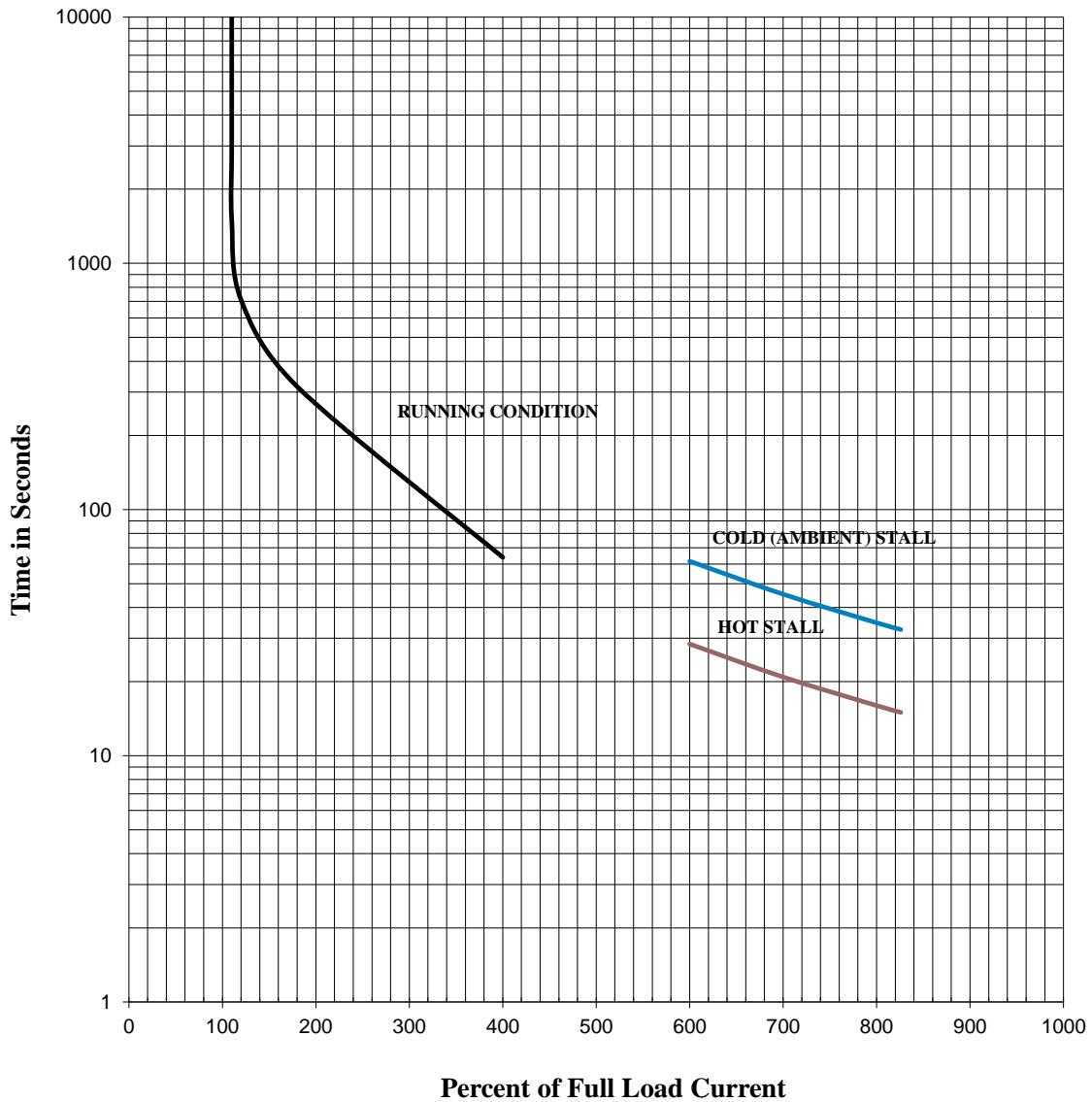
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0152SDMW7KS-PL			<b>FLAmps:</b>	27
<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>	15	<b>Rotor Inertia:</b>	1.5 lb-ft <sup>2</sup>	<b>Date:</b>	8/5/2020
<b>FLRPM:</b>	2940	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2015 (15kW)



**Comments:** PROJECT -  
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**D.E.Curve #:** GH2015 (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: 3000
FRAME: 160M	ENCL: TEFC	FLAMPS: 28	FLRPM: 2930
FORM: FCKL1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0152SDMW7KS-PL		kW: 15	
NOM. EFF.: 91.9	MIN. EFF.: -	cosØ 0.87	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 202	FULL LOAD (lb-ft.): 36	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 245	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 340	

EFFICIENCY	POWER FACTOR
FULL LOAD: 91.6	FULL LOAD: 87.9
3/4 LOAD: 91.2	3/4 LOAD: 85.2
1/2 LOAD: 89.4	1/2 LOAD: 78.1

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:** 8/5/2020



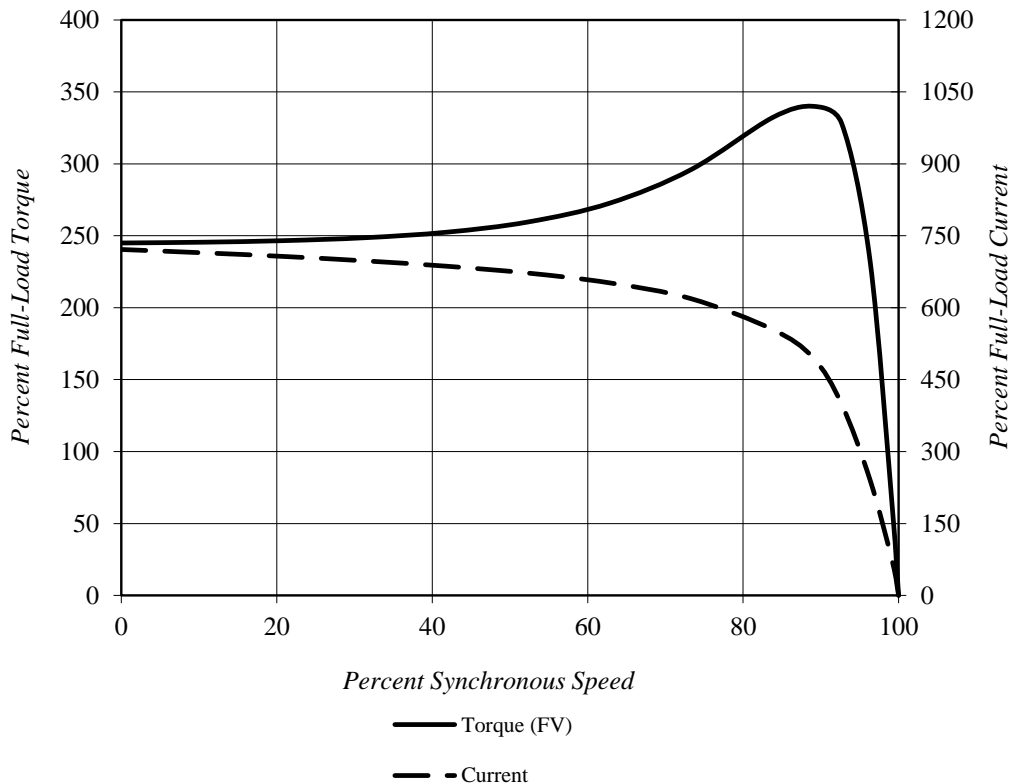
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0152SDMW7KS-PL			<b>FLAmps:</b>	28
<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>	15	<b>Rotor Inertia:</b>	1.5 lb-ft <sup>2</sup>	<b>Date:</b>	8/5/2020
<b>FLRPM:</b>	2930	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2015 (15kW)

<b>Locked Rotor Amps:</b>	202 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	245%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	340%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	36 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
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**D.E.Curve #:** GH2015 (15kW)

**Prepared by:** Zichao Xie

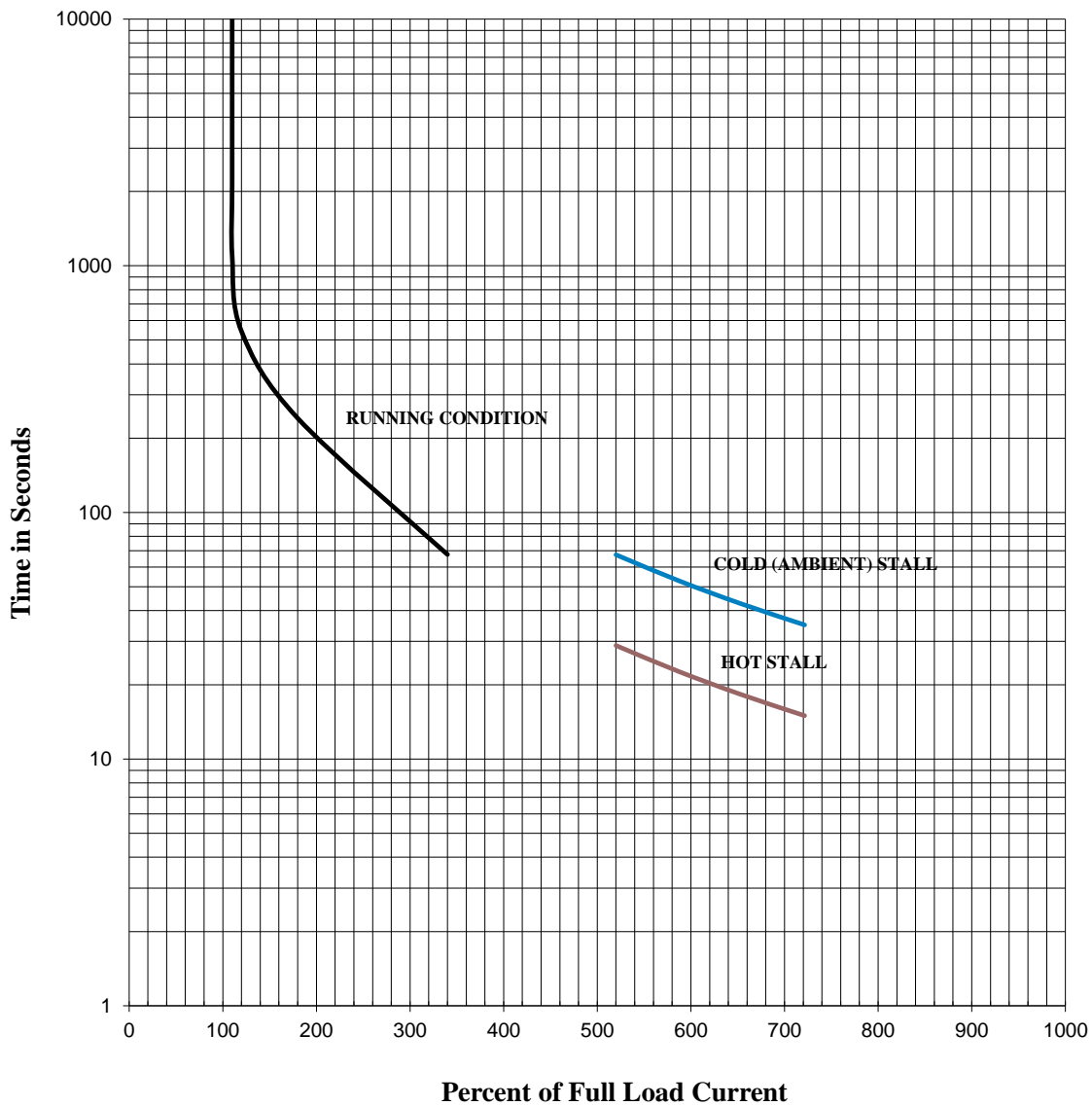
**Checked by:**

# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0152SDMW7KS-PL			<b>FLAmps:</b>	28
<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>	15	<b>Rotor Inertia:</b>	1.5 lb-ft <sup>2</sup>	<b>Date:</b>	8/5/2020
<b>FLRPM:</b>	2930	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2015 (15kW)



**Comments:** PROJECT -  
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**D.E.Curve #:** GH2015 (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: 3600
FRAME: 160M	ENCL: TEFC	FLAMPS: 25	FLRPM: 3555
FORM: FCKL1	S.F.: 1.15	NEMA DESIGN: A	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: K	DUTY: Cont.
MODEL No.: 0152SDMW7KS-PL		kW: 15	
NOM. EFF.: 91.0	MIN. EFF.: -	P.F.: 84.0	

**AMPERAGE**

LOCKED ROTOR: 207

**TORQUES**

FULL LOAD (lb-ft.): 30  
LOCKED ROTOR (%): 310  
BREAK DOWN (%): 420

**\*\*BEARINGS:**

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

**EFFICIENCY**

FULL LOAD: 91.0  
3/4 LOAD: 90.1  
1/2 LOAD: 87.6

**POWER FACTOR**

FULL LOAD: 84.2  
3/4 LOAD: 80.1  
1/2 LOAD: 71.1

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:** 1/8/2020

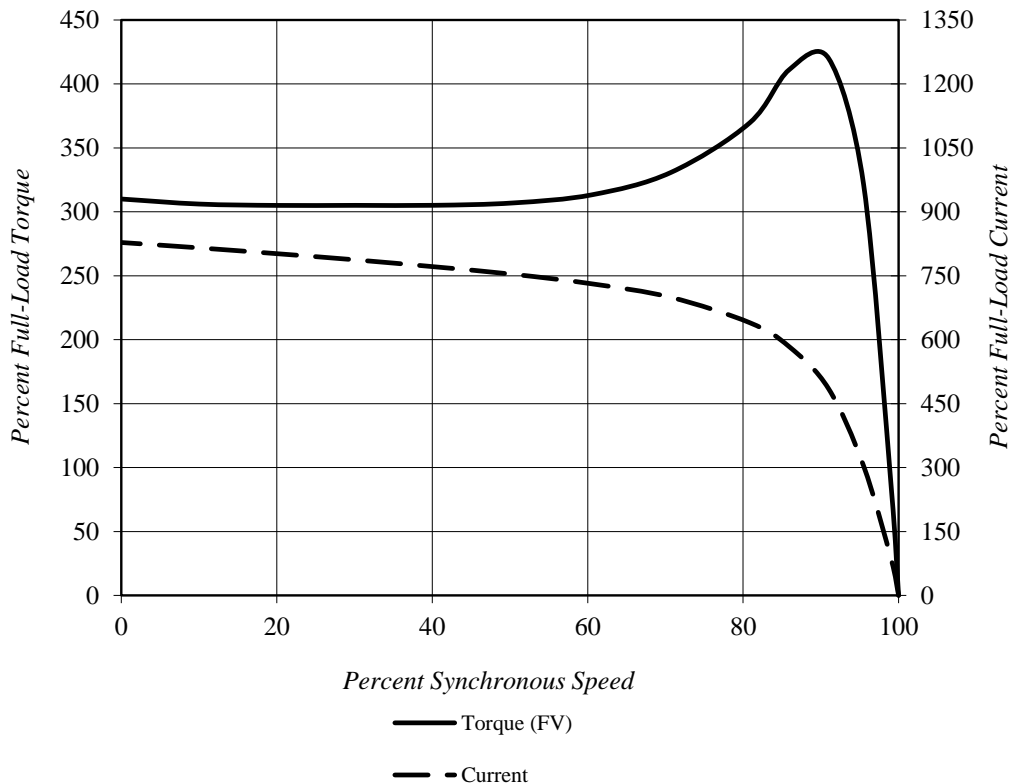
# TOSHIBA INTERNATIONAL CORPORATION

## Speed Torque/Current Curve

<b>Model #:</b>	0152SDMW7KS-PL			<b>FLAmps:</b>	25
<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>	20	<b>Rotor Inertia:</b>	1.5 lb-ft <sup>2</sup>	<b>Date:</b>	1/8/2020
<b>FLRPM:</b>	3555	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2015 (15kW)

<b>Locked Rotor Amps:</b>	207 A	<b>Load Type:</b>	N/A
<b>Locked Rotor Torque:</b>	310%	<b>Starting at:</b>	N/A
<b>Breakdown Torque:</b>	420%	<b>Accel. Time:</b>	N/A
<b>Rated Torque:</b>	30 lb-ft		

### *Design Values*



**Comments:** PROJECT -  
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**D.E.Curve #:** GH2015 (15kW)

**Prepared by:** Zichao Xie

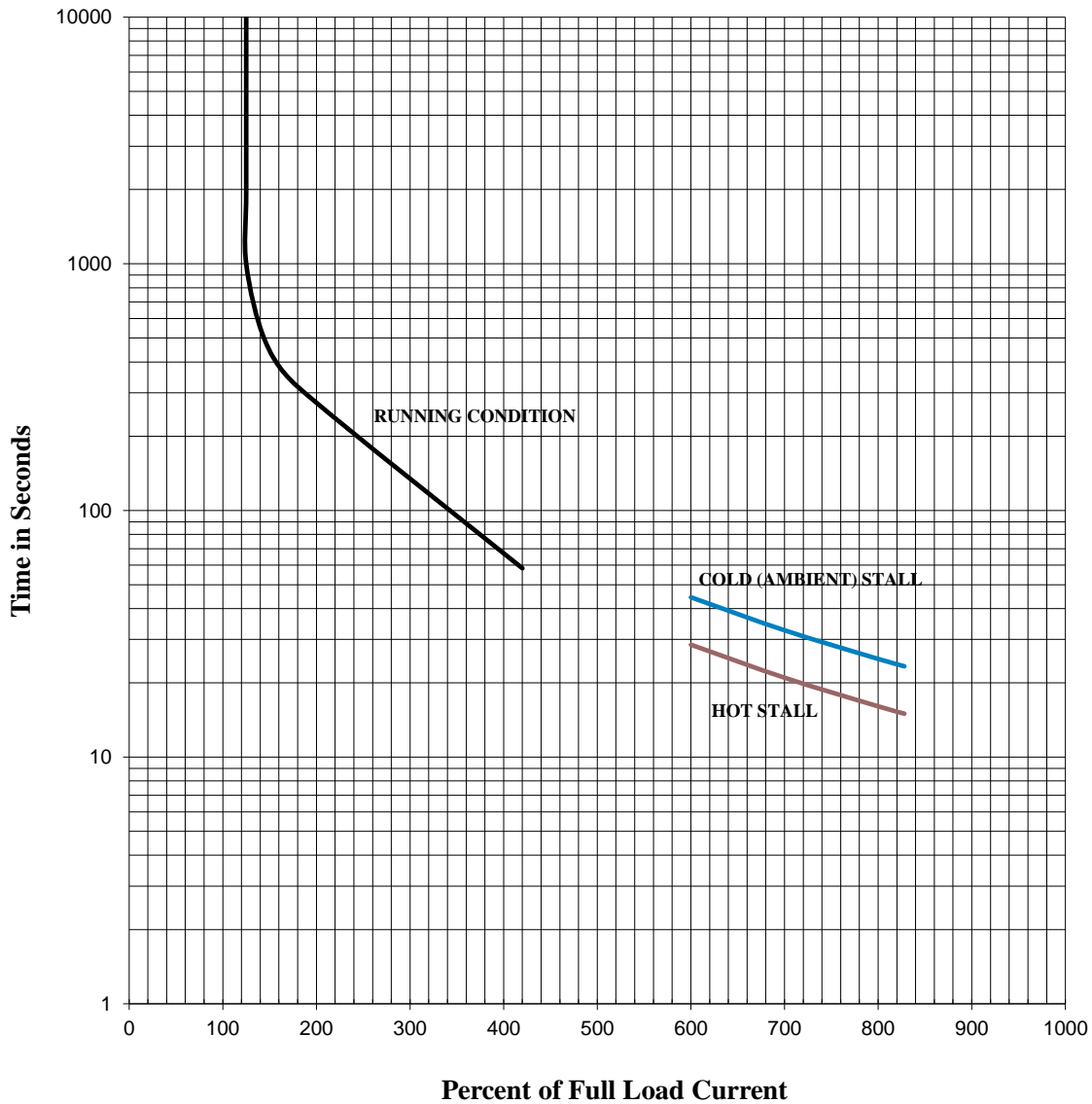
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# TOSHIBA INTERNATIONAL CORPORATION

## Thermal Limit & Acceleration Curves

*Design Values (For Reference Only)*

<b>Model #:</b>	0152SDMW7KS-PL			<b>FLAmps:</b>	25
<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>	20	<b>Rotor Inertia:</b>	1.5 lb-ft <sup>2</sup>	<b>Date:</b>	1/8/2020
<b>FLRPM:</b>	3555	<b>Load Inertia:</b>	N/A	<b>File:</b>	GH2015 (15kW)



**Comments:** PROJECT -  
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**D.E. Curve #:** GH2015 (15kW)

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