

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
 3HFN000314

TYPE: 2-4-6P -
 400V
 FRAME: 90L

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

ROTATION:
 CCW
 VIEW FROM:
 DDE



TOSHIBA
 TOSHIBA INTERNATIONAL CORPORATION

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

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: 230/400	3 PH / 50 Hz	S. RPM: 1500
FRAME: 90L	ENCL: TEFC	FLAMPS: 4.2/2.4	FLRPM: 1440
FORM: FBKL1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: Y114SDMV7KS-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

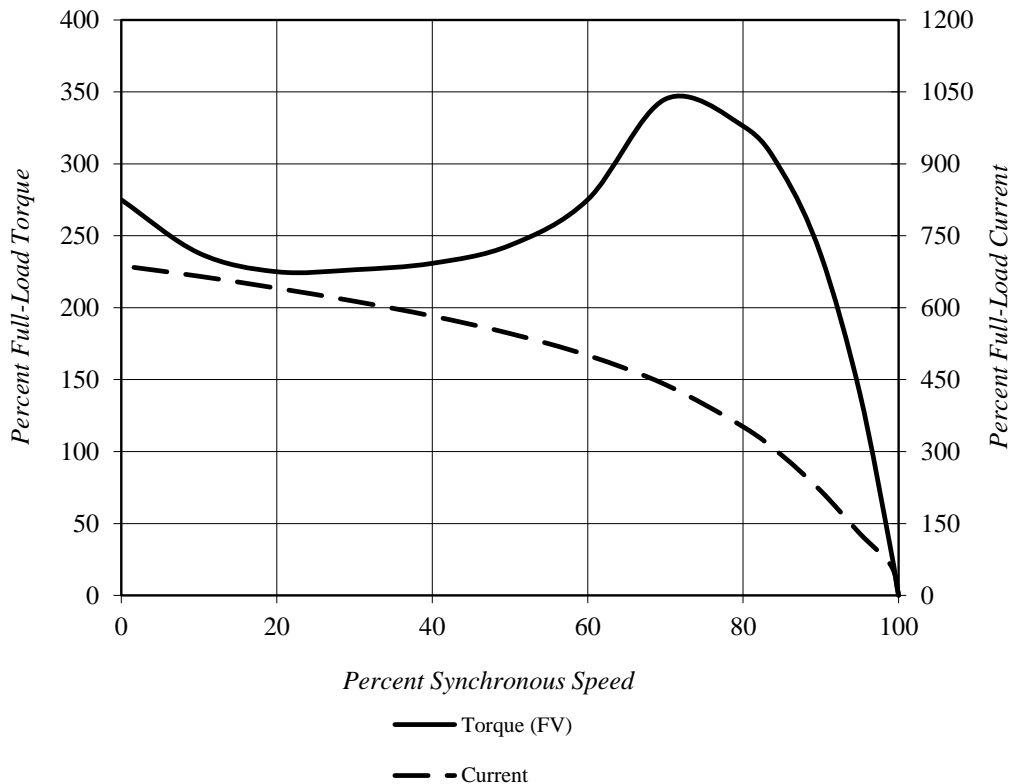
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	Y114SDMV7KS-PL			FLAmps:	4.2/2.4
Enclosure:	TEFC	Voltage:	230/400 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	1.1	Rotor Inertia:	0.13 lb-ft ²	Date:	10/18/2019
FLRPM:	1440	Load Inertia:	N/A	File:	GH4Y11 (1.1kW)

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

Design Values



Comments: PROJECT -

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

Prepared by: Zichao Xie

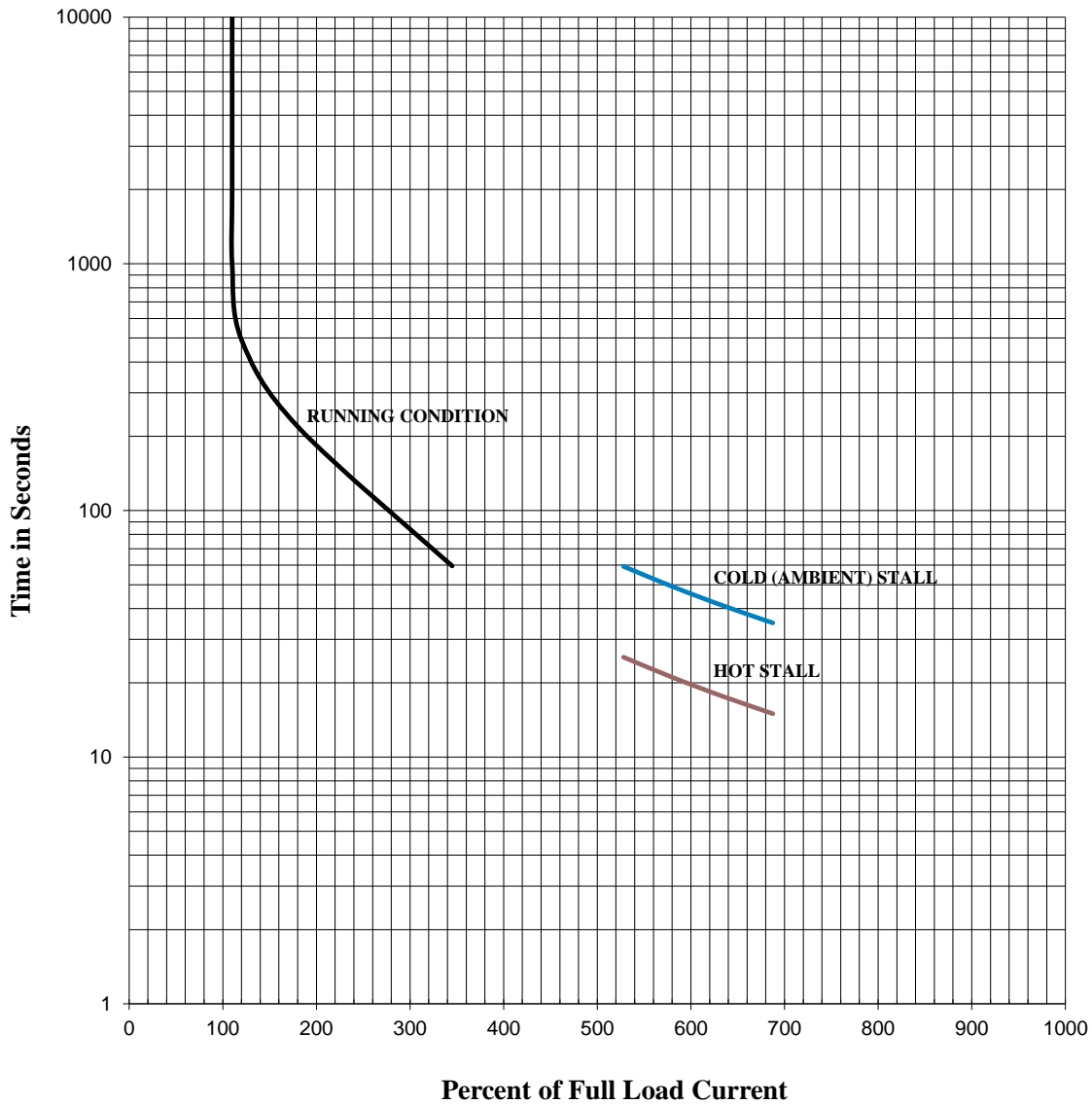
Checked by:

TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	Y114SDMV7KS-PL			FLAmps:	4.2/2.4
Enclosure:	TEFC	Voltage:	230/400 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	1.1	Rotor Inertia:	0.13 lb-ft ²	Date:	10/18/2019
FLRPM:	1440	Load Inertia:	N/A	File:	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
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	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: FBKL1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: Y114SDMV7KS-PL		kW: 1.1	
NOM. EFF.: 84.1	MIN. EFF.: -	cosØ 0.74	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 30/17.3	FULL LOAD (lb-ft.): 5.4	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 305	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 370	

EFFICIENCY	POWER FACTOR
FULL LOAD: 85.2	FULL LOAD: 74.5
3/4 LOAD: 85.2	3/4 LOAD: 67.9
1/2 LOAD: 82.7	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).

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DATE: 10/18/2019

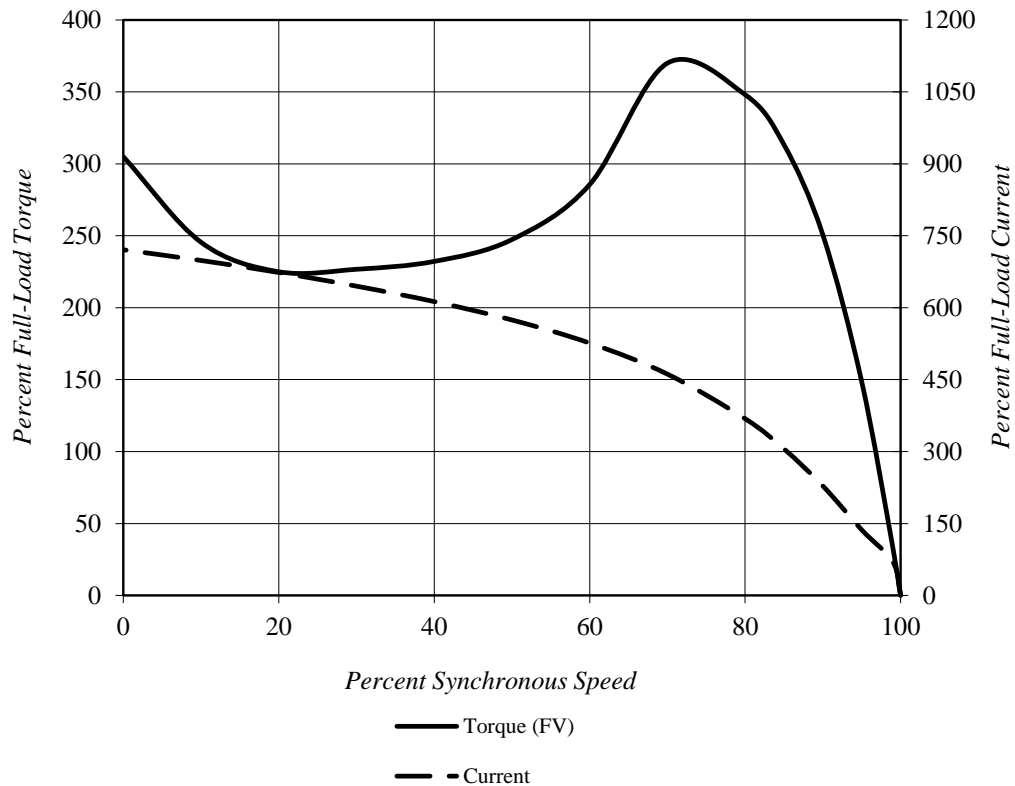
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	Y114SDMV7KS-PL			FLAmps:	4.2/2.4
Enclosure:	TEFC	Voltage:	240/415 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	1.1	Rotor Inertia:	0.13 lb-ft ²	Date:	10/18/2019
FLRPM:	1445	Load Inertia:	N/A	File:	GH4Y11 (1.1kW)

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

Design Values



Comments: PROJECT -

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

Prepared by: Zichao Xie

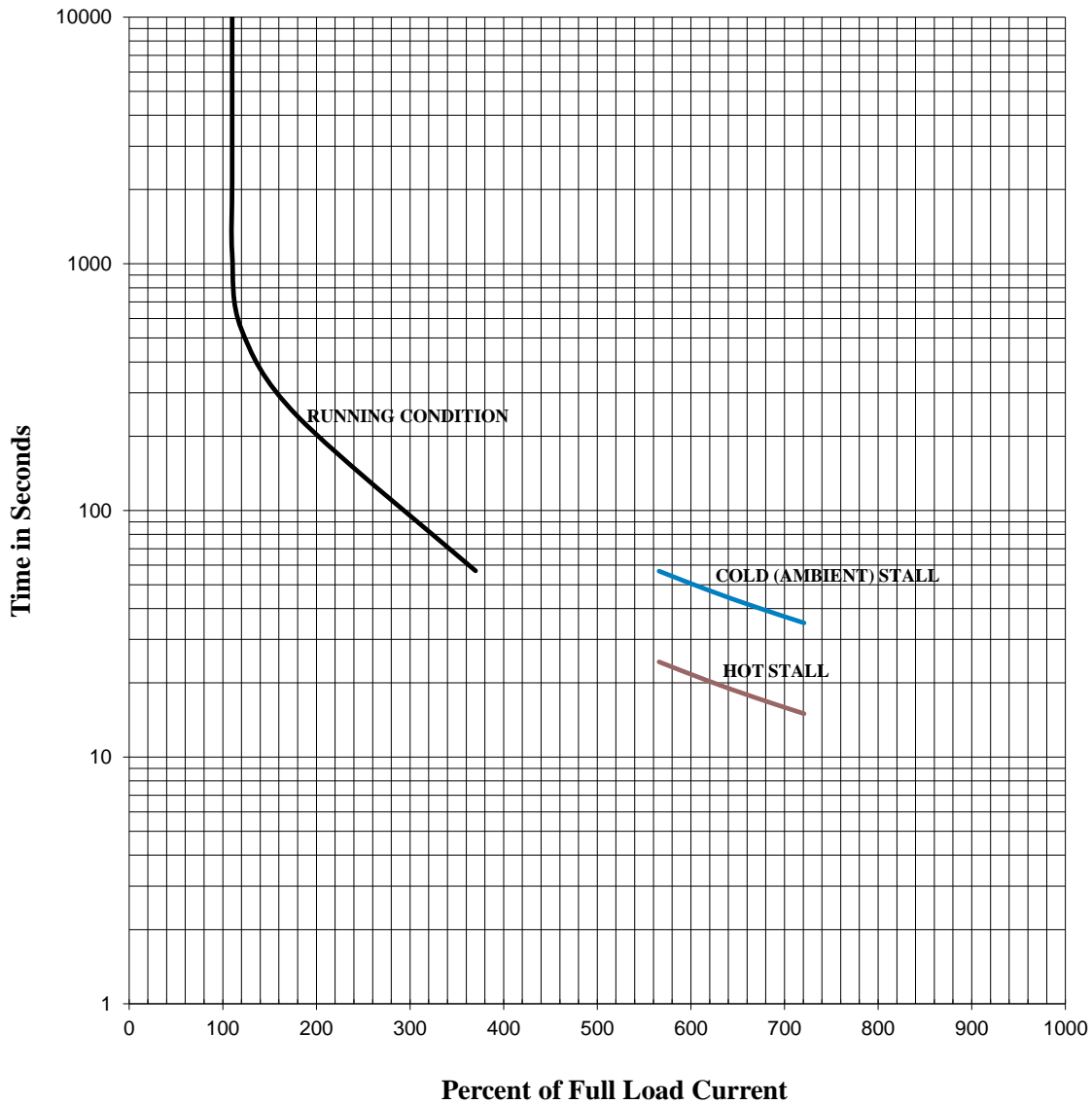
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TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	Y114SDMV7KS-PL			FLAmps:	4.2/2.4
Enclosure:	TEFC	Voltage:	240/415 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	1.1	Rotor Inertia:	0.13 lb-ft ²	Date:	10/18/2019
FLRPM:	1445	Load Inertia:	N/A	File:	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: FBKL1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: Y114SDMV7KS-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).

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DATE: 10/18/2019

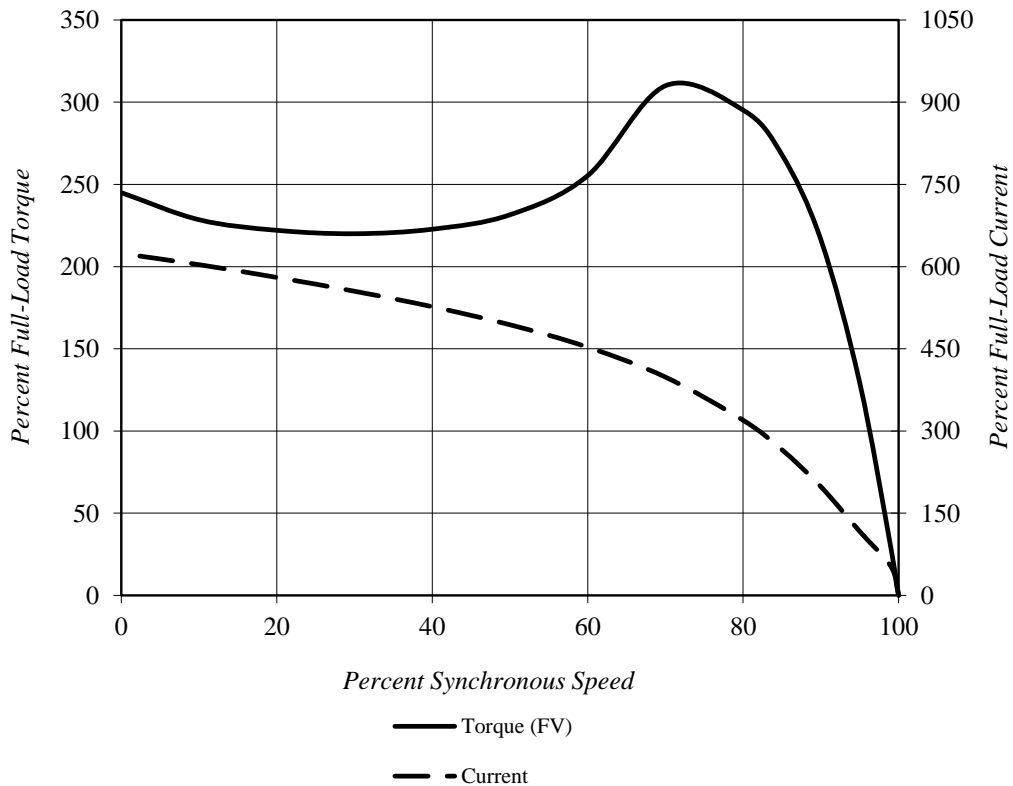
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	Y114SDMV7KS-PL			FLAmps:	4.3/2.5
Enclosure:	TEFC	Voltage:	220/380 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	1.1	Rotor Inertia:	0.13 lb-ft ²	Date:	10/18/2019
FLRPM:	1430	Load Inertia:	N/A	File:	GH4Y11 (1.1kW)

Locked Rotor Amps:	27/15.6 A	Load Type:	N/A
Locked Rotor Torque:	245%	Starting at:	N/A
Breakdown Torque:	310%	Accel. Time:	N/A
Rated Torque:	5.5 lb-ft		

Design Values



Comments: PROJECT -

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

Prepared by: Zichao Xie

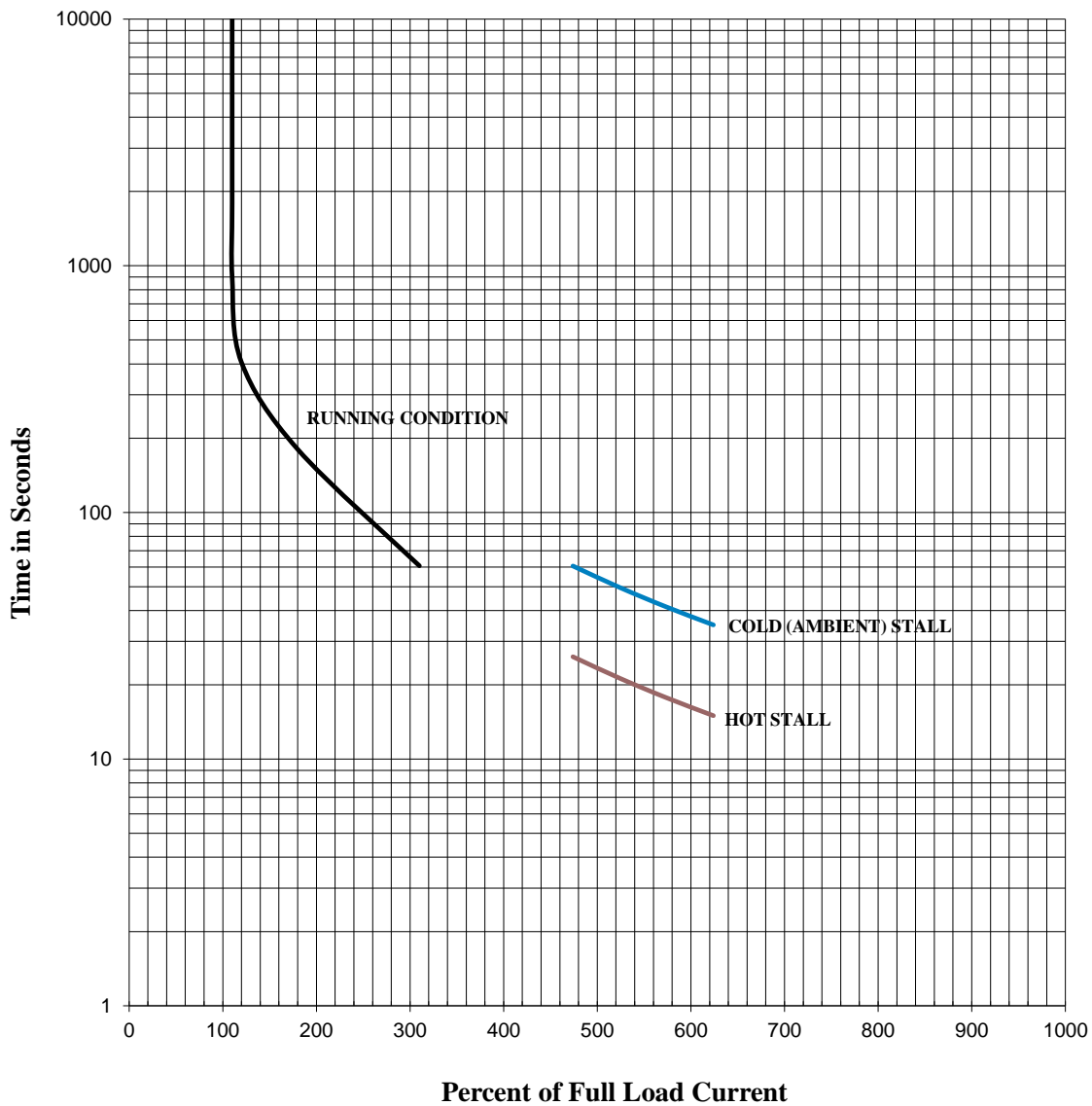
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TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	Y114SDMV7KS-PL			FLAmps:	4.3/2.5
Enclosure:	TEFC	Voltage:	220/380 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	1.1	Rotor Inertia:	0.13 lb-ft ²	Date:	10/18/2019
FLRPM:	1430	Load Inertia:	N/A	File:	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
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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: FBKL1	S.F.: 1.15	NEMA DESIGN: B	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: L	DUTY: Cont.
MODEL No.: Y114SDMV7KS-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).

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DATE: 10/18/2019

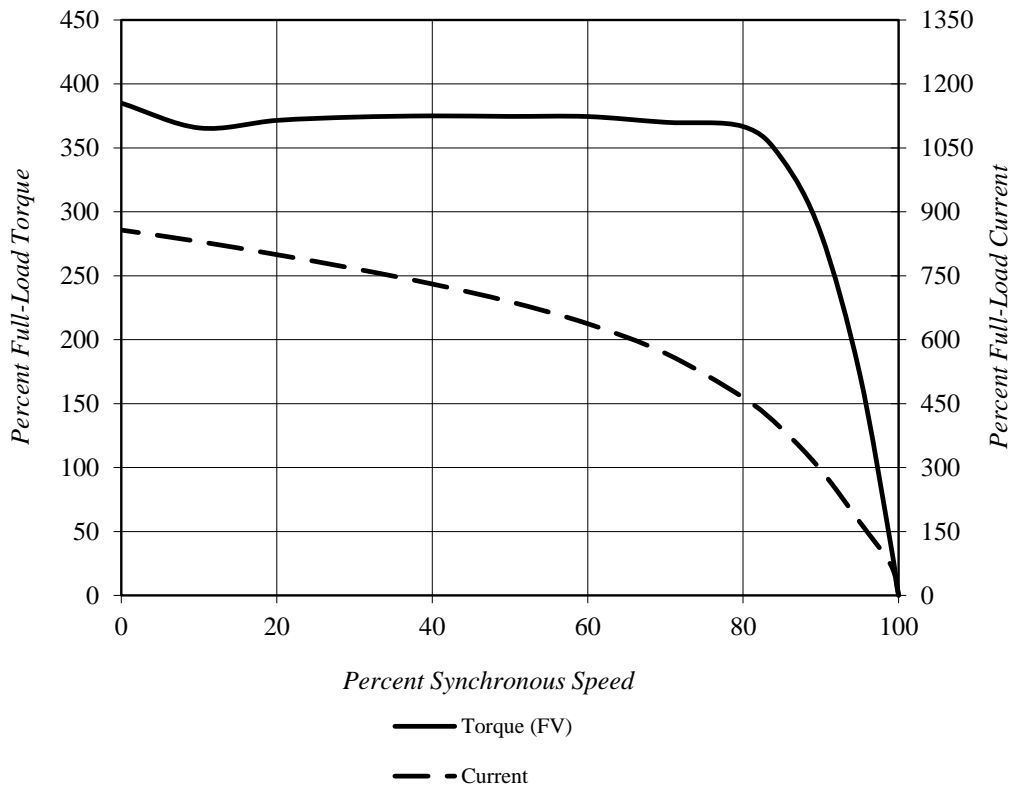
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	Y114SDMV7KS-PL			FLAmps:	2.1
Enclosure:	TEFC	Voltage:	460 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 60 Hz	Ins. Class:	F
HP:	1.5	Rotor Inertia:	0.13 lb-ft ²	Date:	10/18/2019
FLRPM:	1750	Load Inertia:	N/A	File:	GH4Y11 (1.1kW)

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

Design Values



Comments: PROJECT -

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

Prepared by: Zichao Xie

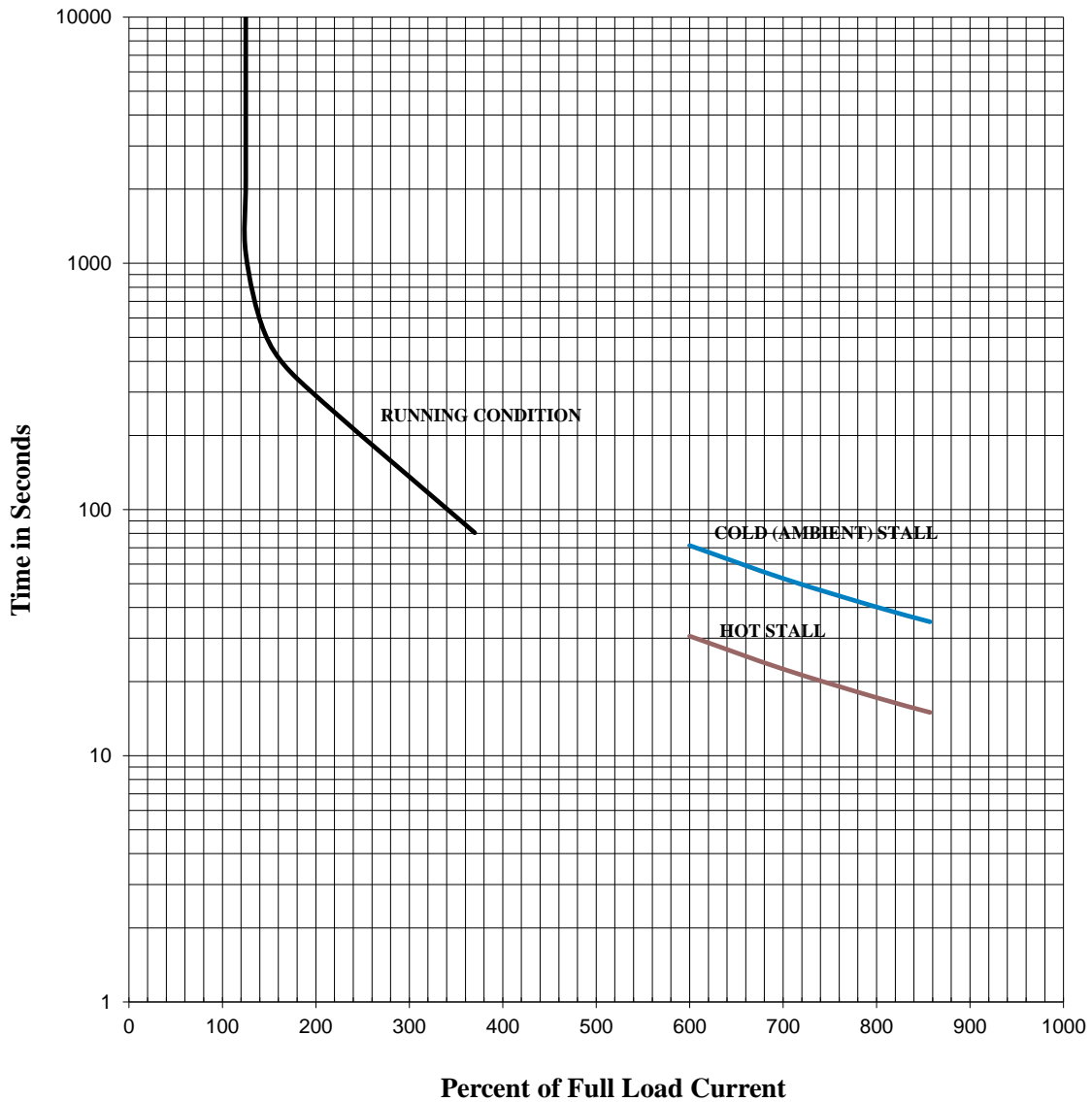
Checked by:

TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	Y114SDMV7KS-PL			FLAmps:	2.1
Enclosure:	TEFC	Voltage:	460 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 60 Hz	Ins. Class:	F
HP:	1.5	Rotor Inertia:	0.13 lb-ft ²	Date:	10/18/2019
FLRPM:	1750	Load Inertia:	N/A	File:	GH4Y11 (1.1kW)



Comments: PROJECT -

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

Prepared by: Zichao Xie

Checked by: