

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.

B3 FOOT MOUNTED MOTOR
DL DRAWING IEC GLOBAL
TYPE: 2-4-6P - 400V
FRAME: 90L
3HFN000151

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



TOSHIBA
TOSHIBA INTERNATIONAL CORPORATION

DRAWN BY: HIEN. NGUYEN
CHECK BY: B.X.QUYNH
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: 5.9/3.4	FLRPM: 1440
FORM: FBK1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: Y154SDMV7FS-PL		kW: 1.5	
NOM. EFF.: 85.3	MIN. EFF.: -	cosØ 0.76	

AMPERAGE

LOCKED ROTOR: 38/22

TORQUES

FULL LOAD (lb-ft.): 7.3
LOCKED ROTOR (%): 275
BREAK DOWN (%): 340

****BEARINGS:**

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

EFFICIENCY

FULL LOAD: 85.0
3/4 LOAD: 85.6
1/2 LOAD: 83.9

POWER FACTOR

FULL LOAD: 76.0
3/4 LOAD: 70.0
1/2 LOAD: 58.6

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: 10/18/2019

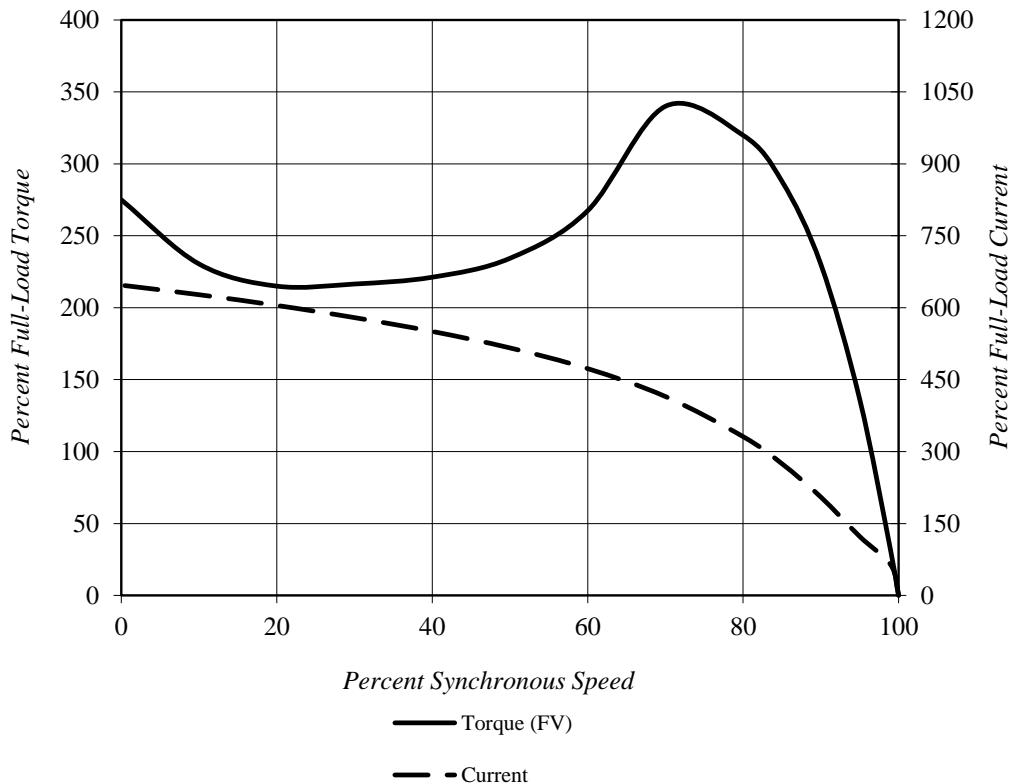
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	Y154SDMV7FS-PL			FLAmps:	5.9/3.4
Enclosure:	TEFC	Voltage:	230/400 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	1.5	Rotor Inertia:	0.15 lb-ft ²	Date:	10/18/2019
FLRPM:	1440	Load Inertia:	N/A	File:	GH4Y15 (1.5kW)

Locked Rotor Amps:	38/22 A	Load Type:	N/A
Locked Rotor Torque:	275%	Starting at:	N/A
Breakdown Torque:	340%	Accel. Time:	N/A
Rated Torque:	7.3 lb-ft		

Design Values



Comments: PROJECT -

D.E.Curve #: GH4Y15 (1.5kW)

Prepared by: Zichao Xie

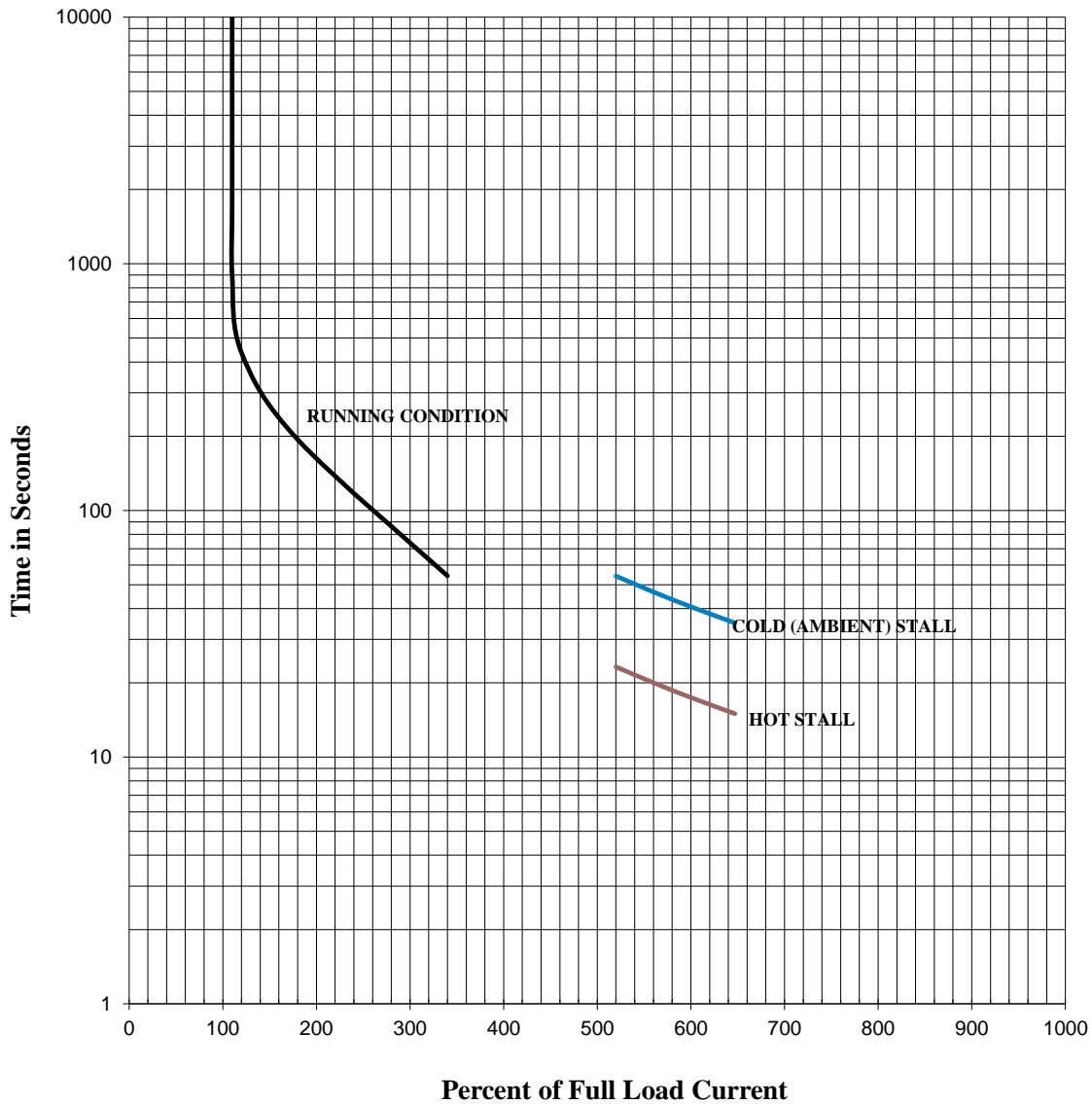
Checked by:

TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	Y154SDMV7FS-PL			FLAmps:	5.9/3.4
Enclosure:	TEFC	Voltage:	230/400 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	1.5	Rotor Inertia:	0.15 lb-ft ²	Date:	10/18/2019
FLRPM:	1440	Load Inertia:	N/A	File:	GH4Y15 (1.5kW)



Comments: PROJECT -

D.E.Curve #: GH4Y15 (1.5kW)

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: 240/415	3 PH / 50 Hz	S. RPM: 1500
FRAME: 90L	ENCL: TEFC	FLAMPS: 5.9/3.4	FLRPM: 1445
FORM: FBK1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: Y154SDMV7FS-PL		kW: 1.5	
NOM. EFF.: 85.3	MIN. EFF.: -	cosØ 0.72	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 40/23	FULL LOAD (lb-ft.): 7.3	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 305	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 360	

EFFICIENCY	POWER FACTOR
FULL LOAD: 85.2	FULL LOAD: 72.9
3/4 LOAD: 85.3	3/4 LOAD: 66.0
1/2 LOAD: 83.8	1/2 LOAD: 57.4

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

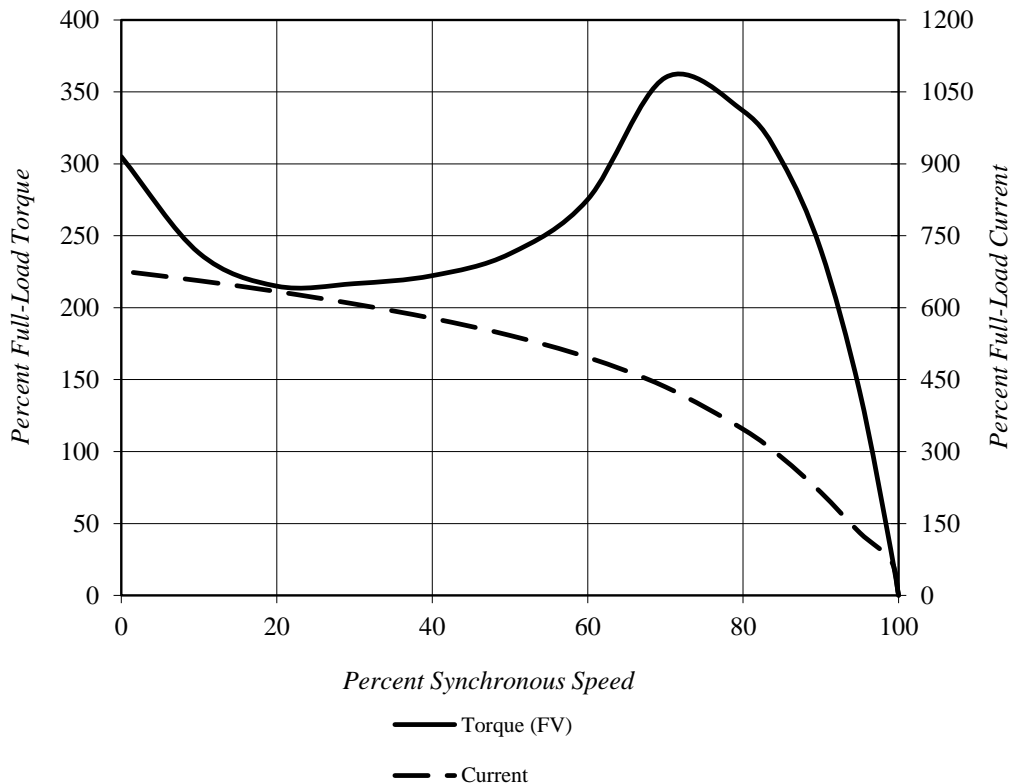
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	Y154SDMV7FS-PL			FLAmps:	5.9/3.4
Enclosure:	TEFC	Voltage:	240/415 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	1.5	Rotor Inertia:	0.15 lb-ft ²	Date:	10/18/2019
FLRPM:	1445	Load Inertia:	N/A	File:	GH4Y15 (1.5kW)

Locked Rotor Amps:	40/23 A	Load Type:	N/A
Locked Rotor Torque:	305%	Starting at:	N/A
Breakdown Torque:	360%	Accel. Time:	N/A
Rated Torque:	7.3 lb-ft		

Design Values



Comments: PROJECT -

D.E.Curve #: GH4Y15 (1.5kW)

Prepared by: Zichao Xie

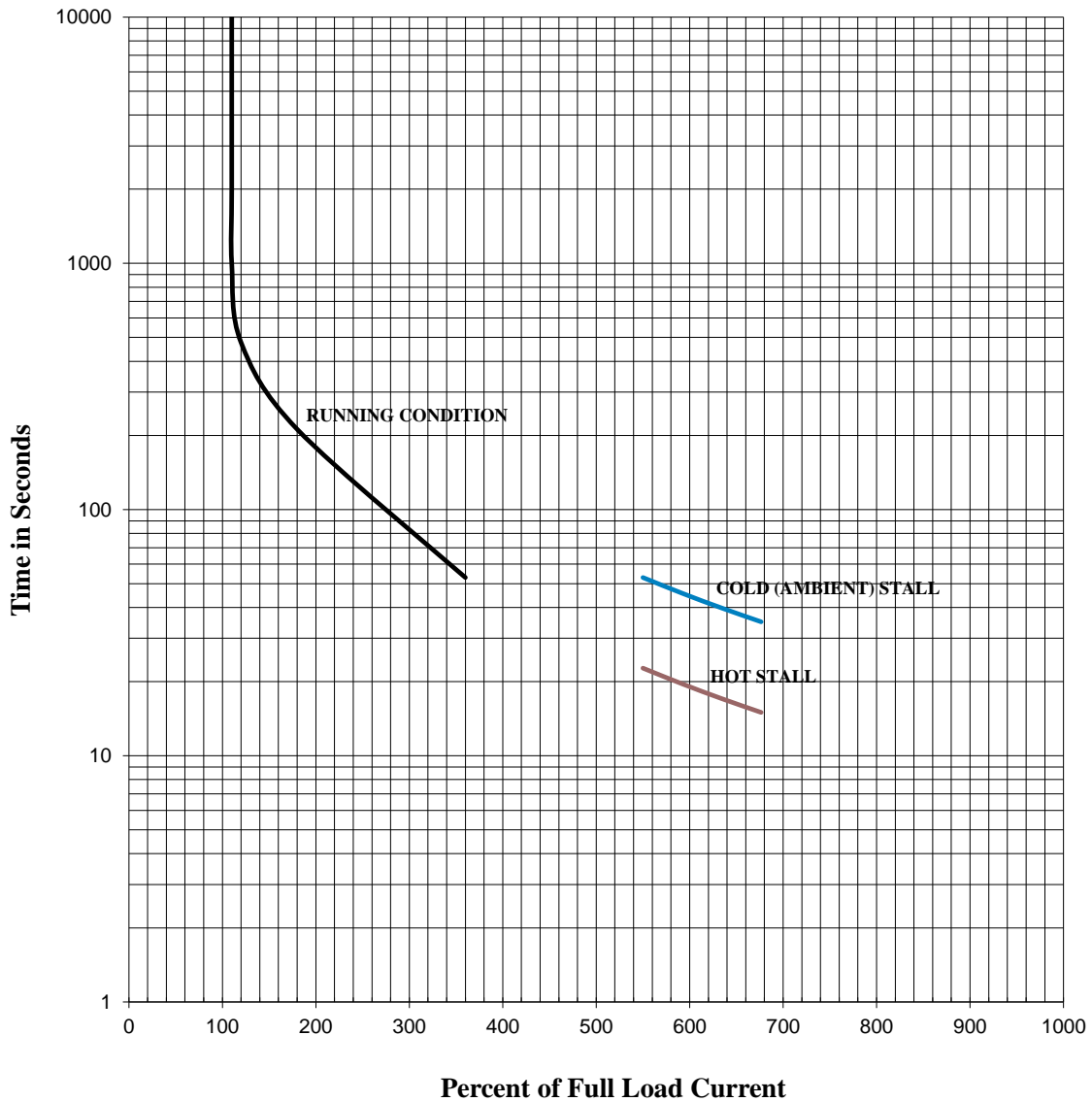
Checked by:

TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	Y154SDMV7FS-PL			FLAmps:	5.9/3.4
Enclosure:	TEFC	Voltage:	240/415 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	1.5	Rotor Inertia:	0.15 lb-ft ²	Date:	10/18/2019
FLRPM:	1445	Load Inertia:	N/A	File:	GH4Y15 (1.5kW)



Comments: PROJECT _____

D.E.Curve #: GH4Y15 (1.5kW)

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: 5.9/3.4	FLRPM: 1430
FORM: FBK1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: Y154SDMV7FS-PL		kW: 1.5	
NOM. EFF.: 85.3	MIN. EFF.: -	cosØ 0.79	

AMPERAGE

LOCKED ROTOR: 36/21

TORQUES

FULL LOAD (lb-ft.): 7.3
LOCKED ROTOR (%): 245
BREAK DOWN (%): 310

****BEARINGS:**

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

EFFICIENCY

FULL LOAD: 84.3
3/4 LOAD: 85.7
1/2 LOAD: 84.8

POWER FACTOR

FULL LOAD: 79.2
3/4 LOAD: 74.5
1/2 LOAD: 64.5

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

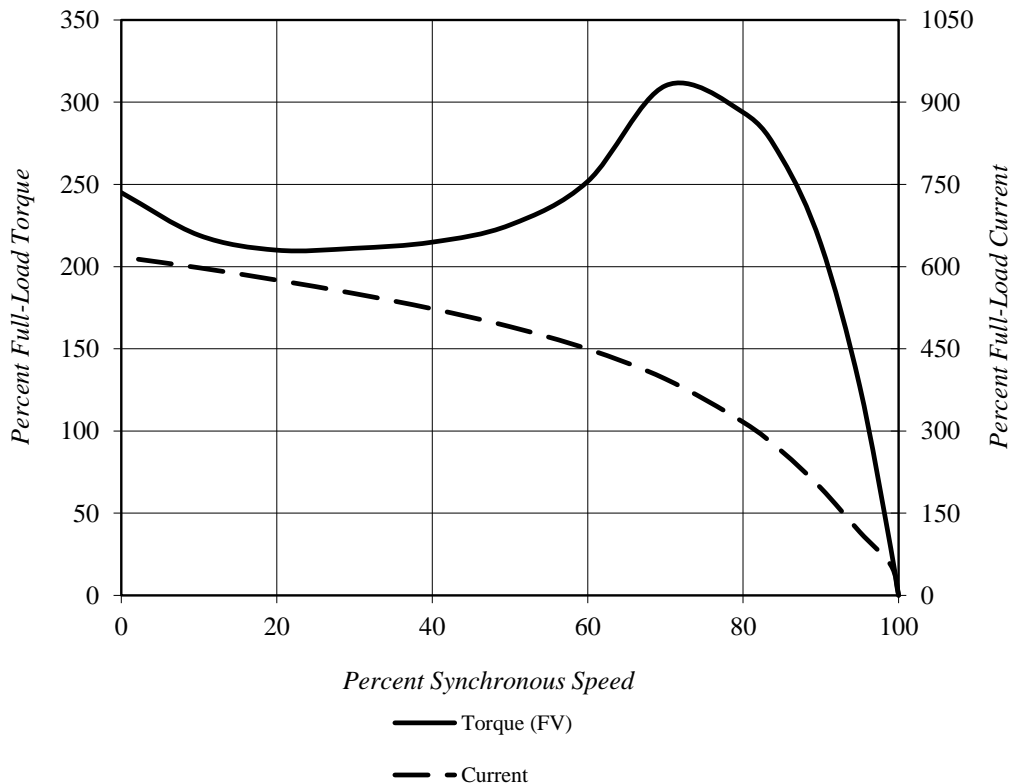
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	Y154SDMV7FS-PL			FLAmps:	5.9/3.4
Enclosure:	TEFC	Voltage:	220/380 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	1.5	Rotor Inertia:	0.15 lb-ft ²	Date:	10/18/2019
FLRPM:	1430	Load Inertia:	N/A	File:	GH4Y15 (1.5kW)

Locked Rotor Amps:	36/21 A	Load Type:	N/A
Locked Rotor Torque:	245%	Starting at:	N/A
Breakdown Torque:	310%	Accel. Time:	N/A
Rated Torque:	7.3 lb-ft		

Design Values



Comments: PROJECT -

D.E.Curve #: GH4Y15 (1.5kW)

Prepared by: Zichao Xie

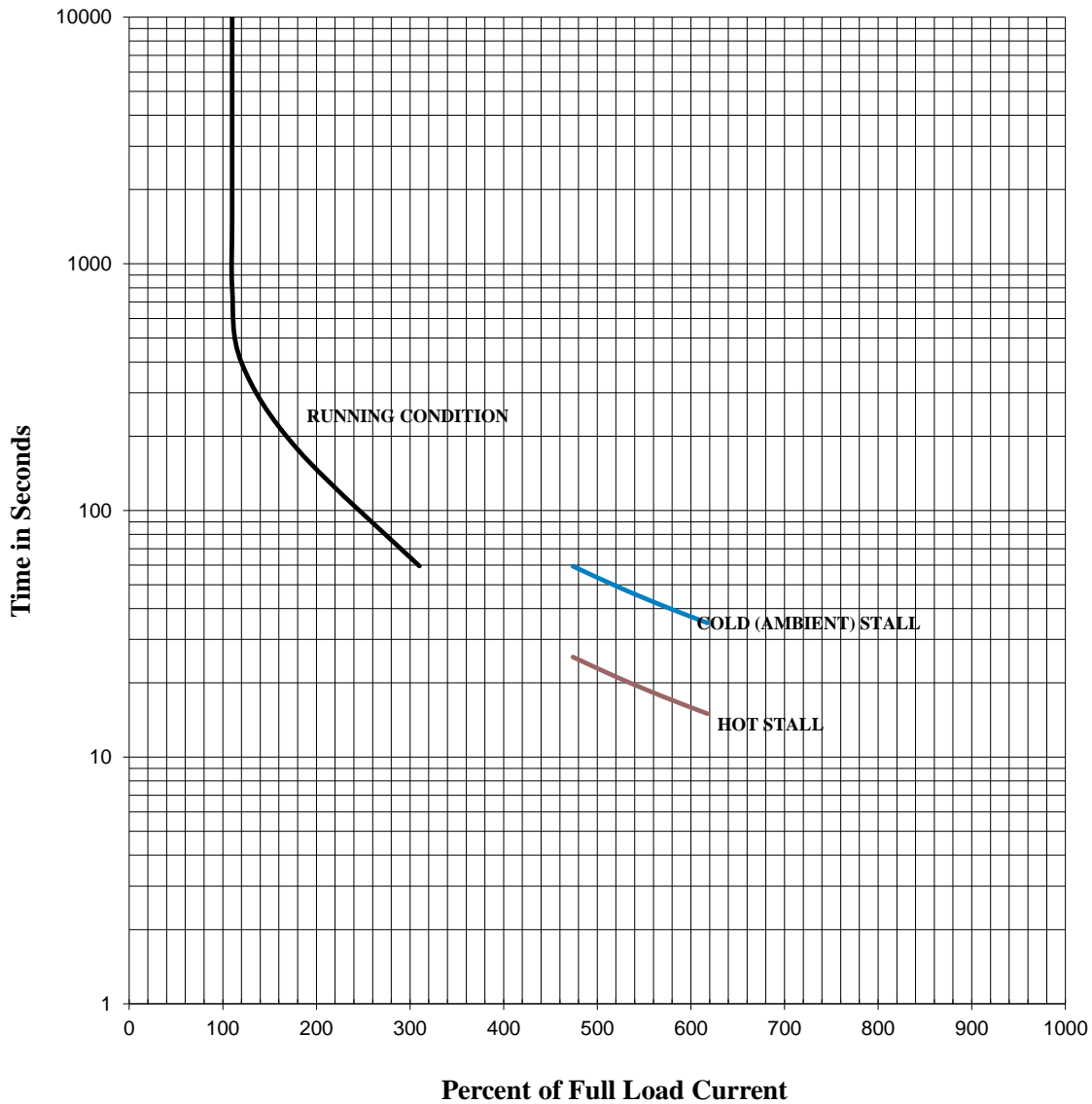
Checked by:

TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	Y154SDMV7FS-PL			FLAmps:	5.9/3.4
Enclosure:	TEFC	Voltage:	220/380 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	1.5	Rotor Inertia:	0.15 lb-ft ²	Date:	10/18/2019
FLRPM:	1430	Load Inertia:	N/A	File:	GH4Y15 (1.5kW)



Comments: PROJECT _____

D.E.Curve #: GH4Y15 (1.5kW)

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.: 2	VOLTS: 460	3 PH / 60 Hz	S. RPM: 1800
FRAME: 90L	ENCL: TEFC	FLAMPS: 2.9	FLRPM: 1750
FORM: FBK1	S.F.: 1.15	NEMA DESIGN: B	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: L	DUTY: Cont.
MODEL No.: Y154SDMV7FS-PL		kW: 1.5	
NOM. EFF.: 86.5	MIN. EFF.: -	P.F.: 73.5	

AMPERAGE

LOCKED ROTOR: 24

TORQUES

FULL LOAD (lb-ft.): 6.0
LOCKED ROTOR (%): 385
BREAK DOWN (%): 365

****BEARINGS:**

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

EFFICIENCY

FULL LOAD: 87.6
3/4 LOAD: 87.3
1/2 LOAD: 84.8

POWER FACTOR

FULL LOAD: 73.5
3/4 LOAD: 67.4
1/2 LOAD: 56.1

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

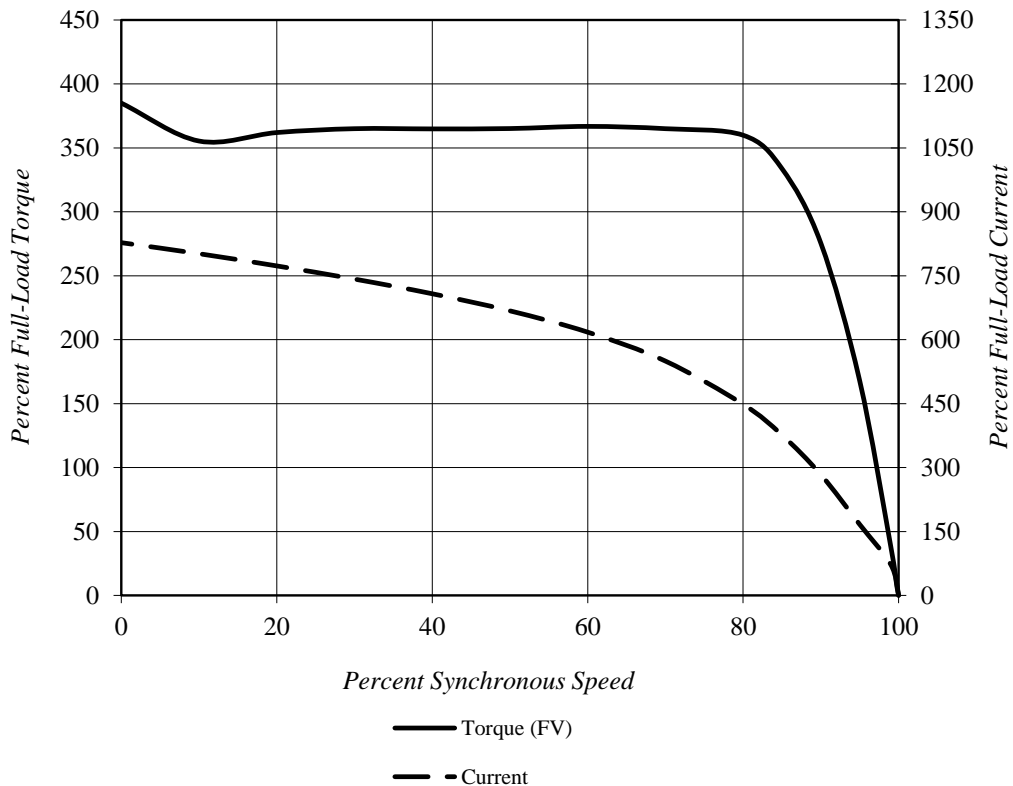
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	Y154SDMV7FS-PL			FLAmps:	2.9
Enclosure:	TEFC	Voltage:	460 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 60 Hz	Ins. Class:	F
HP:	2	Rotor Inertia:	0.15 lb-ft ²	Date:	10/18/2019
FLRPM:	1750	Load Inertia:	N/A	File:	GH4Y15 (1.5kW)

Locked Rotor Amps:	24 A	Load Type:	N/A
Locked Rotor Torque:	385%	Starting at:	N/A
Breakdown Torque:	365%	Accel. Time:	N/A
Rated Torque:	6 lb-ft		

Design Values



Comments: PROJECT -

D.E.Curve #: GH4Y15 (1.5kW)

Prepared by: Zichao Xie

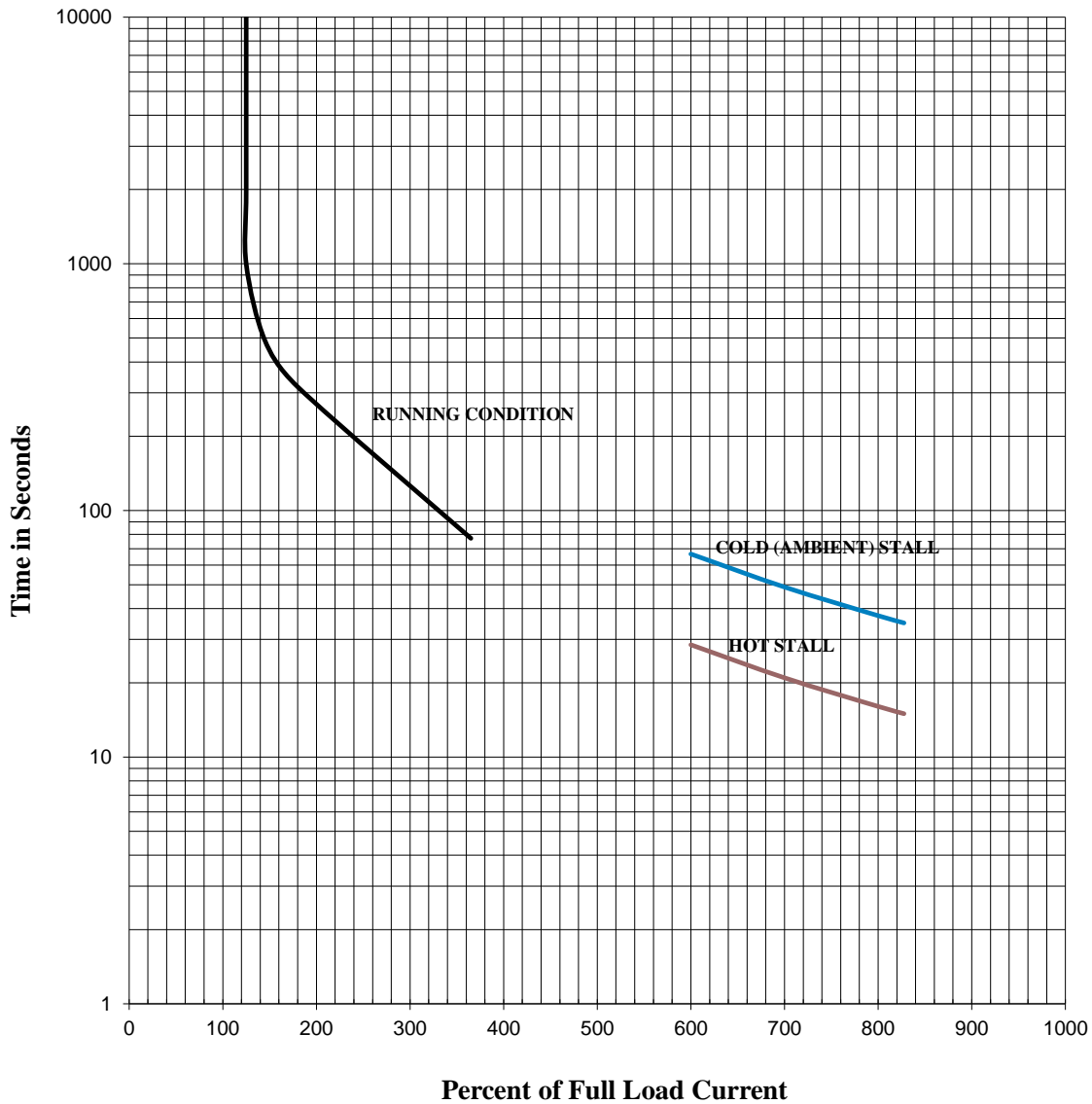
Checked by:

TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	Y154SDMV7FS-PL			FLAmps:	2.9
Enclosure:	TEFC	Voltage:	460 V	Frame:	90L
Pole:	4	Frequency:	3 PH / 60 Hz	Ins. Class:	F
HP:	2	Rotor Inertia:	0.15 lb-ft ²	Date:	10/18/2019
FLRPM:	1750	Load Inertia:	N/A	File:	GH4Y15 (1.5kW)



Comments: PROJECT -

D.E. Curve #: GH4Y15 (1.5kW)

Prepared by: Zichao Xie

Checked by: