


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 X. ±2.0 X.X ±0.5 X.XX ±0.1						
3HFN000314		FRAME: 90L							
TOSHIBA TOSHIBA INTERNATIONAL CORPORATION			MAXIMUM MOTOR WEIGHT - lbs. - kgs.	NO	REVISION	DRAWN BY	DATE	CHECK	 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: 3000
FRAME: 90L	ENCL: TEFC	FLAMPS: 7.5/4.3	FLRPM: 2885
FORM: FCKL1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: Y222SDMV7KS-PL		kW: 2.2	
NOM. EFF.: 85.9	MIN. EFF.: -	cosØ 0.86	

AMPERAGE

LOCKED ROTOR: 64/37

TORQUES

FULL LOAD (lb-ft.): 5.3
LOCKED ROTOR (%): 365
BREAK DOWN (%): 300

****BEARINGS:**

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

EFFICIENCY

FULL LOAD: 86.1
3/4 LOAD: 86.3
1/2 LOAD: 84.7

POWER FACTOR

FULL LOAD: 86.5
3/4 LOAD: 82.2
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: 1/7/2020

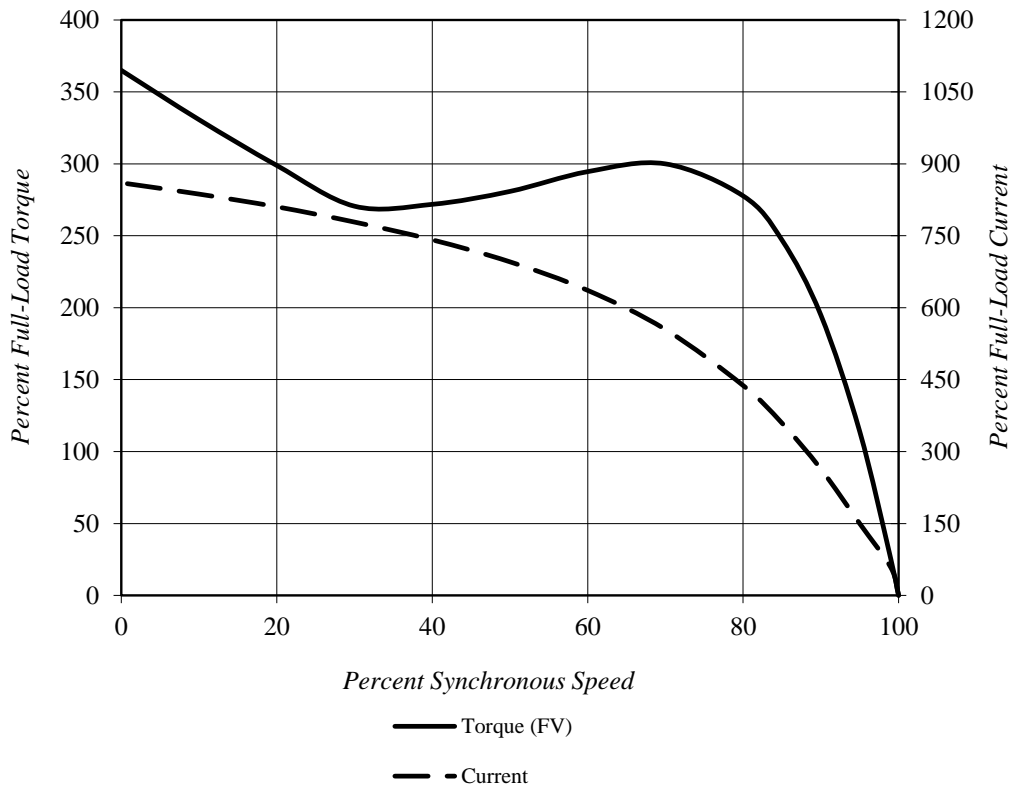
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	Y222SDMV7KS-PL			FLAmps:	7.5/4.3
Enclosure:	TEFC	Voltage:	230/400 V	Frame:	90L
Pole:	2	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	2.2	Rotor Inertia:	0.09 lb-ft ²	Date:	1/7/2020
FLRPM:	2885	Load Inertia:	N/A	File:	GH2Y22 (2.2kW)

Locked Rotor Amps:	64/37 A	Load Type:	N/A
Locked Rotor Torque:	365%	Starting at:	N/A
Breakdown Torque:	300%	Accel. Time:	N/A
Rated Torque:	5.3 lb-ft		

Design Values



Comments: PROJECT -

D.E. Curve #: GH2Y22 (2.2kW)

Prepared by: Zichao Xie

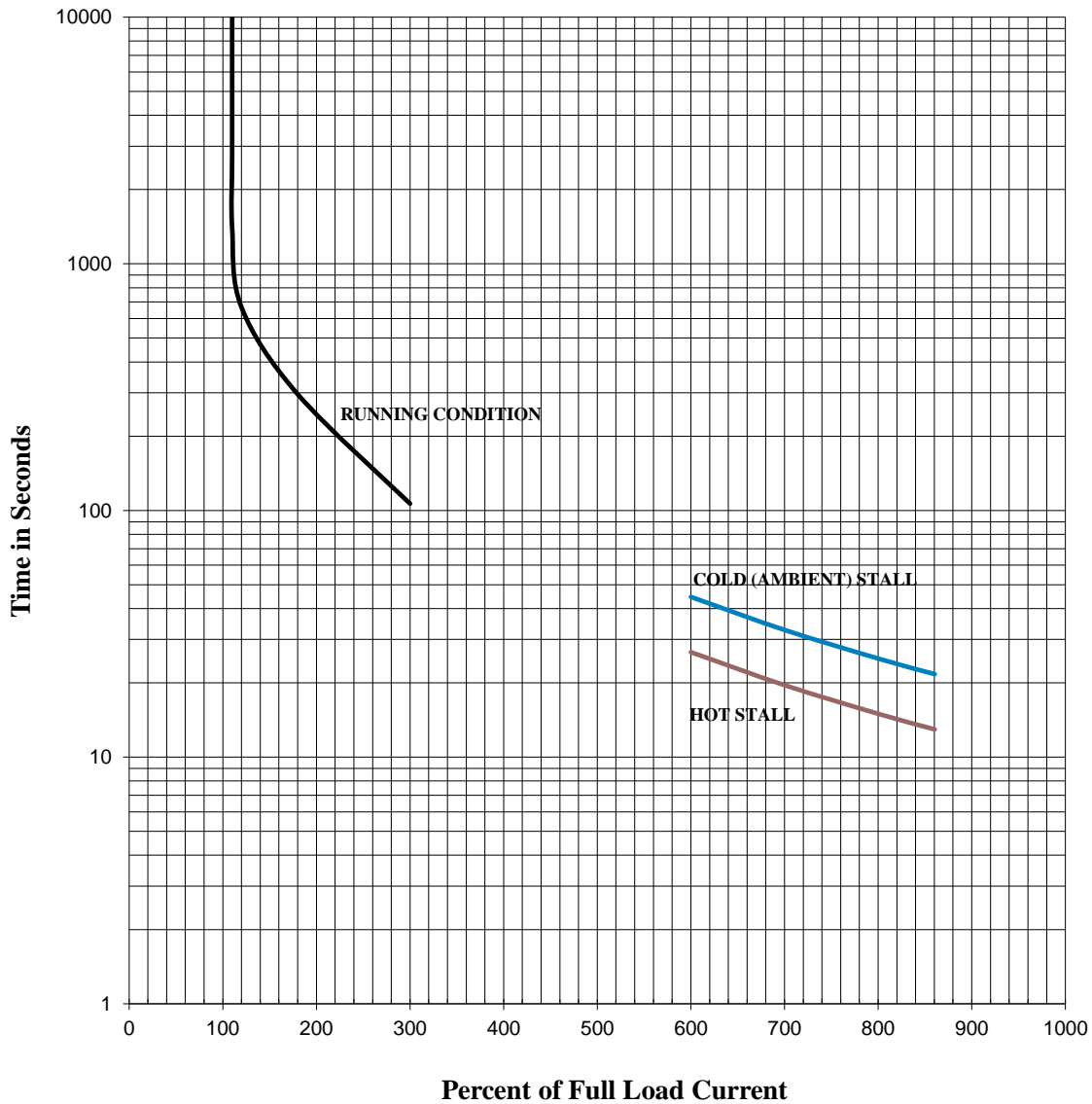
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TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	Y22SDMV7KS-PL			FLAmps:	7.5/4.3
Enclosure:	TEFC	Voltage:	230/400 V	Frame:	90L
Pole:	2	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	2.2	Rotor Inertia:	0.09 lb-ft ²	Date:	1/7/2020
FLRPM:	2885	Load Inertia:	N/A	File:	GH2Y22 (2.2kW)



Comments: PROJECT -

D.E. Curve #: GH2Y22 (2.2kW)

Prepared by: Zichao Xie

Checked by:

TOSHIBA INTERNATIONAL CORPORATION
Industrial Division / Houston Motor Plant

SQUIRREL CAGE INDUCTION MOTOR
PERFORMANCE SPECIFICATIONS

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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: 3000
FRAME: 90L	ENCL: TEFC	FLAMPS: 7.4/4.3	FLRPM: 2885
FORM: FCKL1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: Y222SDMV7KS-PL		kW: 2.2	
NOM. EFF.: 85.9	MIN. EFF.: -	cosØ 0.83	

AMPERAGE

LOCKED ROTOR: 66/38

TORQUES

FULL LOAD (lb-ft.): 5.3
LOCKED ROTOR (%): 450
BREAK DOWN (%): 320

****BEARINGS:**

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

EFFICIENCY

FULL LOAD: 86.0
3/4 LOAD: 85.9
1/2 LOAD: 83.8

POWER FACTOR

FULL LOAD: 83.1
3/4 LOAD: 77.4
1/2 LOAD: 66.1

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: 12/27/2019

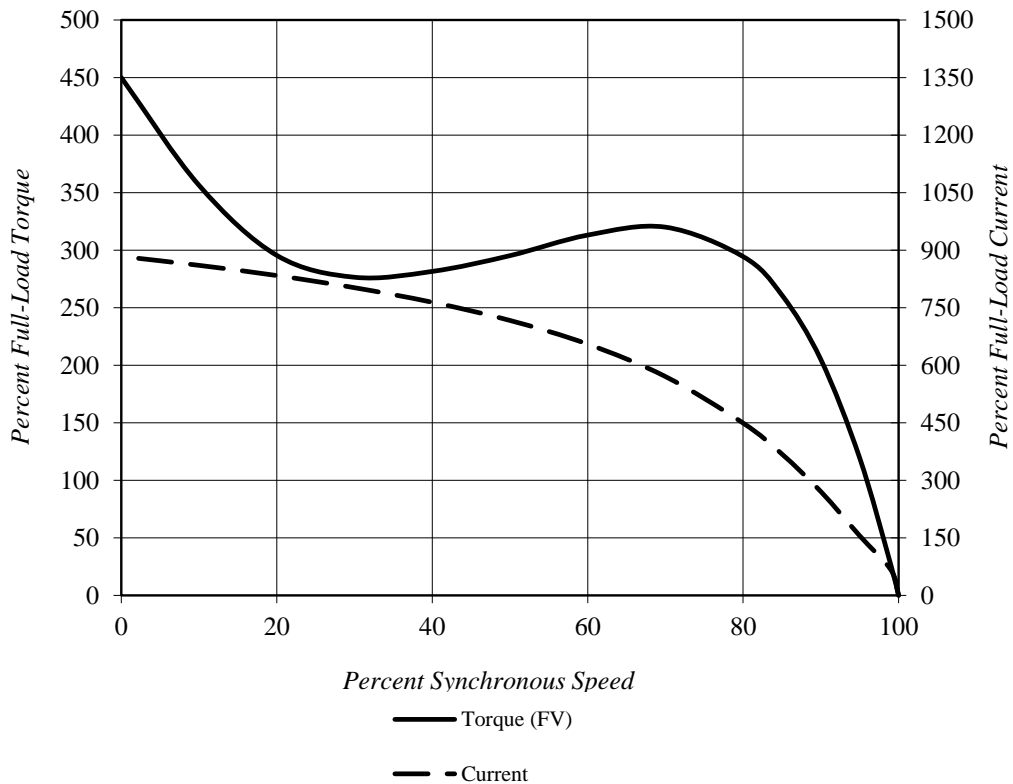
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	Y222SDMV7KS-PL			FLAmps:	7.4/4.3
Enclosure:	TEFC	Voltage:	240/415 V	Frame:	90L
Pole:	2	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	2.2	Rotor Inertia:	0.09 lb-ft ²	Date:	12/27/2019
FLRPM:	2885	Load Inertia:	N/A	File:	GH2Y22 (2.2kW)

Locked Rotor Amps:	66/38 A	Load Type:	N/A
Locked Rotor Torque:	450%	Starting at:	N/A
Breakdown Torque:	320%	Accel. Time:	N/A
Rated Torque:	5.3 lb-ft		

Design Values



Comments: PROJECT -

D.E. Curve #: GH2Y22 (2.2kW)

Prepared by: Zichao Xie

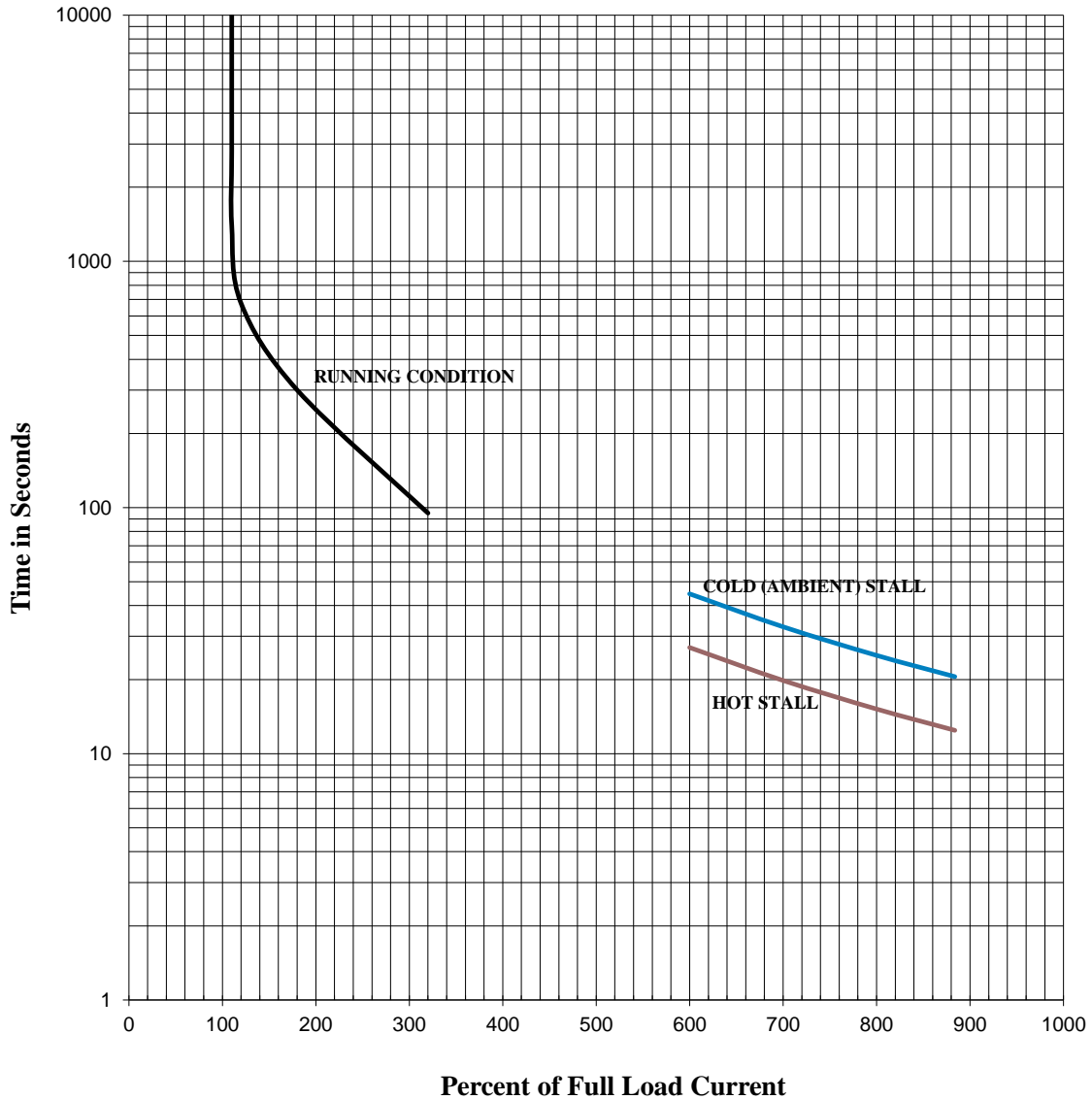
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TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	Y22SDMV7KS-PL			FLAmps:	7.4/4.3
Enclosure:	TEFC	Voltage:	240/415 V	Frame:	90L
Pole:	2	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	2.2	Rotor Inertia:	0.09 lb-ft ²	Date:	12/27/2019
FLRPM:	2885	Load Inertia:	N/A	File:	GH2Y22 (2.2kW)



Comments: PROJECT -

D.E. Curve #: GH2Y22 (2.2kW)

Prepared by: Zichao Xie

Checked by:

TOSHIBA INTERNATIONAL CORPORATION
Industrial Division / Houston Motor Plant

SQUIRREL CAGE INDUCTION MOTOR
PERFORMANCE SPECIFICATIONS

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WRITTEN BY	MDC
APPROVED BY	PAA

CUSTOMER: -
TIC SR No.: -

MOTOR NAMEPLATE DATA

H.P.: -	VOLTS: 220/380	3 PH / 50 Hz	S. RPM: 3000
FRAME: 90L	ENCL: TEFC	FLAMPS: 7.8/4.5	FLRPM: 2865
FORM: FCKL1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: Y222SDMV7KS-PL		kW: 2.2	
NOM. EFF.: 85.9	MIN. EFF.: -	cosØ 0.88	

AMPERAGE

LOCKED ROTOR: 61/35

TORQUES

FULL LOAD (lb-ft.): 5.3
LOCKED ROTOR (%): 365
BREAK DOWN (%): 270

****BEARINGS:**

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

EFFICIENCY

FULL LOAD: 84.7
3/4 LOAD: 85.4
1/2 LOAD: 84.4

POWER FACTOR

FULL LOAD: 88.4
3/4 LOAD: 85.3
1/2 LOAD: 77.6

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: 1/7/2020

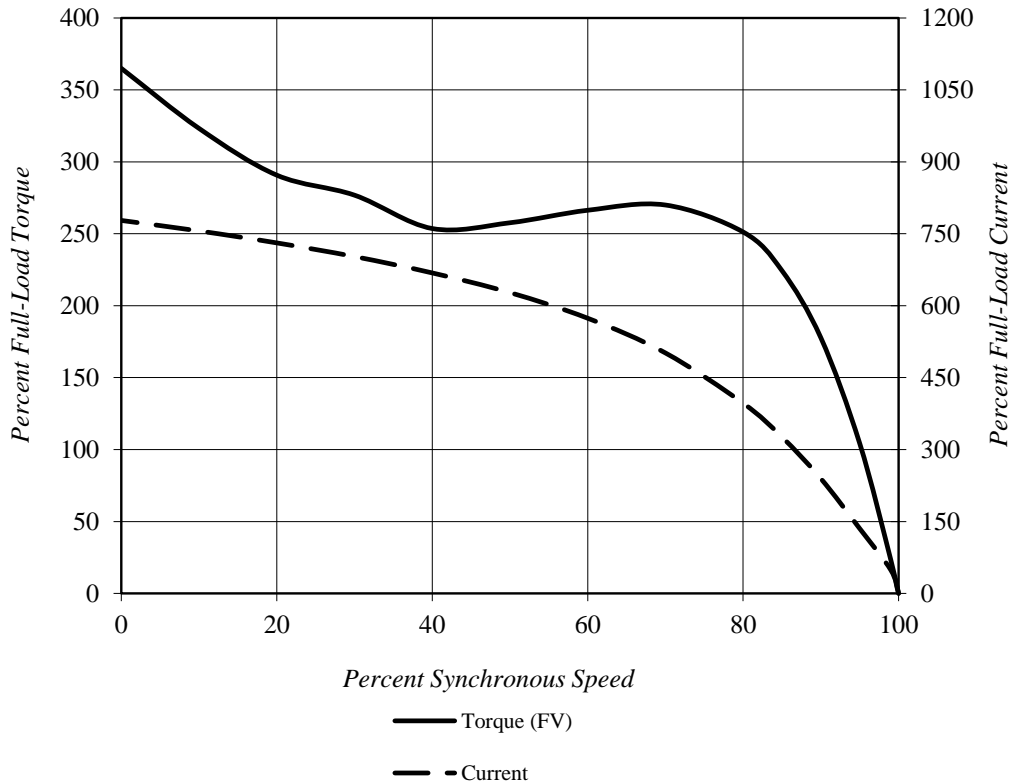
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	Y222SDMV7KS-PL			FLAmps:	7.8/4.5
Enclosure:	TEFC	Voltage:	220/380 V	Frame:	90L
Pole:	2	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	2.2	Rotor Inertia:	0.09 lb-ft ²	Date:	1/7/2020
FLRPM:	2865	Load Inertia:	N/A	File:	GH2Y22 (2.2kW)

Locked Rotor Amps:	61/35 A	Load Type:	N/A
Locked Rotor Torque:	365%	Starting at:	N/A
Breakdown Torque:	270%	Accel. Time:	N/A
Rated Torque:	5.3 lb-ft		

Design Values



Comments: PROJECT -

D.E.Curve #: GH2Y22 (2.2kW)

Prepared by: Zichao Xie

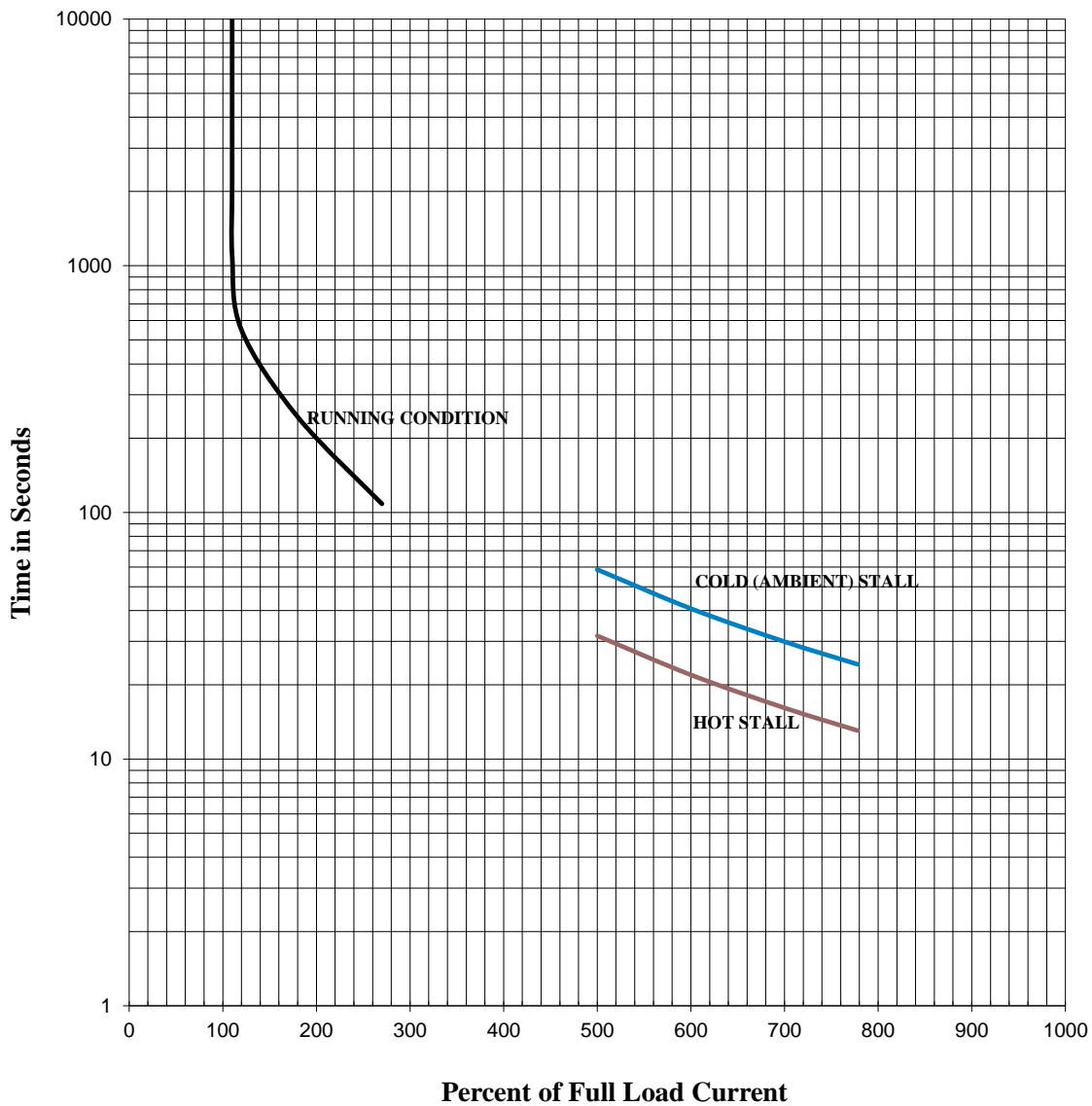
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TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	Y222SDMV7KS-PL			FLAmps:	7.8/4.5
Enclosure:	TEFC	Voltage:	220/380 V	Frame:	90L
Pole:	2	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	2.2	Rotor Inertia:	0.09 lb-ft ²	Date:	1/7/2020
FLRPM:	2865	Load Inertia:	N/A	File:	GH2Y22 (2.2kW)



Comments: PROJECT -

D.E. Curve #: GH2Y22 (2.2kW)

Prepared by: Zichao Xie

Checked by:

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SQUIRREL CAGE INDUCTION MOTOR
PERFORMANCE SPECIFICATIONS

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SUPERSEDES	11/8/96
REVISION	2
WRITTEN BY	MDC
APPROVED BY	PAA

CUSTOMER: -
TIC SR No.: -

MOTOR NAMEPLATE DATA

H.P.: 3	VOLTS: 460	3 PH / 60 Hz	S. RPM: 3600
FRAME: 90L	ENCL: TEFC	FLAMPS: 3.7	FLRPM: 3505
FORM: FCKL1	S.F.: 1.15	NEMA DESIGN: A	INSUL CLASS: F
TYPE: IKH	AMB.: 40°C	CODE: M	DUTY: Cont.
MODEL No.: Y222SDMV7KS-PL		kW: 2.2	
NOM. EFF.: 86.5	MIN. EFF.: -	P.F.: 85.0	

AMPERAGE

LOCKED ROTOR: 39

TORQUES

FULL LOAD (lb-ft.): 4.3
LOCKED ROTOR (%): 420
BREAK DOWN (%): 335

****BEARINGS:**

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

EFFICIENCY

FULL LOAD: 88.1
3/4 LOAD: 87.6
1/2 LOAD: 85.3

POWER FACTOR

FULL LOAD: 85.3
3/4 LOAD: 80.9
1/2 LOAD: 71.3

ALL CHARACTERISTICS ARE AVERAGE EXPECTED VALUES BASED UPON RATED VOLTAGE,
FREQUENCY AND SINEWAVE POWER INPUT.

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DEFINED BY NEMA-MG-12 OR -20.

** BEARINGS ARE THE ONLY RECOMMENDED SPARE PART(S).

CERTIFIED BY: Zichao Xie

DATE: 1/7/2020

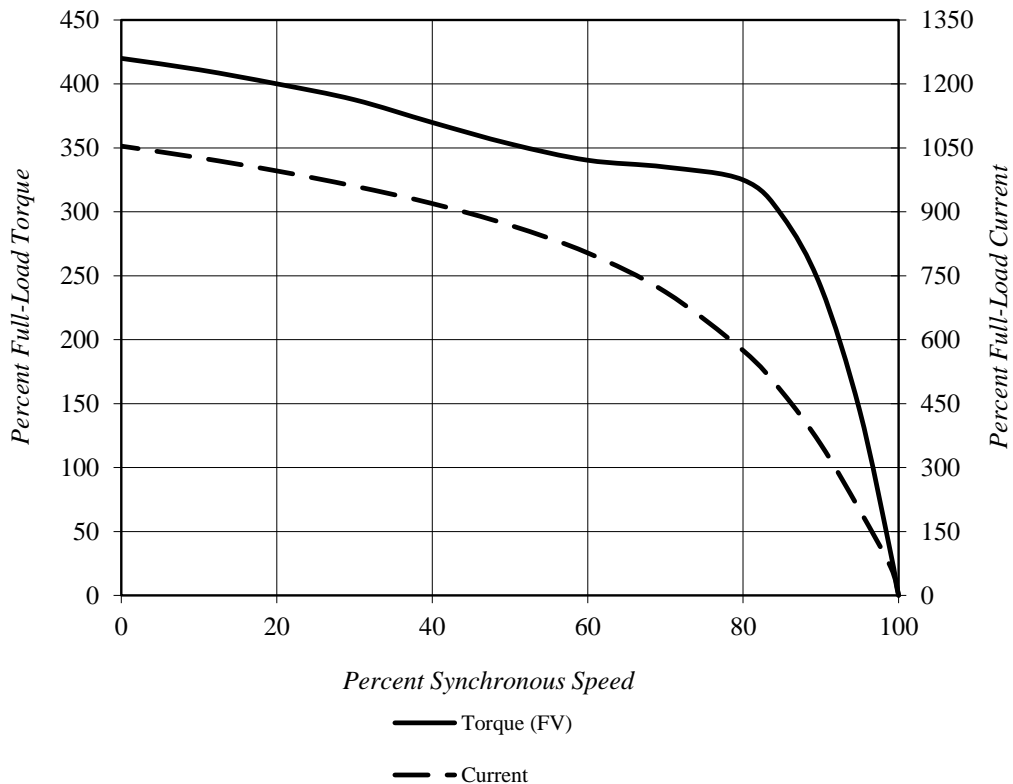
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	Y222SDMV7KS-PL			FLAmps:	3.7
Enclosure:	TEFC	Voltage:	460 V	Frame:	90L
Pole:	2	Frequency:	3 PH / 60 Hz	Ins. Class:	F
HP:	3	Rotor Inertia:	0.09 lb-ft ²	Date:	1/7/2020
FLRPM:	3505	Load Inertia:	N/A	File:	GH2Y22 (2.2kW)

Locked Rotor Amps:	39 A	Load Type:	N/A
Locked Rotor Torque:	420%	Starting at:	N/A
Breakdown Torque:	335%	Accel. Time:	N/A
Rated Torque:	4.3 lb-ft		

Design Values



Comments: PROJECT -

D.E. Curve #: GH2Y22 (2.2kW)

Prepared by: Zichao Xie

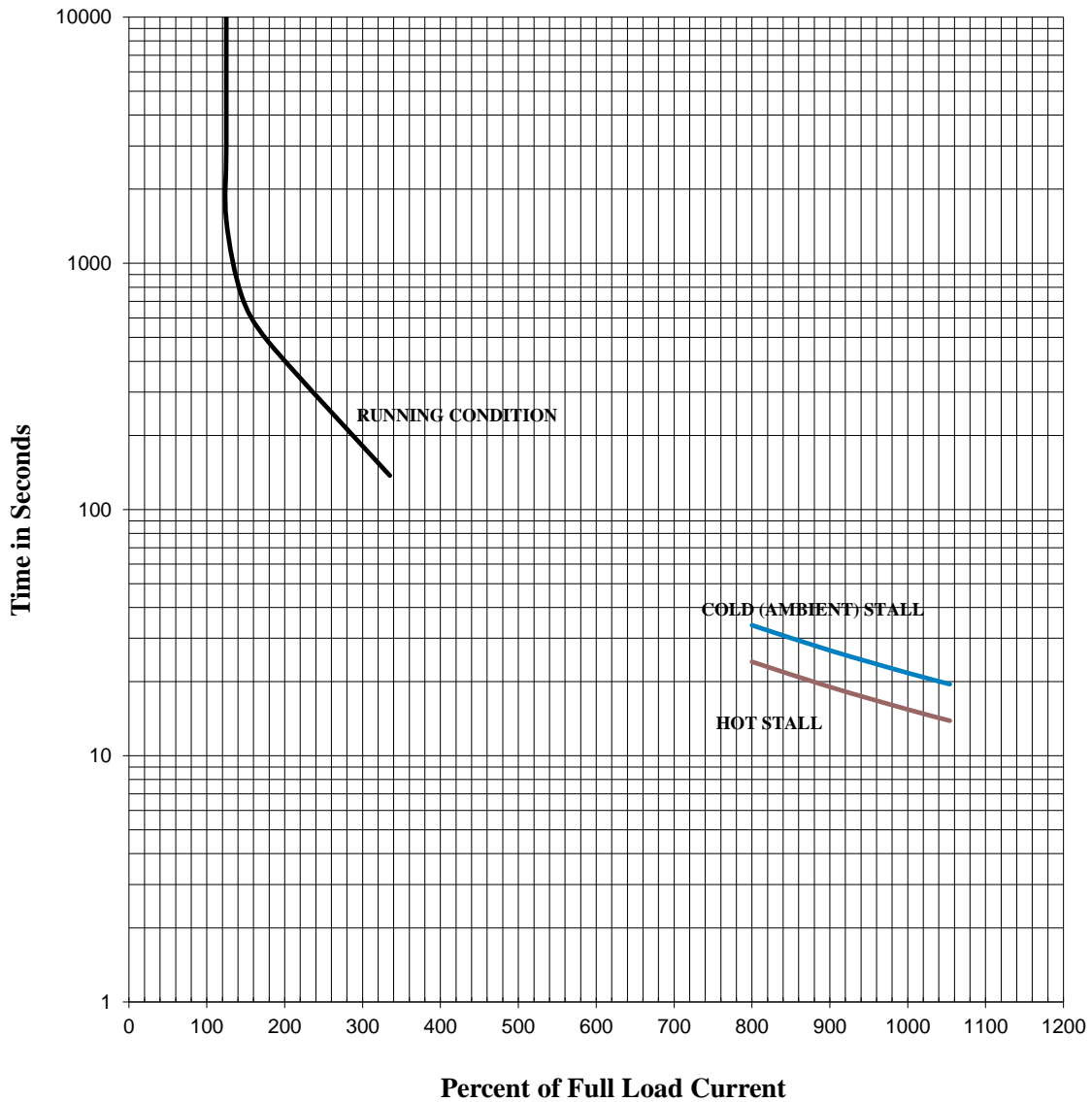
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TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	Y222SDMV7KS-PL			FLAmps:	3.7
Enclosure:	TEFC	Voltage:	460 V	Frame:	90L
Pole:	2	Frequency:	3 PH / 60 Hz	Ins. Class:	F
HP:	3	Rotor Inertia:	0.09 lb-ft ²	Date:	1/7/2020
FLRPM:	3505	Load Inertia:	N/A	File:	GH2Y22 (2.2kW)



Comments: PROJECT -

D.E. Curve #: GH2Y22 (2.2kW)

Prepared by: Zichao Xie

Checked by: