

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.

B5-FLANGE MOTOR
OL DRAWING IEC GLOBAL

TYPE: 2P - 400V

FRAME: 225S

TOLERANCES
X. ±2.0
X.X ±0.5
X.XX ±0.1

3HFN000337

MAXIMUM
MOTOR WEIGHT

-- lbs.
-- kgs.

02	Change to dimension KEY thickness	T.Danh	Sep-08-18	B.Quynh
01	Change to new design Frame footless	T.Danh	May-21-18	B.Quynh
NO	REVISION	DRAWN BY	DATE	CHECK



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

TOSHIBA
TOSHIBA INTERNATIONAL CORPORATION

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: 225S	ENCL: TEFC	FLAMPS: 82	FLRPM: 2965
FORM: FCKL1	S.F.: -	IEC DESIGN NE	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0452SDMW7JS-P		kW: 45	
NOM. EFF.: 94.0	MIN. EFF.: -	cosØ 0.84	

AMPERAGE

LOCKED ROTOR: 781

TORQUES

FULL LOAD (lb-ft.): 107
LOCKED ROTOR (%): 320
BREAK DOWN (%): 345

****BEARINGS:**

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

EFFICIENCY

FULL LOAD: 94.7
3/4 LOAD: 93.9
1/2 LOAD: 91.9

POWER FACTOR

FULL LOAD: 84.0
3/4 LOAD: 79.6
1/2 LOAD: 70.0

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).

CERTIFIED BY: Zichao Xie

DATE: 1/15/2020

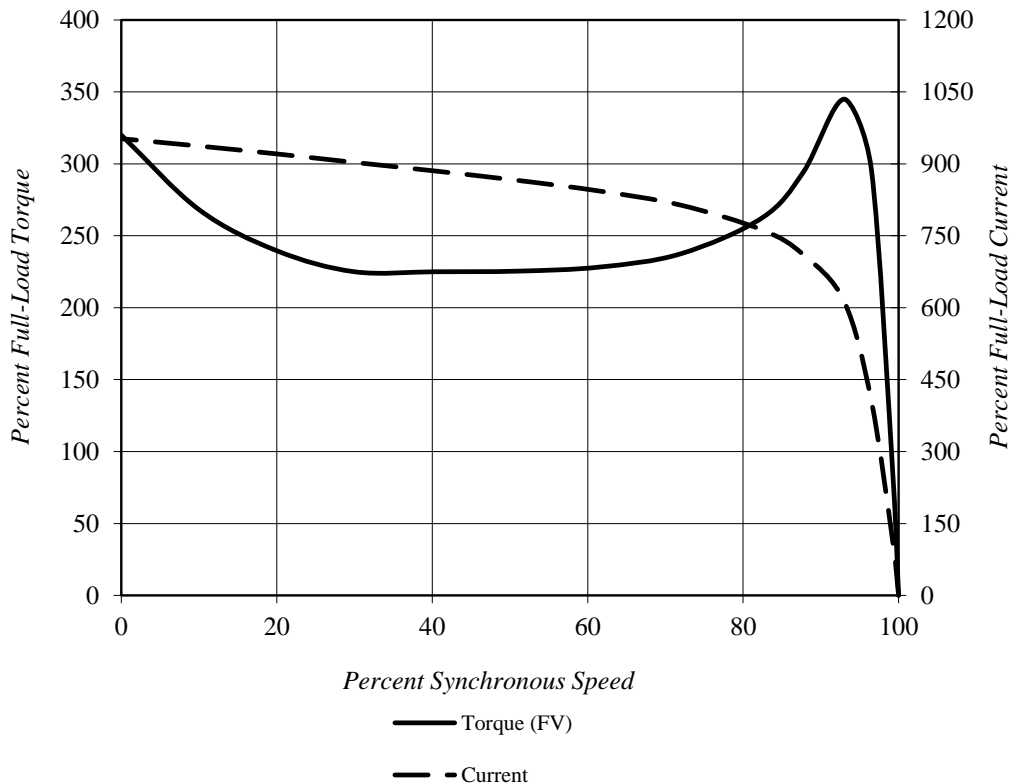
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	0452SDMW7JS-P			FLAmps:	82
Enclosure:	TEFC	Voltage:	400 V	Frame:	225S
Pole:	2	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	45	Rotor Inertia:	8.4 lb-ft ²	Date:	1/15/2020
FLRPM:	2965	Load Inertia:	N/A	File:	GH2045 (45kW)

Locked Rotor Amps:	781 A	Load Type:	N/A
Locked Rotor Torque:	320%	Starting at:	N/A
Breakdown Torque:	345%	Accel. Time:	N/A
Rated Torque:	107 lb-ft		

Design Values



Comments: PROJECT -

D.E. Curve #: GH2045 (45kW)

Prepared by: Zichao Xie

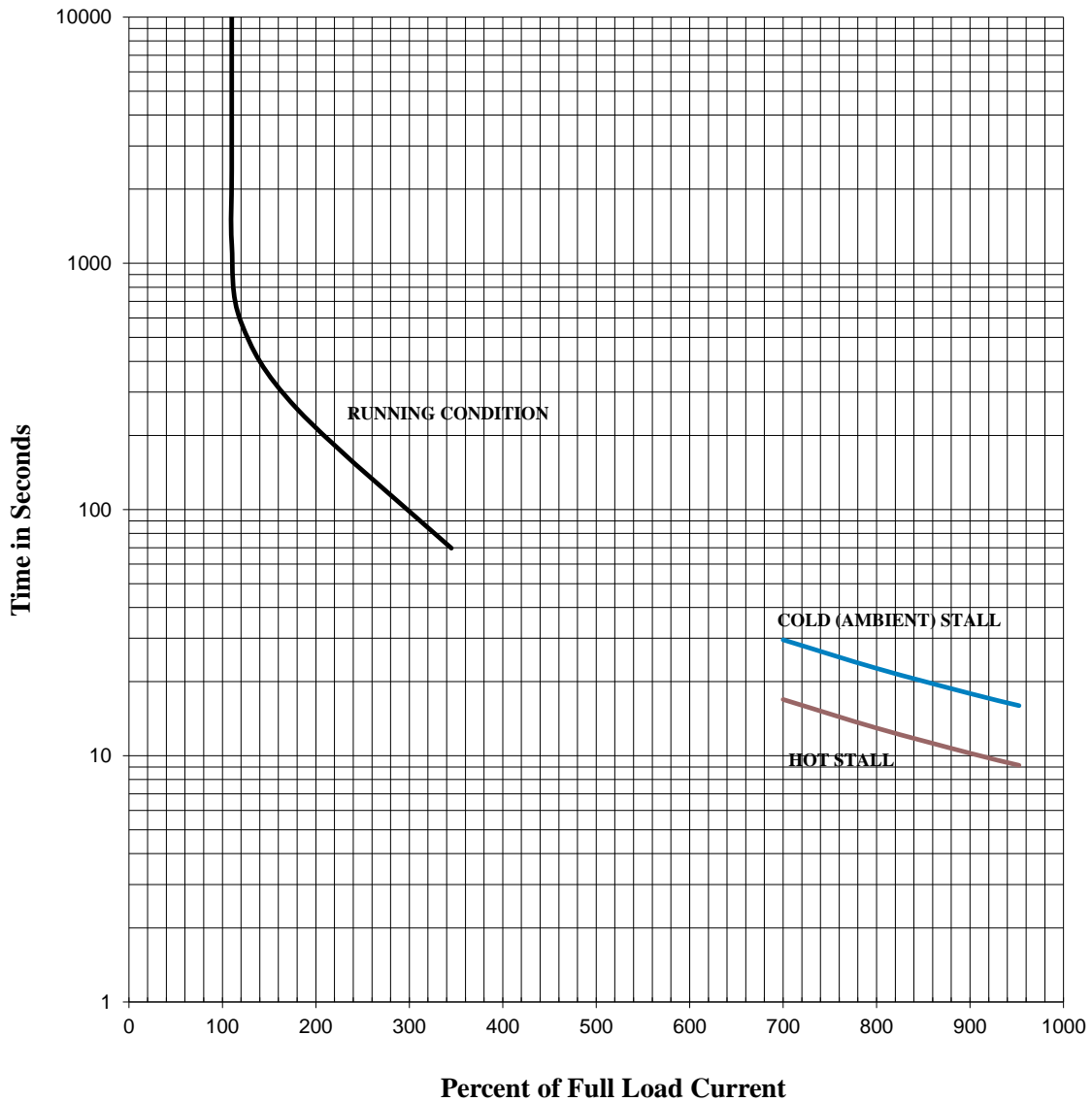
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TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	0452SDMW7JS-P			FLAmps:	82
Enclosure:	TEFC	Voltage:	400 V	Frame:	225S
Pole:	2	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	45	Rotor Inertia:	8.4 lb-ft ²	Date:	1/15/2020
FLRPM:	2965	Load Inertia:	N/A	File:	GH2045 (45kW)



Comments: PROJECT -

D.E.Curve #: GH2045 (45kW)

Prepared by: Zichao Xie

Checked by:

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SQUIRREL CAGE INDUCTION MOTOR
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CUSTOMER: -
TIC SR No.: -

MOTOR NAMEPLATE DATA

H.P.: -	VOLTS: 415	3 PH / 50 Hz	S. RPM: 3000
FRAME: 225S	ENCL: TEFC	FLAMPS: 81	FLRPM: 2965
FORM: FCKL1	S.F.: -	IEC DESIGN NE	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0452SDMW7JS-P		kW: 45	
NOM. EFF.: 94.0	MIN. EFF.: -	cosØ 0.81	

AMPERAGE

LOCKED ROTOR: 815

TORQUES

FULL LOAD (lb-ft.): 107
LOCKED ROTOR (%): 350
BREAK DOWN (%): 365

****BEARINGS:**

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

EFFICIENCY

FULL LOAD: 94.9
3/4 LOAD: 94.1
1/2 LOAD: 91.9

POWER FACTOR

FULL LOAD: 81.9
3/4 LOAD: 76.6
1/2 LOAD: 65.7

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: 1/15/2020

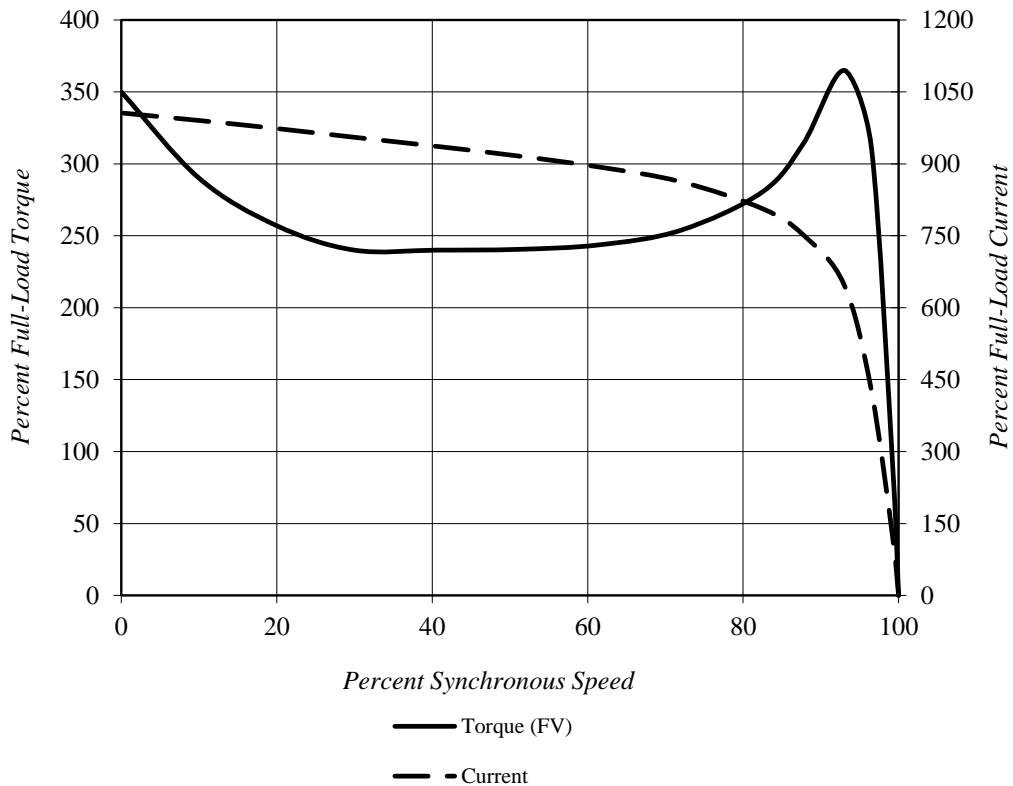
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	0452SDMW7JS-P			FLAmps:	81
Enclosure:	TEFC	Voltage:	415 V	Frame:	225S
Pole:	2	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	45	Rotor Inertia:	8.4 lb-ft ²	Date:	1/15/2020
FLRPM:	2965	Load Inertia:	N/A	File:	GH2045 (45kW)

Locked Rotor Amps:	815 A	Load Type:	N/A
Locked Rotor Torque:	350%	Starting at:	N/A
Breakdown Torque:	365%	Accel. Time:	N/A
Rated Torque:	107 lb-ft		

Design Values



Comments: PROJECT -

D.E. Curve #: GH2045 (45kW)

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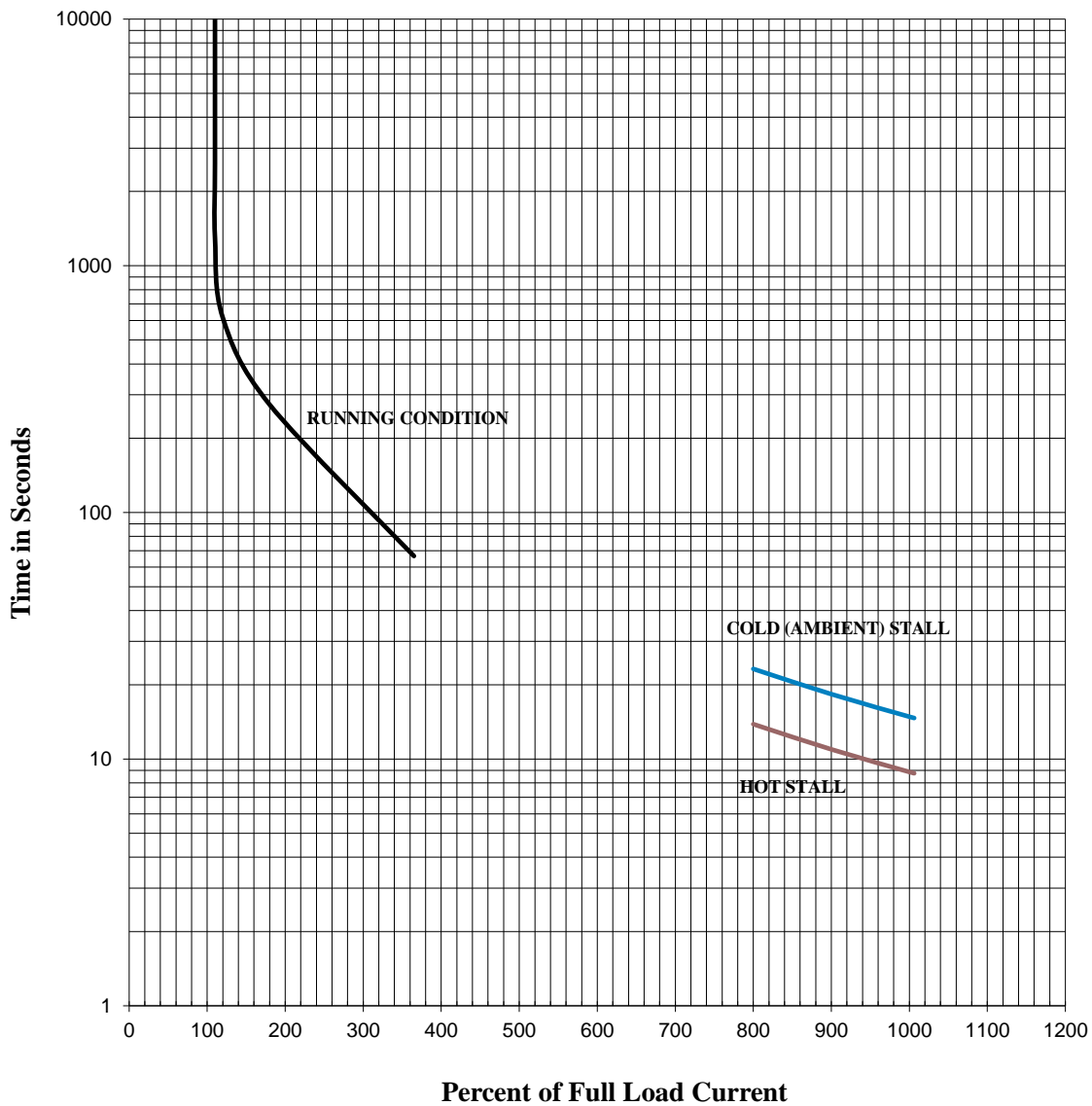
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TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	0452SDMW7JS-P			FLAmps:	81
Enclosure:	TEFC	Voltage:	415 V	Frame:	225S
Pole:	2	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	45	Rotor Inertia:	8.4 lb-ft ²	Date:	1/15/2020
FLRPM:	2965	Load Inertia:	N/A	File:	GH2045 (45kW)



Comments: PROJECT -

D.E. Curve #: GH2045 (45kW)

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TIC SR No.: -

MOTOR NAMEPLATE DATA

H.P.: -	VOLTS: 380	3 PH / 50 Hz	S. RPM: 3000
FRAME: 225S	ENCL: TEFC	FLAMPS: 84	FLRPM: 2960
FORM: FCKL1	S.F.: -	IEC DESIGN NE	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0452SDMW7JS-P		kW: 45	
NOM. EFF.: 94.0	MIN. EFF.: -	cosØ 0.86	

AMPERAGE

LOCKED ROTOR: 736

TORQUES

FULL LOAD (lb-ft.): 107
LOCKED ROTOR (%): 285
BREAK DOWN (%): 315

****BEARINGS:**

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

EFFICIENCY

FULL LOAD: 94.5
3/4 LOAD: 93.8
1/2 LOAD: 92.0

POWER FACTOR

FULL LOAD: 86.4
3/4 LOAD: 83.3
1/2 LOAD: 75.7

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: 1/15/2020

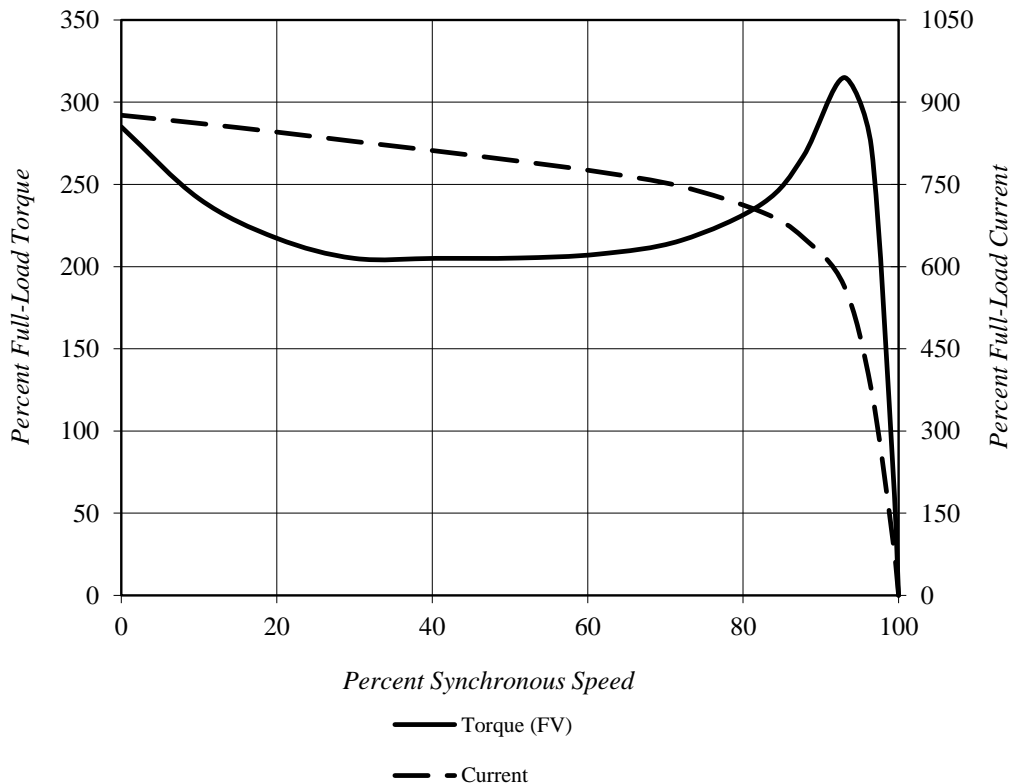
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	0452SDMW7JS-P			FLAmps:	84
Enclosure:	TEFC	Voltage:	380 V	Frame:	225S
Pole:	2	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	45	Rotor Inertia:	8.4 lb-ft ²	Date:	1/15/2020
FLRPM:	2960	Load Inertia:	N/A	File:	GH2045 (45kW)

Locked Rotor Amps:	736 A	Load Type:	N/A
Locked Rotor Torque:	285%	Starting at:	N/A
Breakdown Torque:	315%	Accel. Time:	N/A
Rated Torque:	107 lb-ft		

Design Values



Comments: PROJECT -

D.E.Curve #: GH2045 (45kW)

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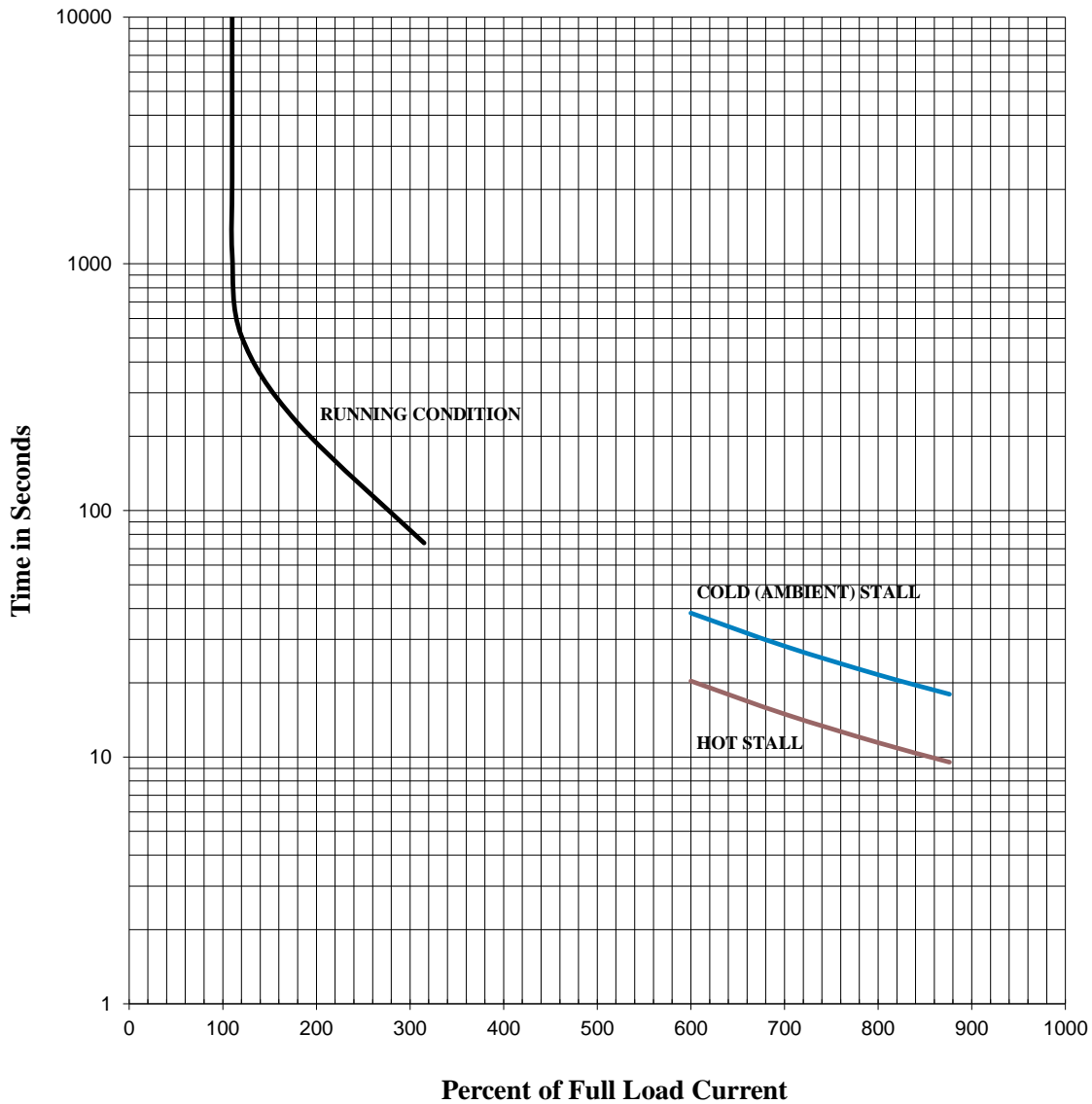
Checked by:

TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	0452SDMW7JS-P			FLAmps:	84
Enclosure:	TEFC	Voltage:	380 V	Frame:	225S
Pole:	2	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	45	Rotor Inertia:	8.4 lb-ft ²	Date:	1/15/2020
FLRPM:	2960	Load Inertia:	N/A	File:	GH2045 (45kW)



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CUSTOMER: -
TIC SR No.: -

MOTOR NAMEPLATE DATA

H.P.: 60	VOLTS: 460	3 PH / 60 Hz	S. RPM: 3600
FRAME: 225S	ENCL: TEFC	FLAMPS: 71	FLRPM: 3570
FORM: FCKL1	S.F.: 1.15	NEMA DESIGN: A	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: L	DUTY: Cont.
MODEL No.: 0452SDMW7JS-P		kW: 45	
NOM. EFF.: 93.6	MIN. EFF.: -	P.F.: 83.5	

AMPERAGE

LOCKED ROTOR: 741

TORQUES

FULL LOAD (lb-ft.): 89
LOCKED ROTOR (%): 370
BREAK DOWN (%): 370

****BEARINGS:**

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

EFFICIENCY

FULL LOAD: 94.9
3/4 LOAD: 93.8
1/2 LOAD: 91.4

POWER FACTOR

FULL LOAD: 83.9
3/4 LOAD: 79.4
1/2 LOAD: 69.6

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

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DATE: 1/15/2020

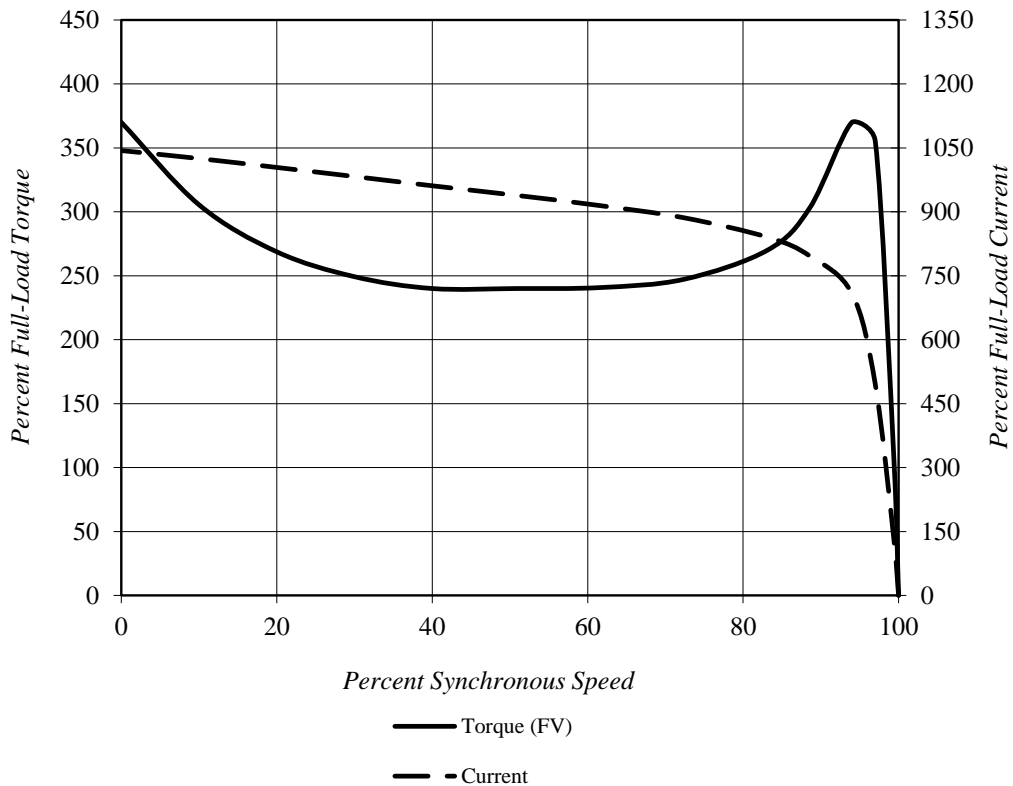
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	0452SDMW7JS-P			FLAmps:	71
Enclosure:	TEFC	Voltage:	460 V	Frame:	225S
Pole:	2	Frequency:	3 PH / 60 Hz	Ins. Class:	F
HP:	60	Rotor Inertia:	8.4 lb-ft ²	Date:	1/15/2020
FLRPM:	3570	Load Inertia:	N/A	File:	GH2045 (45kW)

Locked Rotor Amps:	741 A	Load Type:	N/A
Locked Rotor Torque:	370%	Starting at:	N/A
Breakdown Torque:	370%	Accel. Time:	N/A
Rated Torque:	89 lb-ft		

Design Values



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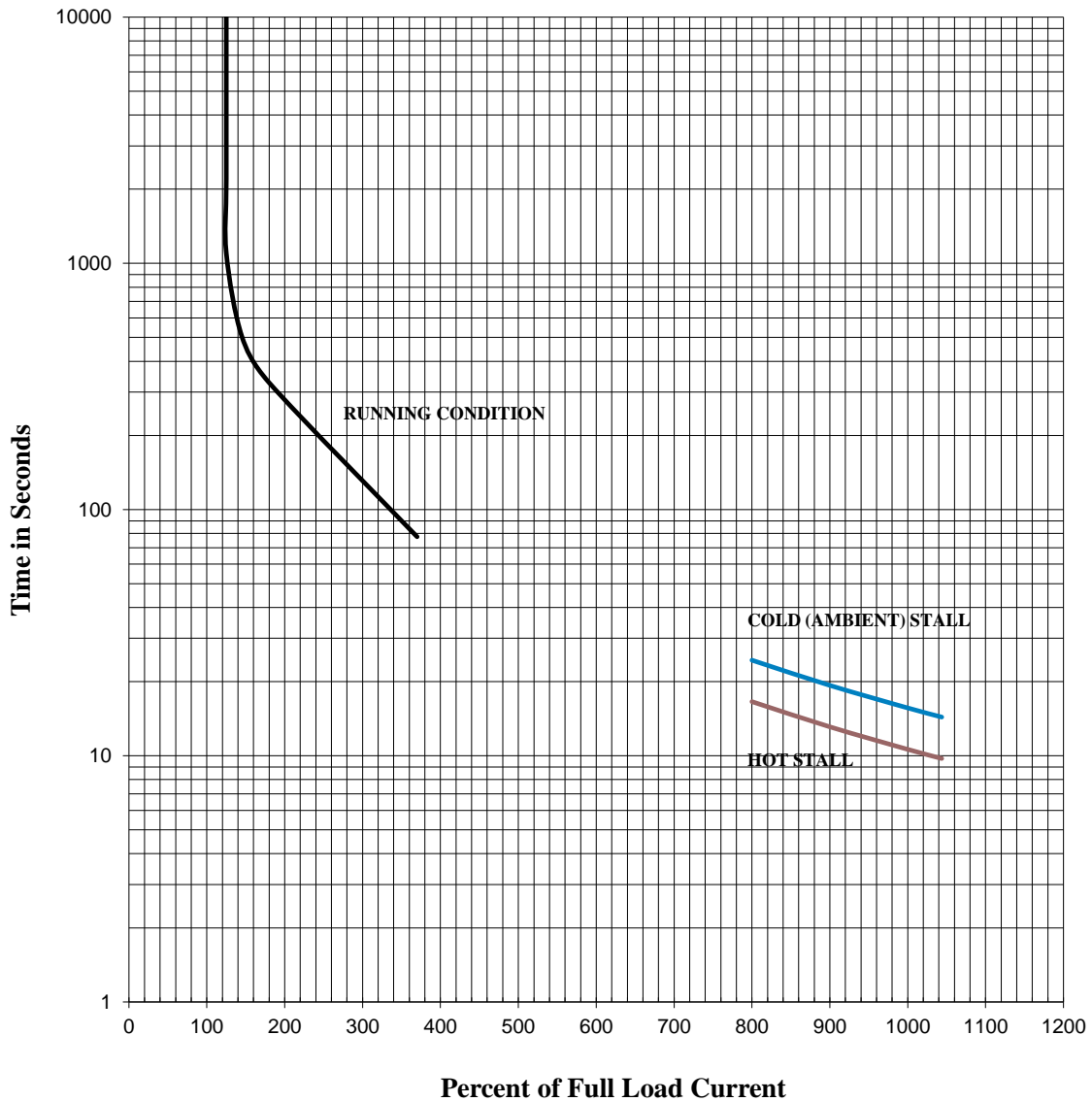
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Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	0452SDMW7JS-P			FLAmps:	71
Enclosure:	TEFC	Voltage:	460 V	Frame:	225S
Pole:	2	Frequency:	3 PH / 60 Hz	Ins. Class:	F
HP:	60	Rotor Inertia:	8.4 lb-ft ²	Date:	1/15/2020
FLRPM:	3570	Load Inertia:	N/A	File:	GH2045 (45kW)



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