

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 OL DRAWING IEC GLOBAL	TYPE: 2-4-6P - 400V	TOLERANCES X. ± 2.0 X.X ± 0.5 X.XX ± 0.1						EQP Global SD XT SERIES
	FRAME: 180L							
3HFN000223		MAXIMUM MOTOR WEIGHT - lbs. - kgs.	03	Adding dimension Overall length	T.Danh	Sep-07-18	B.Quynh	DRAWN BY: HIEN, NGUYEN
			02	change to M20S-EB	T.Danh	May-07-18	Q.Hung	CHECK BY: B.X.QUYNH
			01	change to fancover	T.Danh	Feb-08-18	Q.Hung	APPROVED BY: JAY BUGBEE
			NO	REVISION	DRAWN BY	DATE	CHECK	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: 1000
FRAME: 180L	ENCL: TEFC	FLAMPS: 31	FLRPM: 975
FORM: FBK1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0156SDMW7FS-P		kW: 15	
NOM. EFF.: 91.2	MIN. EFF.: -	cosØ 0.77	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 185	FULL LOAD (lb-ft.): 108	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 275	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 295	

EFFICIENCY	POWER FACTOR
FULL LOAD: 91.1	FULL LOAD: 77.7
3/4 LOAD: 91.2	3/4 LOAD: 72.3
1/2 LOAD: 90.0	1/2 LOAD: 61.5

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: 9/11/2020

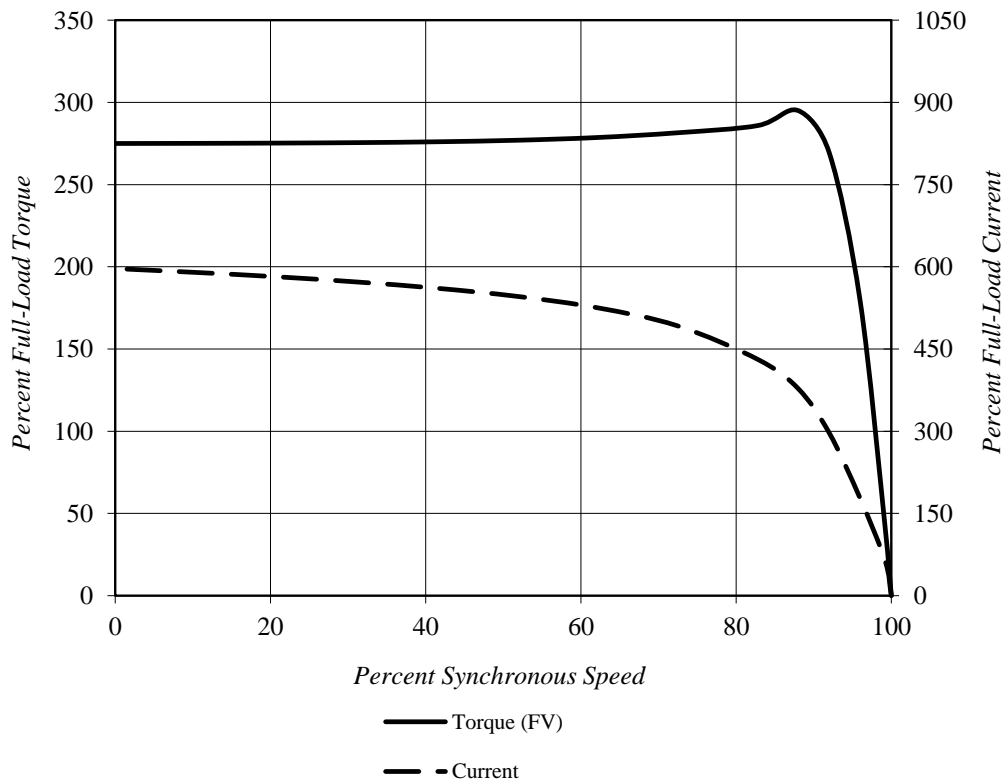
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	0156SDMW7FS-P			FLAmps:	31
Enclosure:	TEFC	Voltage:	400 V	Frame:	180L
Pole:	6	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	15	Rotor Inertia:	5.9 lb-ft ²	Date:	9/11/2020
FLRPM:	975	Load Inertia:	N/A	File:	GH6015 (15kW)

Locked Rotor Amps:	185 A	Load Type:	N/A
Locked Rotor Torque:	275%	Starting at:	N/A
Breakdown Torque:	295%	Accel. Time:	N/A
Rated Torque:	108 lb-ft		

Design Values



Comments: PROJECT -

D.E.Curve #: GH6015 (15kW)

Prepared by: Zichao Xie

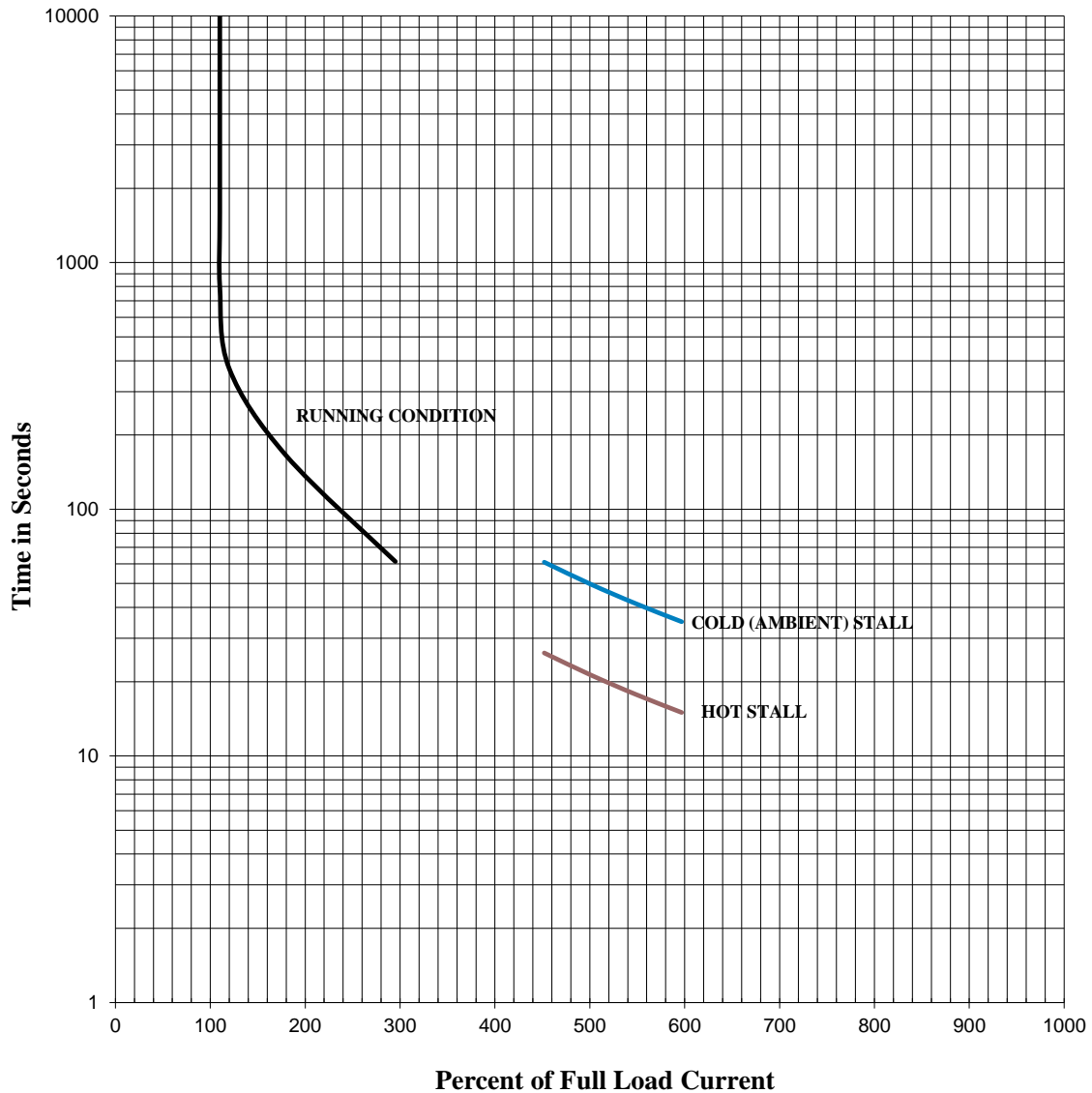
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TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	0156SDMW7FS-P			FLAmps:	31
Enclosure:	TEFC	Voltage:	400 V	Frame:	180L
Pole:	6	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	15	Rotor Inertia:	5.9 lb-ft ²	Date:	9/11/2020
FLRPM:	975	Load Inertia:	N/A	File:	GH6015 (15kW)



Comments: PROJECT -

D.E.Curve #: GH6015 (15kW)

Prepared by: Zichao Xie

Checked by:

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	APPROVED BY	PAA

CUSTOMER: -
TIC SR No.: -

MOTOR NAMEPLATE DATA			
H.P.: -	VOLTS: 415	3 PH / 50 Hz	S. RPM: 1000
FRAME: 180L	ENCL: TEFC	FLAMPS: 30	FLRPM: 975
FORM: FBK1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0156SDMW7FS-P		kW: 15	
NOM. EFF.: 91.2	MIN. EFF.: -	cosØ 0.76	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 193	FULL LOAD (lb-ft.): 108	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 300	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 305	

EFFICIENCY	POWER FACTOR
FULL LOAD: 91.5	FULL LOAD: 76.1
3/4 LOAD: 91.4	3/4 LOAD: 69.8
1/2 LOAD: 90.0	1/2 LOAD: 57.9

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).

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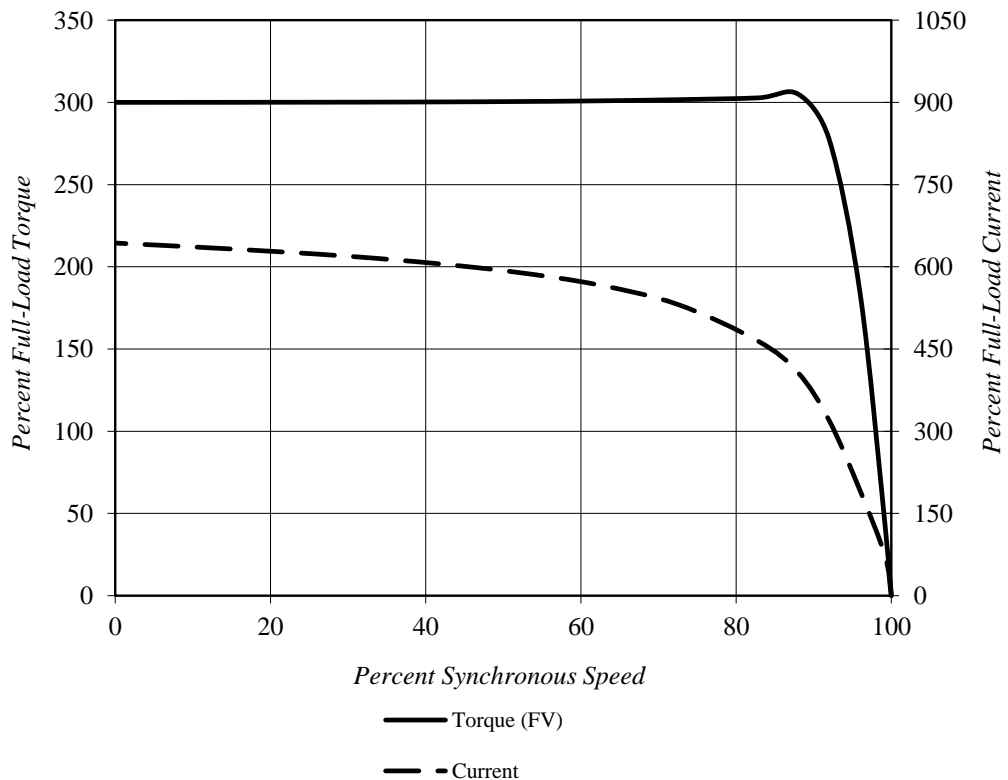
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	0156SDMW7FS-P			FLAmps:	30
Enclosure:	TEFC	Voltage:	415 V	Frame:	180L
Pole:	6	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	15	Rotor Inertia:	5.9 lb-ft ²	Date:	9/11/2020
FLRPM:	975	Load Inertia:	N/A	File:	GH6015 (15kW)

Locked Rotor Amps:	193 A	Load Type:	N/A
Locked Rotor Torque:	300%	Starting at:	N/A
Breakdown Torque:	305%	Accel. Time:	N/A
Rated Torque:	108 lb-ft		

Design Values



Comments: PROJECT -

D.E.Curve #: GH6015 (15kW)

Prepared by: Zichao Xie

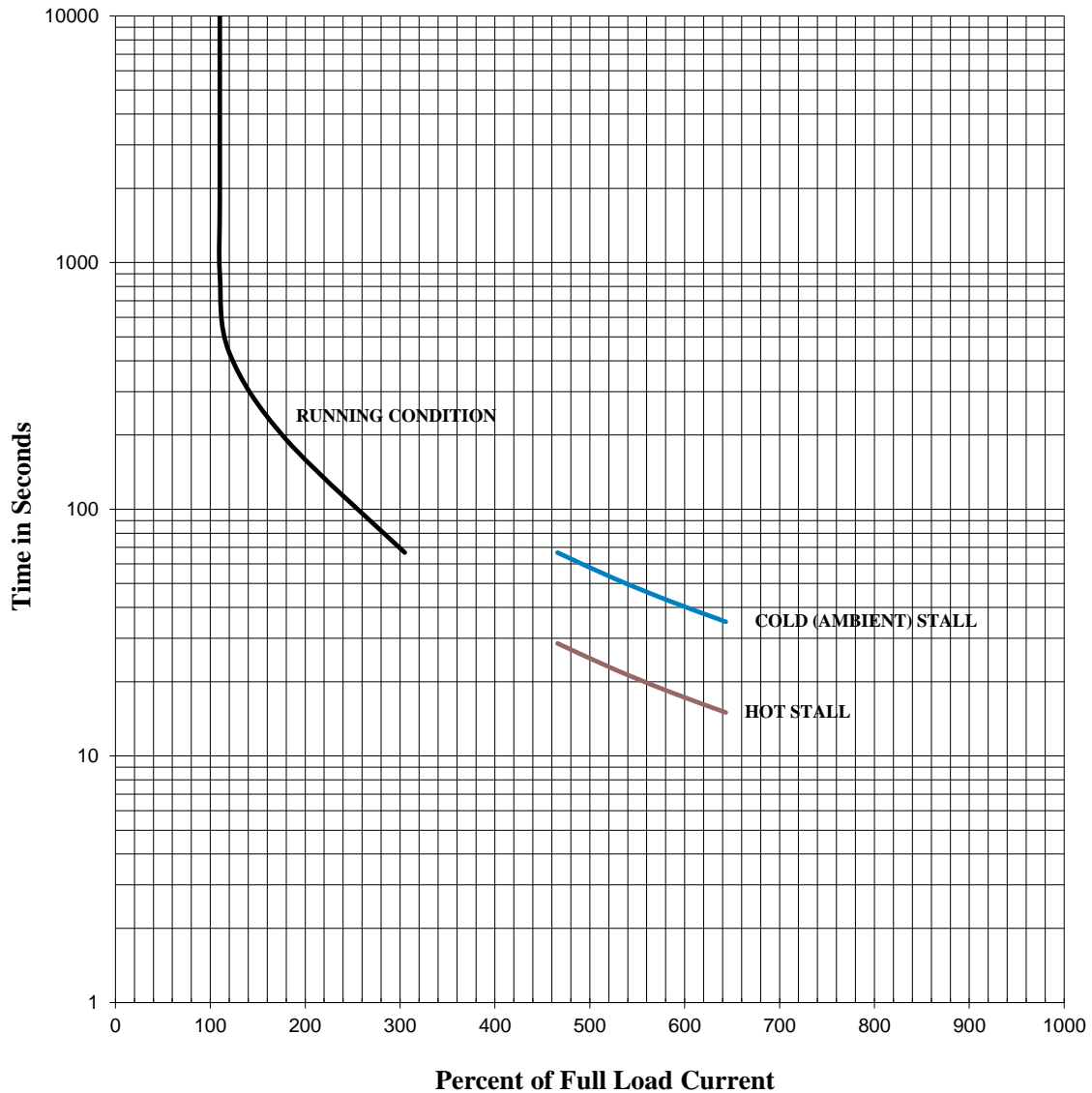
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TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	0156SDMW7FS-P			FLAmps:	30
Enclosure:	TEFC	Voltage:	415 V	Frame:	180L
Pole:	6	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	15	Rotor Inertia:	5.9 lb-ft ²	Date:	9/11/2020
FLRPM:	975	Load Inertia:	N/A	File:	GH6015 (15kW)



Comments: PROJECT -

D.E.Curve #: GH6015 (15kW)

Prepared by: Zichao Xie

Checked by:

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	APPROVED BY	PAA

CUSTOMER: -
TIC SR No.: -

MOTOR NAMEPLATE DATA			
H.P.: -	VOLTS: 380	3 PH / 50 Hz	S. RPM: 1000
FRAME: 180L	ENCL: TEFC	FLAMPS: 31	FLRPM: 970
FORM: FBK1	S.F.: -	IEC DESIGN N	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: -	DUTY: Cont.
MODEL No.: 0156SDMW7FS-P		kW: 15	
NOM. EFF.: 91.2	MIN. EFF.: -	cosØ 0.80	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 174	FULL LOAD (lb-ft.): 109	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 245	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 265	

EFFICIENCY	POWER FACTOR
FULL LOAD: 90.7	FULL LOAD: 80.6
3/4 LOAD: 91.1	3/4 LOAD: 76.4
1/2 LOAD: 90.3	1/2 LOAD: 66.8

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: 9/11/2020

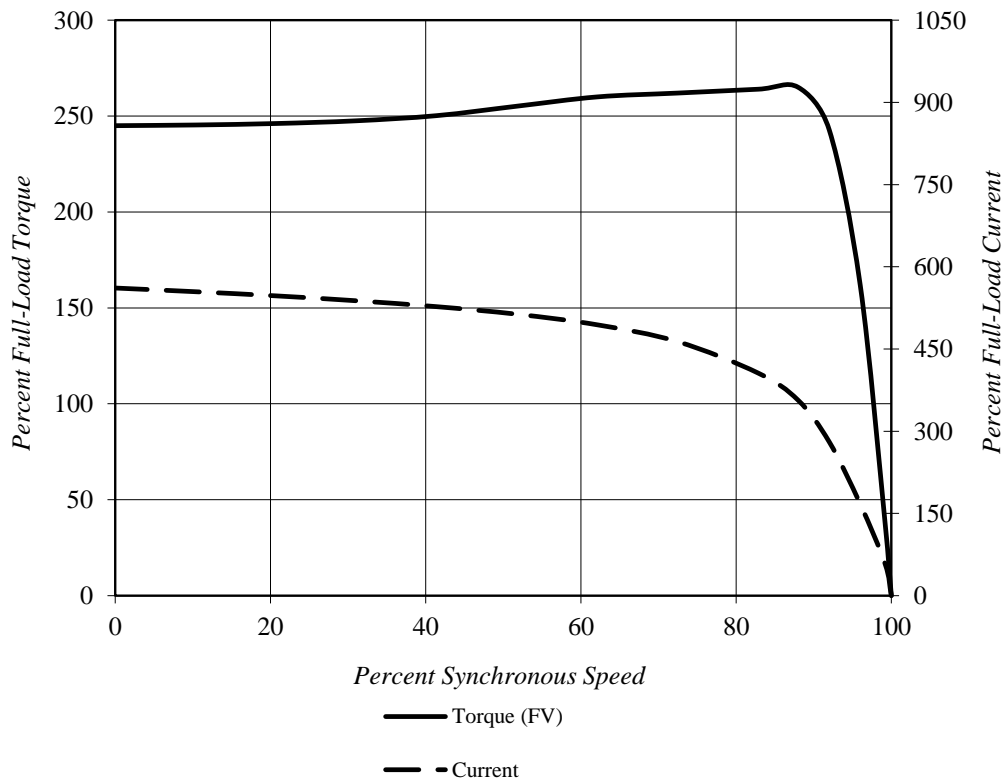
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	0156SDMW7FS-P			FLAmps:	31
Enclosure:	TEFC	Voltage:	380 V	Frame:	180L
Pole:	6	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	15	Rotor Inertia:	5.9 lb-ft ²	Date:	9/11/2020
FLRPM:	970	Load Inertia:	N/A	File:	GH6015 (15kW)

Locked Rotor Amps:	174 A	Load Type:	N/A
Locked Rotor Torque:	245%	Starting at:	N/A
Breakdown Torque:	265%	Accel. Time:	N/A
Rated Torque:	109 lb-ft		

Design Values



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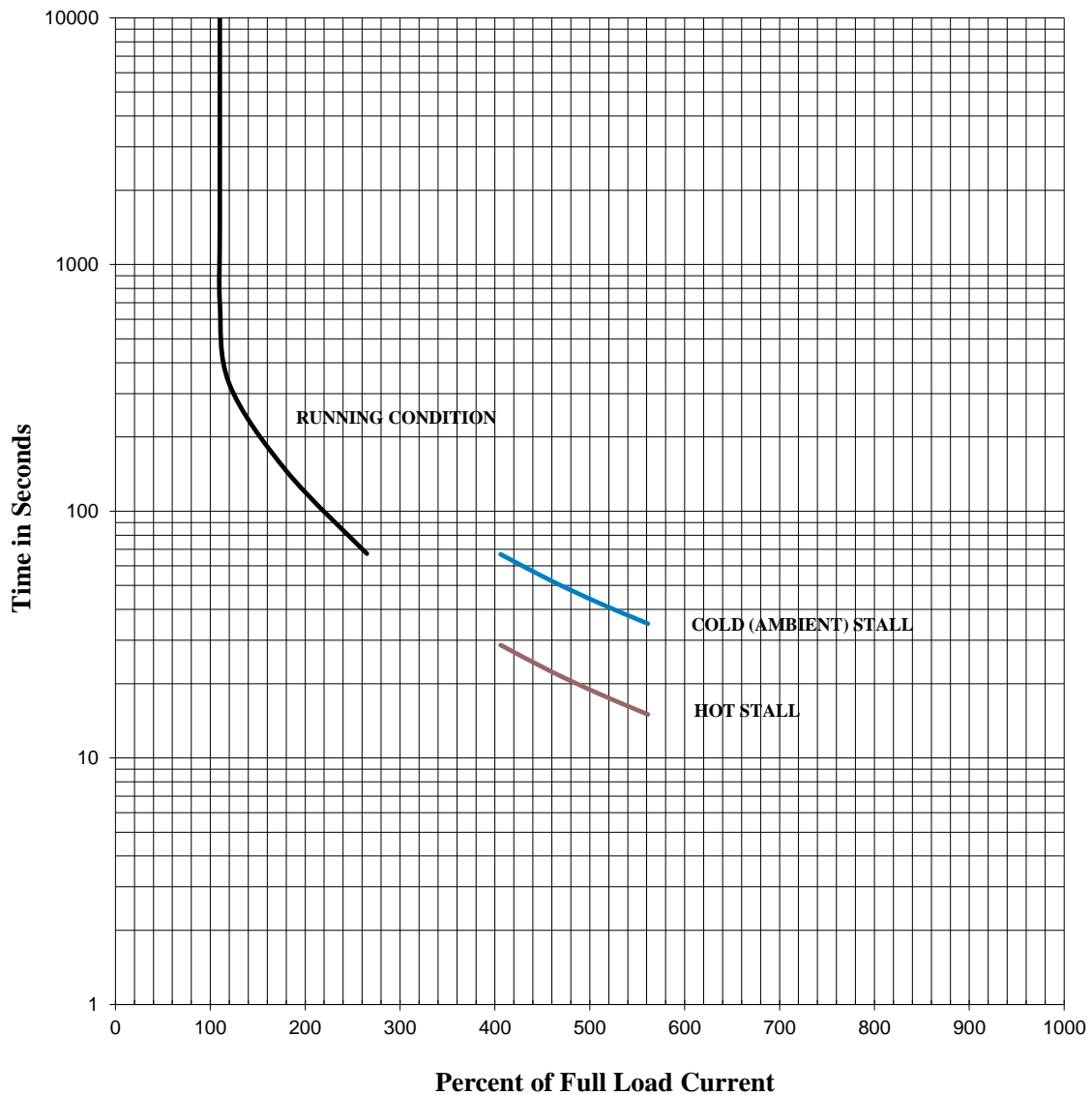
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TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	0156SDMW7FS-P			FLAmps:	31
Enclosure:	TEFC	Voltage:	380 V	Frame:	180L
Pole:	6	Frequency:	3 PH / 50 Hz	Ins. Class:	F
KW:	15	Rotor Inertia:	5.9 lb-ft ²	Date:	9/11/2020
FLRPM:	970	Load Inertia:	N/A	File:	GH6015 (15kW)



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	APPROVED BY	PAA

CUSTOMER: -
TIC SR No.: -

MOTOR NAMEPLATE DATA			
H.P.: 20	VOLTS: 460	3 PH / 60 Hz	S. RPM: 1200
FRAME: 180L	ENCL: TEFC	FLAMPS: 27	FLRPM: 1175
FORM: FBK1	S.F.: 1.15	NEMA DESIGN: A	INSUL CLASS: F
TYPE: TKKH	AMB.: 40°C	CODE: J	DUTY: Cont.
MODEL No.: 0156SDMW7FS-P		kW: 15	
NOM. EFF.: 91.7	MIN. EFF.: -	P.F.: 76.0	

AMPERAGE	TORQUES	**BEARINGS:
LOCKED ROTOR: 189	FULL LOAD (lb-ft.): 90	DRIVE END: REFER TO NP
	LOCKED ROTOR (%): 335	OPPOSITE DRIVE END: REFER TO NP
	BREAK DOWN (%): 370	

EFFICIENCY	POWER FACTOR
FULL LOAD: 92.7	FULL LOAD: 76.4
3/4 LOAD: 92.3	3/4 LOAD: 70.6
1/2 LOAD: 90.6	1/2 LOAD: 59.4

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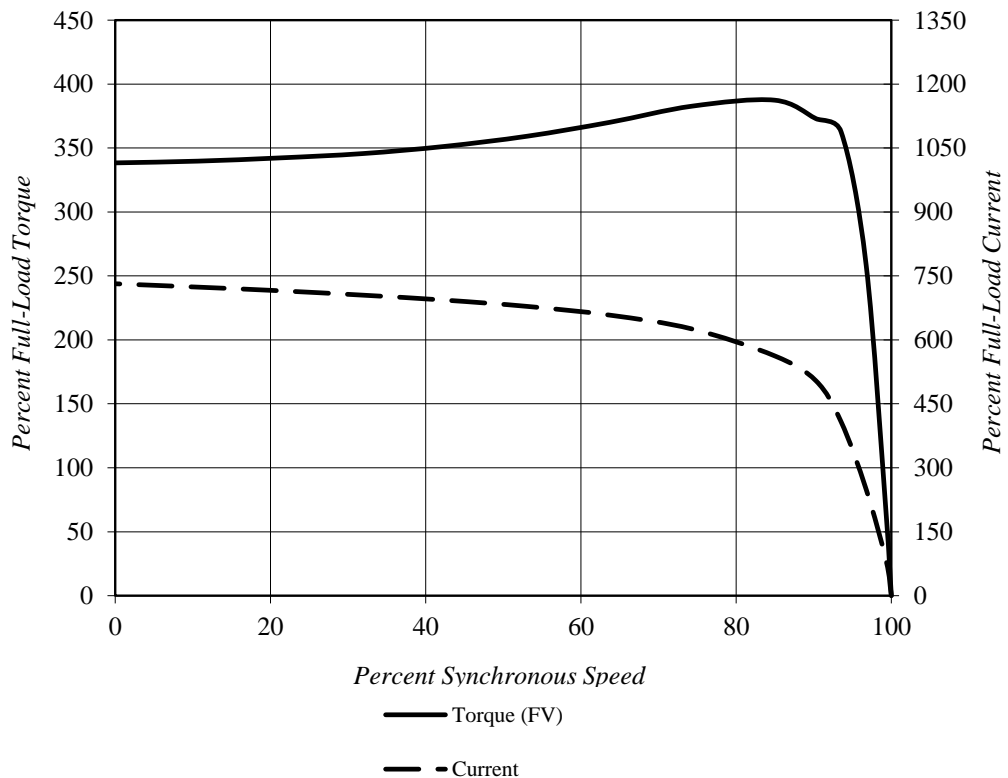
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	0156SDMW7FS-P			FLAmps:	27
Enclosure:	TEFC	Voltage:	460 V	Frame:	180L
Pole:	6	Frequency:	3 PH / 60 Hz	Ins. Class:	F
HP:	20	Rotor Inertia:	5.9 lb-ft ²	Date:	9/11/2020
FLRPM:	1175	Load Inertia:	N/A	File:	GH6015 (15kW)

Locked Rotor Amps:	189 A	Load Type:	N/A
Locked Rotor Torque:	335%	Starting at:	N/A
Breakdown Torque:	370%	Accel. Time:	N/A
Rated Torque:	90 lb-ft		

Design Values



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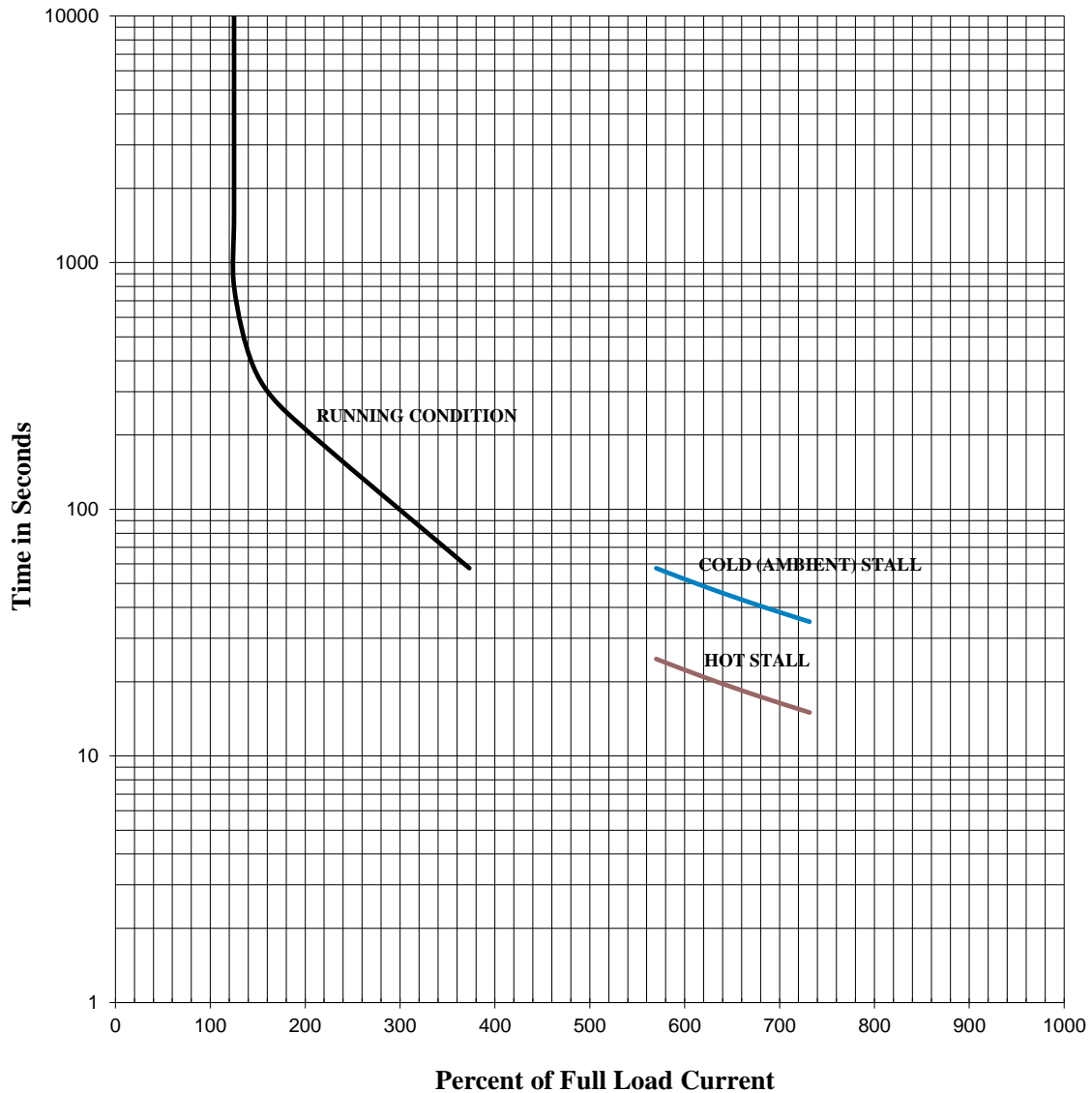
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TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	0156SDMW7FS-P			FLAmps:	27
Enclosure:	TEFC	Voltage:	460 V	Frame:	180L
Pole:	6	Frequency:	3 PH / 60 Hz	Ins. Class:	F
HP:	20	Rotor Inertia:	5.9 lb-ft ²	Date:	9/11/2020
FLRPM:	1175	Load Inertia:	N/A	File:	GH6015 (15kW)



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