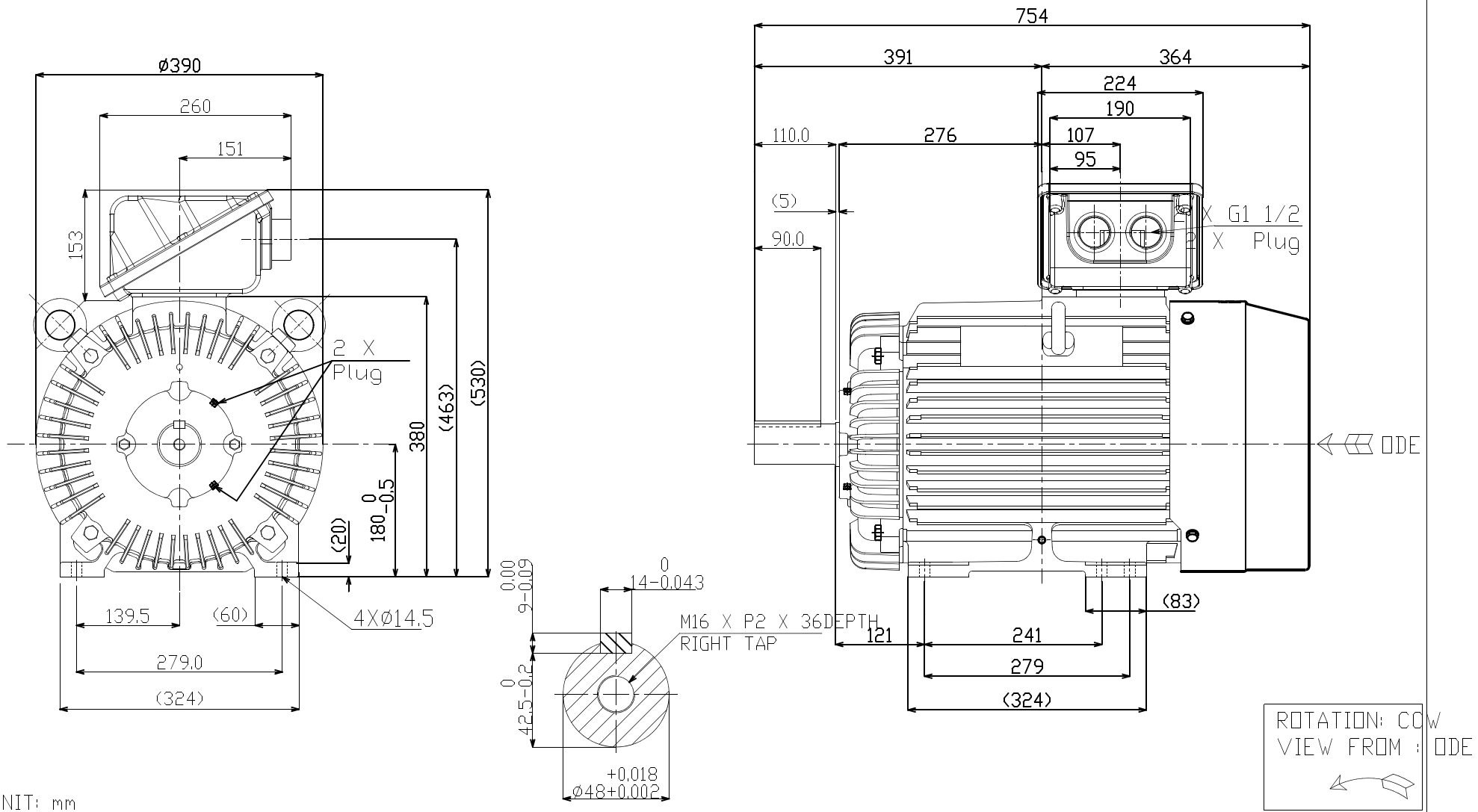


UNIT: mm

B3-FOOT MOUNTED MOTOR OL DRAWING IEC GLOBAL

TYPE: 2-4-6P - 400V

FRAME: 180M

3HFN000169

TOSHIBA

TOSHIBA INTERNATIONAL CORPORATION

TOLERANCES

X. ±2.0

X.X ±0.5

X.XX ±0.1

MAXIMUM MOTOR WEIGHT

- lbs.

- kgs.

NO	REVISION	DRAWN BY	DATE	CHECK
03	change to M20S-EB	T.Danh	May-07-18	Q.Hung
02	MODIFY DIMENSIONS	T.PHUNG	Apr-05-18	Q.Hung
01	change to fancover	T.Danh	Feb-08-18	Q.Hung

EQP Global SD

XT SERIES

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

INDEX	MPCF-1033
SHEET NO.	1 of 1
ISSUED	7/31/13
SUPERSEDES	11/8/96
REVISION	2
WRITTEN BY	MDC
APPROVED BY	PAA

SQUIRREL CAGE INDUCTION MOTOR
PERFORMANCE SPECIFICATIONS

CUSTOMER: -
TIC SR No.: -

MOTOR NAMEPLATE DATA

H.P.:	-	VOLTS:	400	3 PH /	50 Hz	S. RPM:	3000
FRAME:	180M	ENCL:	TEFC	FLAMPS:	39	FLRPM:	2955
FORM:	FCK1	S.F.:	-	IEC DESIGN	NE	INSUL CLASS:	F
TYPE:	TKKH	AMB.:	40°C	CODE:	-	DUTY:	Cont.
MODEL No.:	0222SDMW7FS-P			kW:	22		
NOM. EFF.:	92.7	MIN. EFF.:	-	cosØ	0.86		

AMPERAGE		**TORQUES**		****BEARINGS:**	
LOCKED ROTOR:	353	FULL LOAD (lb-ft.):	52	DRIVE END:	REFER TO NP
		LOCKED ROTOR (%):	275	OPPOSITE DRIVE END:	REFER TO NP
		BREAK DOWN (%):	380		

EFFICIENCY		**POWER FACTOR**	
FULL LOAD:	93.1	FULL LOAD:	86.7
3/4 LOAD:	92.4	3/4 LOAD:	82.7
1/2 LOAD:	90.3	1/2 LOAD:	73.7

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: 1/14/2020

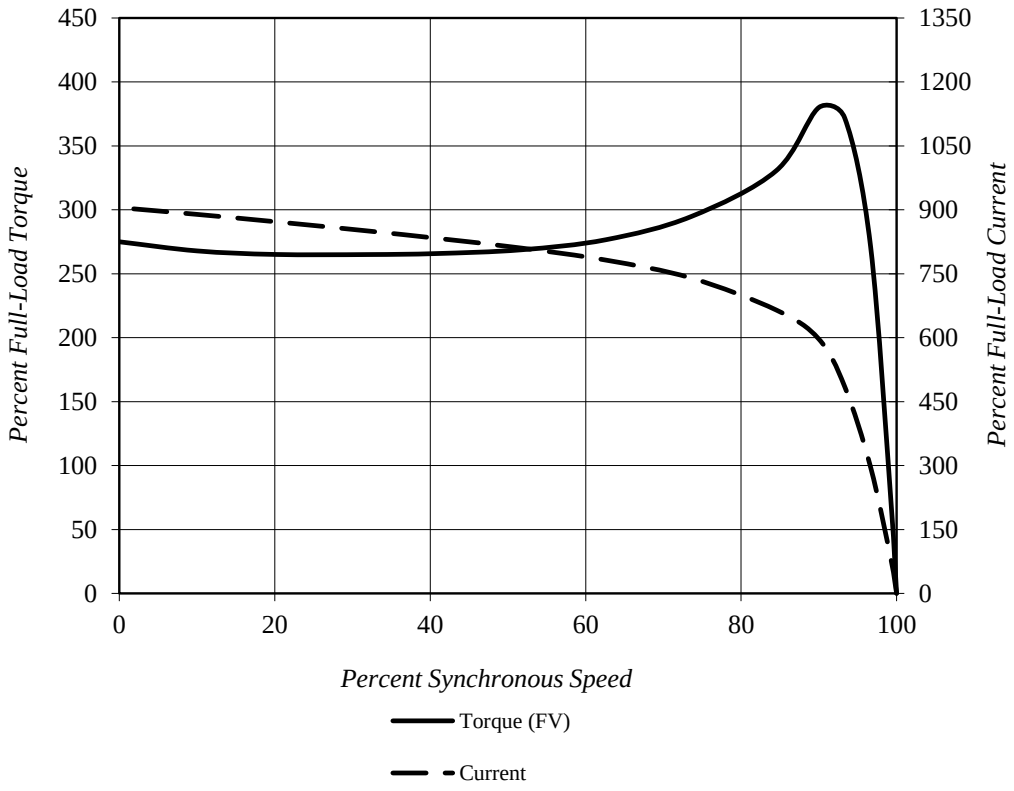
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	0222SDMW7FS-P			***FLAmps:***	39
Enclosure:	TEFC	***Voltage:***	400 V	***Frame:***	180M
Pole:	2	***Frequency:***	3 PH / 50 Hz	***Ins. Class:***	F
KW:	22	***Rotor Inertia:***	3.9 lb-ft²	***Date:***	1/14/2020
FLRPM:	2955	***Load Inertia:***	N/A	***File:***	GH2022 (22kW)

Locked Rotor Amps:	353 A	***Load Type:***	N/A
Locked Rotor Torque:	275%	***Starting at:***	N/A
Breakdown Torque:	380%	***Accel. Time:***	N/A
Rated Torque:	52 lb-ft		

Design Values



Comments: PROJECT -

D.E.Curve #: GH2022 (22kW)

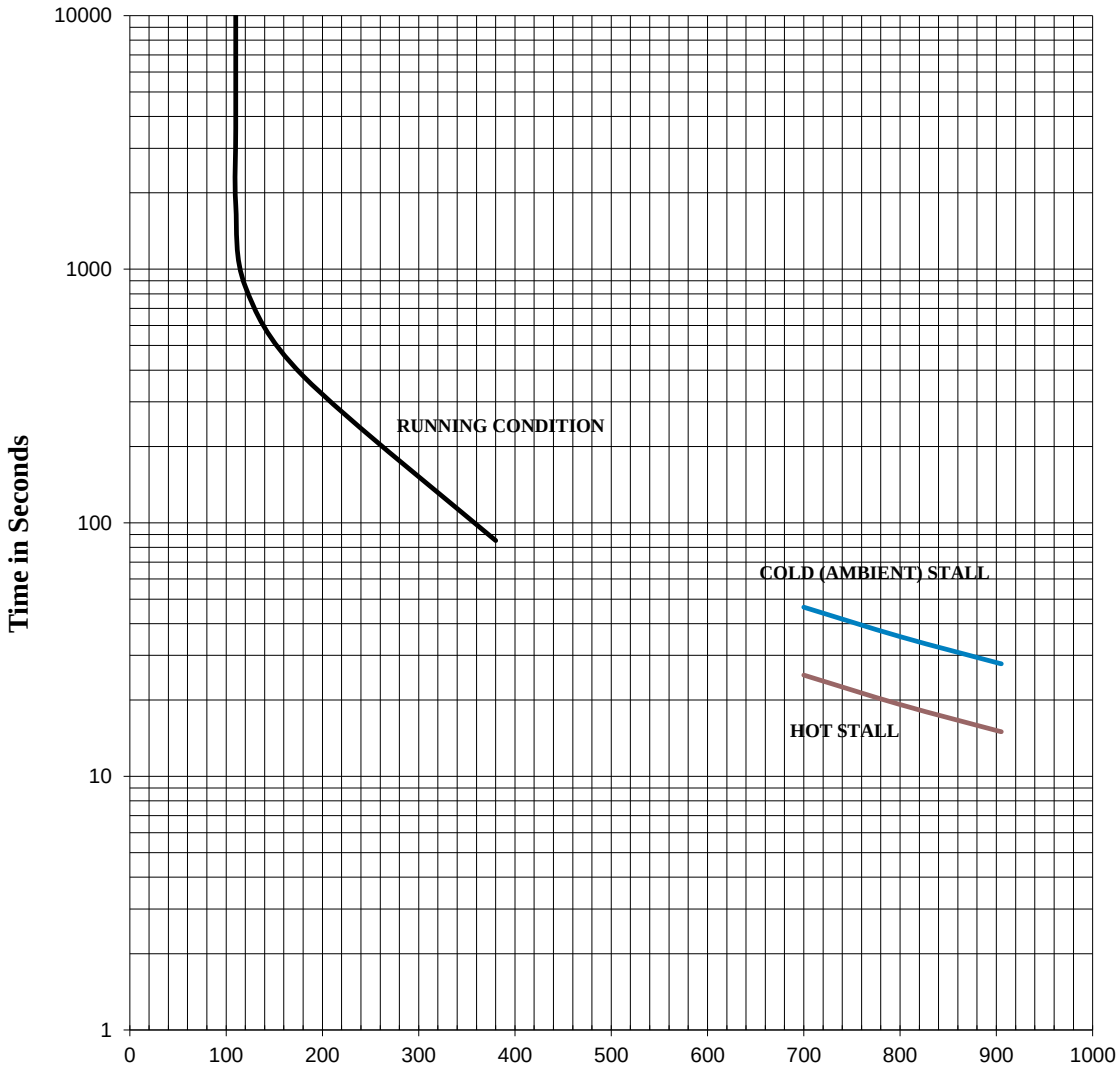
Prepared by: Zichao Xie	***Checked by:***

TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	0222SDMW7FS-P			***FLAmps:***	39
Enclosure:	TEFC	***Voltage:***	400 V	***Frame:***	180M
Pole:	2	***Frequency:***	3 PH / 50 Hz	***Ins. Class:***	F
KW:	22	***Rotor Inertia:***	3.9 lb-ft²	***Date:***	1/14/2020
FLRPM:	2955	***Load Inertia:***	N/A	***File:***	GH2022 (22kW)



Comments: PROJECT -

D.E.Curve #: GH2022 (22kW)

Prepared by: Zichao Xie	***Checked by:***

TOSHIBA INTERNATIONAL CORPORATION
Industrial Division / Houston Motor Plant

INDEX	MPCF-1033
SHEET NO.	1 of 1
ISSUED	7/31/13
SUPERSEDES	11/8/96
REVISION	2
WRITTEN BY	MDC
APPROVED BY	PAA

SQUIRREL CAGE INDUCTION MOTOR PERFORMANCE SPECIFICATIONS

CUSTOMER: -
TIC SR No.: -

MOTOR NAMEPLATE DATA

H.P.:	-	VOLTS:	415	3 PH /	50 Hz	S. RPM:	3000
FRAME:	180M	ENCL:	TEFC	FLAMPS:	39	FLRPM:	2960
FORM:	FCK1	S.F.:	-	IEC DESIGN	NE	INSUL CLASS:	F
TYPE:	TKKH	AMB.:	40°C	CODE:	-	DUTY:	Cont.
MODEL No.:	0222SDMW7FS-P			kW:	22		
NOM. EFF.:	92.7	MIN. EFF.:	-	cosØ	0.84		

AMPERAGE		**TORQUES**		****BEARINGS:**	
LOCKED ROTOR:	369	FULL LOAD (lb-ft.):	52	DRIVE END:	REFER TO NP
		LOCKED ROTOR (%):	305	OPPOSITE DRIVE END:	REFER TO NP
		BREAK DOWN (%):	405		

EFFICIENCY		**POWER FACTOR**	
FULL LOAD:	93.3	FULL LOAD:	84.8
3/4 LOAD:	92.5	3/4 LOAD:	79.9
1/2 LOAD:	90.2	1/2 LOAD:	69.6

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: 1/14/2020

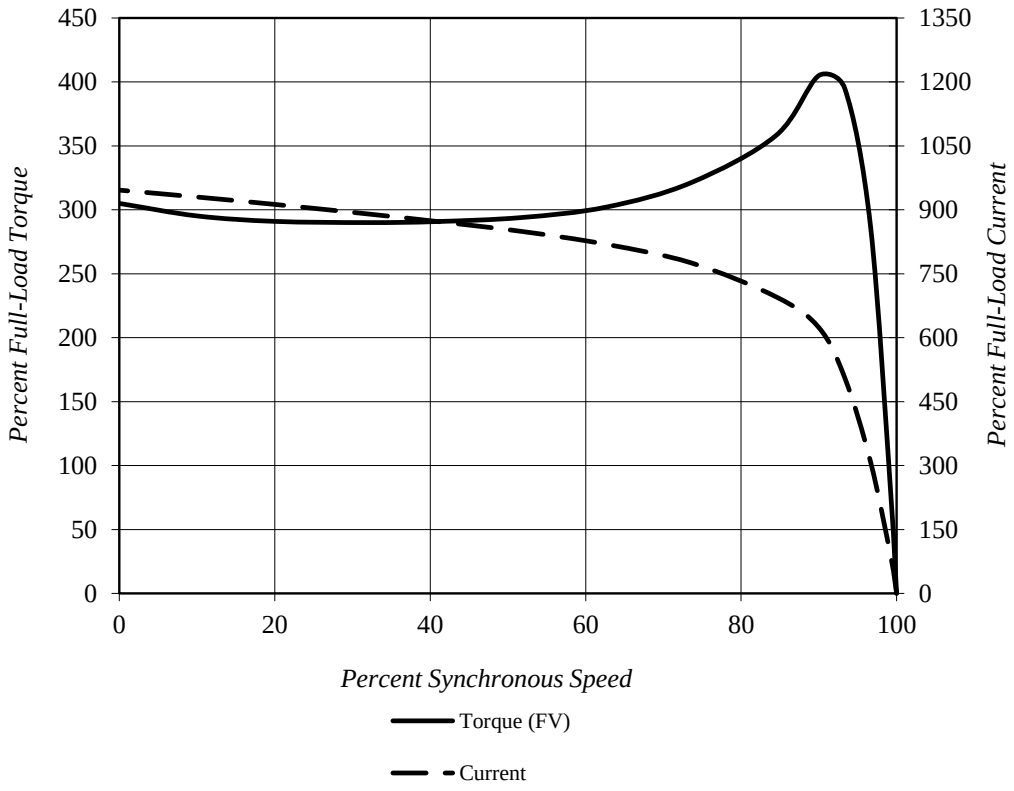
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	0222SDMW7FS-P			***FLAmps:***	39
Enclosure:	TEFC	***Voltage:***	415 V	***Frame:***	180M
Pole:	2	***Frequency:***	3 PH / 50 Hz	***Ins. Class:***	F
KW:	22	***Rotor Inertia:***	3.9 lb-ft²	***Date:***	1/14/2020
FLRPM:	2960	***Load Inertia:***	N/A	***File:***	GH2022 (22kW)

Locked Rotor Amps:	369 A	***Load Type:***	N/A
Locked Rotor Torque:	305%	***Starting at:***	N/A
Breakdown Torque:	405%	***Accel. Time:***	N/A
Rated Torque:	52 lb-ft		

Design Values



Comments: PROJECT -

D.E.Curve #: GH2022 (22kW)

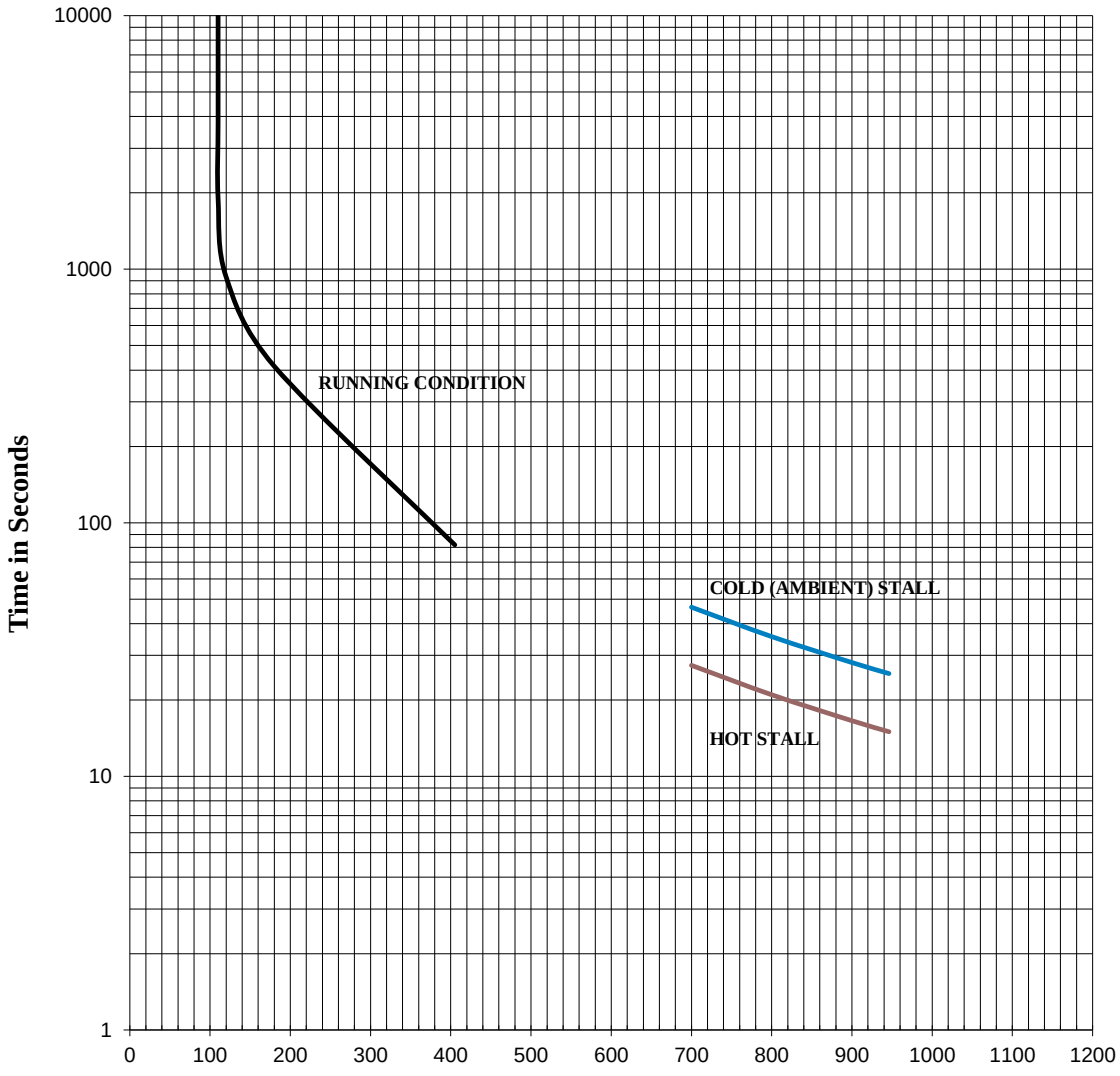
Prepared by: Zichao Xie	***Checked by:***

TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	0222SDMW7FS-P			***FLAmps:***	39
Enclosure:	TEFC	***Voltage:***	415 V	***Frame:***	180M
Pole:	2	***Frequency:***	3 PH / 50 Hz	***Ins. Class:***	F
KW:	22	***Rotor Inertia:***	3.9 lb-ft²	***Date:***	1/14/2020
FLRPM:	2960	***Load Inertia:***	N/A	***File:***	GH2022 (22kW)



Comments: PROJECT -

D.E.Curve #: GH2022 (22kW)

Prepared by: Zichao Xie	***Checked by:***

TOSHIBA INTERNATIONAL CORPORATION
Industrial Division / Houston Motor Plant

INDEX	MPCF-1033
SHEET NO.	1 of 1
ISSUED	7/31/13
SUPERSEDES	11/8/96
REVISION	2
WRITTEN BY	MDC
APPROVED BY	PAA

SQUIRREL CAGE INDUCTION MOTOR PERFORMANCE SPECIFICATIONS

CUSTOMER: -
TIC SR No.: -

MOTOR NAMEPLATE DATA

H.P.:	-	VOLTS:	380	3 PH /	50 Hz	S. RPM:	3000
FRAME:	180M	ENCL:	TEFC	FLAMPS:	41	FLRPM:	2955
FORM:	FCK1	S.F.:	-	IEC DESIGN	NE	INSUL CLASS:	F
TYPE:	TKKH	AMB.:	40°C	CODE:	-	DUTY:	Cont.
MODEL No.:	0222SDMW7FS-P			kW:	22		
NOM. EFF.:	92.7	MIN. EFF.:	-	cosØ	0.88		

AMPERAGE		**TORQUES**		****BEARINGS:**	
LOCKED ROTOR:	333	FULL LOAD (lb-ft.):	52	DRIVE END:	REFER TO NP
		LOCKED ROTOR (%):	245	OPPOSITE DRIVE END:	REFER TO NP
		BREAK DOWN (%):	345		

EFFICIENCY		**POWER FACTOR**	
FULL LOAD:	92.7	FULL LOAD:	88.7
3/4 LOAD:	92.1	3/4 LOAD:	85.7
1/2 LOAD:	90.2	1/2 LOAD:	78.5

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: 1/14/2020

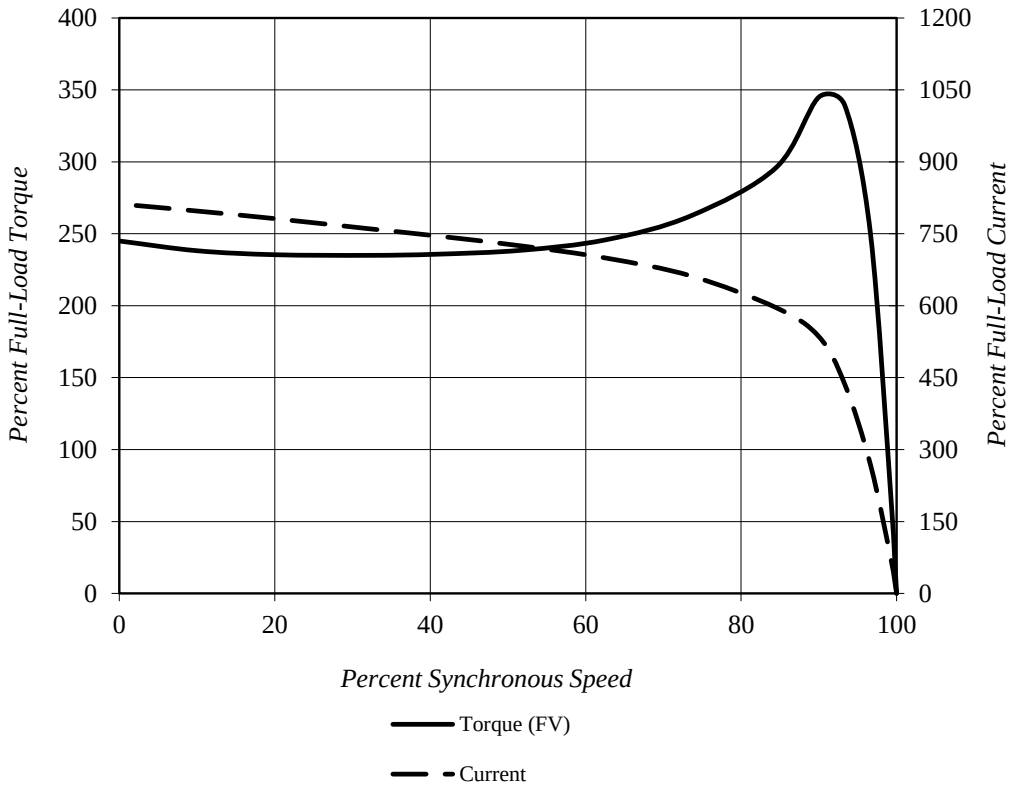
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	0222SDMW7FS-P			***FLAmps:***	41
Enclosure:	TEFC	***Voltage:***	380 V	***Frame:***	180M
Pole:	2	***Frequency:***	3 PH / 50 Hz	***Ins. Class:***	F
KW:	22	***Rotor Inertia:***	3.9 lb-ft²	***Date:***	1/14/2020
FLRPM:	2955	***Load Inertia:***	N/A	***File:***	GH2022 (22kW)

Locked Rotor Amps:	333 A	***Load Type:***	N/A
Locked Rotor Torque:	245%	***Starting at:***	N/A
Breakdown Torque:	345%	***Accel. Time:***	N/A
Rated Torque:	52 lb-ft		

Design Values



Comments: PROJECT - ***D.E.Curve #:*** GH2022 (22kW)

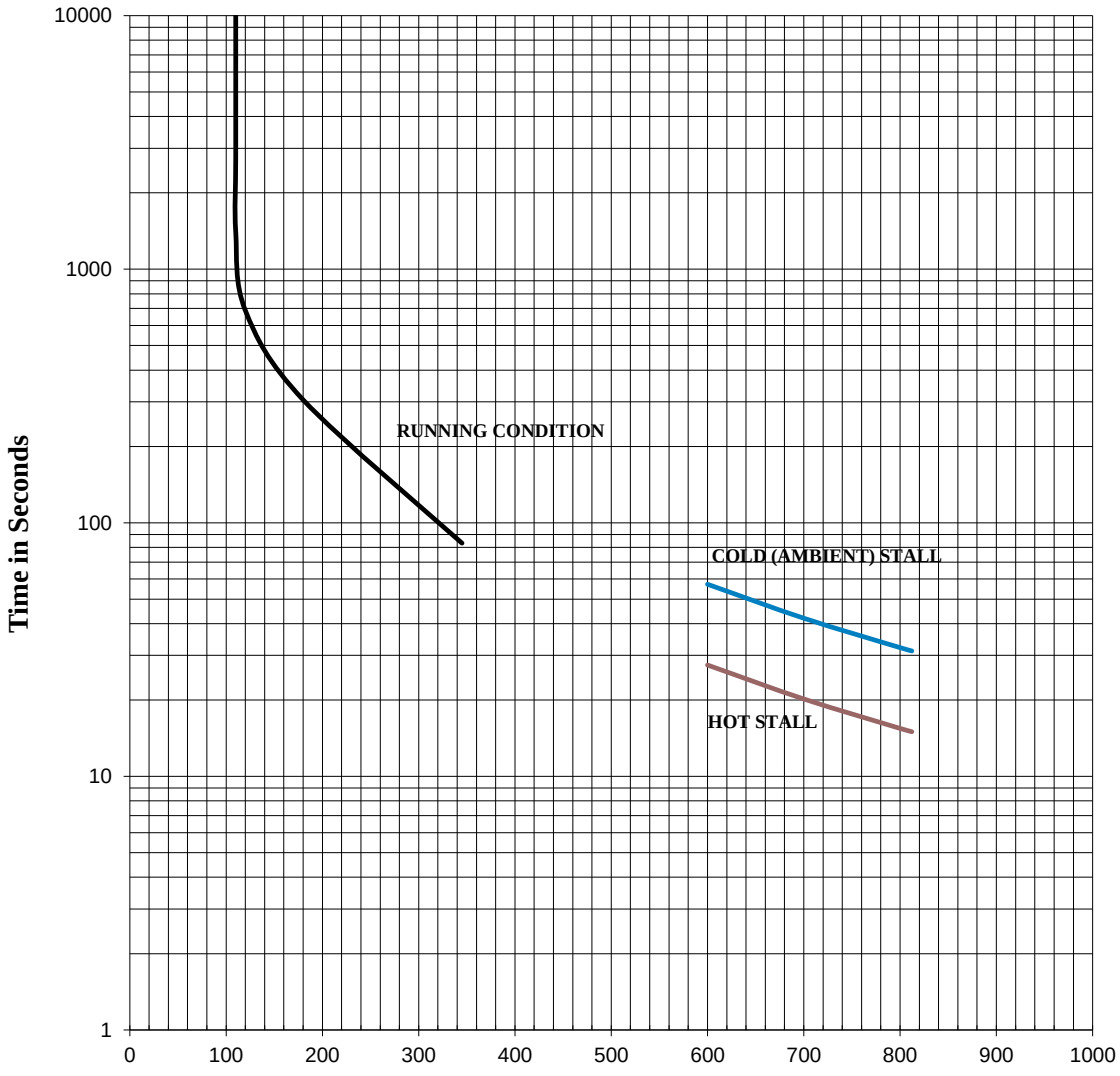
Prepared by: Zichao Xie	***Checked by:***

TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	0222SDMW7FS-P			***FLAmps:***	41
Enclosure:	TEFC	***Voltage:***	380 V	***Frame:***	180M
Pole:	2	***Frequency:***	3 PH / 50 Hz	***Ins. Class:***	F
KW:	22	***Rotor Inertia:***	3.9 lb-ft²	***Date:***	1/14/2020
FLRPM:	2955	***Load Inertia:***	N/A	***File:***	GH2022 (22kW)



Comments: PROJECT -

D.E.Curve #: GH2022 (22kW)

Prepared by: Zichao Xie	***Checked by:***

TOSHIBA INTERNATIONAL CORPORATION
Industrial Division / Houston Motor Plant

INDEX	MPCF-1033
SHEET NO.	1 of 1
ISSUED	7/31/13
SUPERSEDES	11/8/96
REVISION	2
WRITTEN BY	MDC
APPROVED BY	PAA

SQUIRREL CAGE INDUCTION MOTOR PERFORMANCE SPECIFICATIONS

CUSTOMER: -
TIC SR No.: -

MOTOR NAMEPLATE DATA

H.P.:	30	VOLTS:	460	3 PH /	60 Hz	S. RPM:	3600
FRAME:	180M	ENCL:	TEFC	FLAMPS:	34	FLRPM:	3565
FORM:	FCK1	S.F.:	1.15	NEMA DESIGN:	A	INSUL CLASS:	F
TYPE:	TKKH	AMB.:	40°C	CODE:	L	DUTY:	Cont.
MODEL No.:	0222SDMW7FS-P			kW:	22		
NOM. EFF.:	91.7	MIN. EFF.:	-	P.F.:	86.0		

AMPERAGE		**TORQUES**		****BEARINGS:**	
LOCKED ROTOR:	350	FULL LOAD (lb-ft.):	43	DRIVE END:	REFER TO NP
		LOCKED ROTOR (%):	310	OPPOSITE DRIVE END:	REFER TO NP
		BREAK DOWN (%):	415		

EFFICIENCY		**POWER FACTOR**	
FULL LOAD:	93.2	FULL LOAD:	86.4
3/4 LOAD:	92.1	3/4 LOAD:	82.1
1/2 LOAD:	89.6	1/2 LOAD:	72.8

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).

CERTIFIED BY: ZICHAO XIE

DATE: 1/14/2020

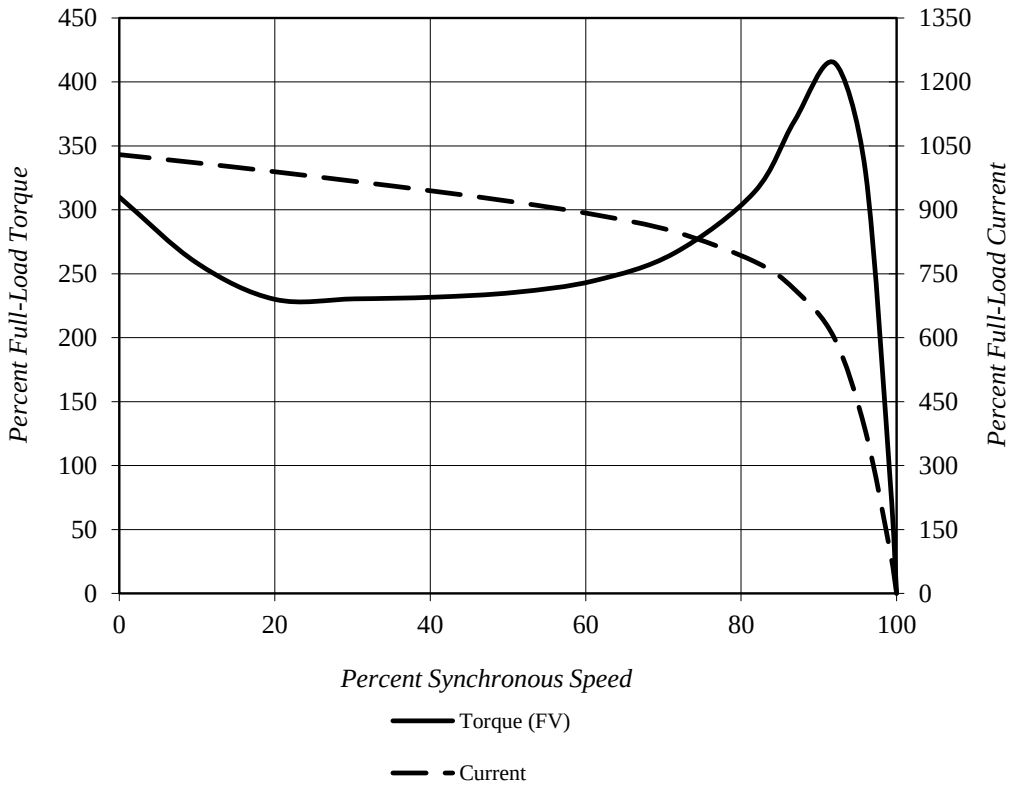
TOSHIBA INTERNATIONAL CORPORATION

Speed Torque/Current Curve

Model #:	0222SDMW7FS-P			***FLAmps:***	34
Enclosure:	TEFC	***Voltage:***	460 V	***Frame:***	180M
Pole:	2	***Frequency:***	3 PH / 60 Hz	***Ins. Class:***	F
HP:	30	***Rotor Inertia:***	3.9 lb-ft²	***Date:***	1/14/2020
FLRPM:	3565	***Load Inertia:***	N/A	***File:***	GH2022 (22kW)

Locked Rotor Amps:	350 A	***Load Type:***	N/A
Locked Rotor Torque:	310%	***Starting at:***	N/A
Breakdown Torque:	415%	***Accel. Time:***	N/A
Rated Torque:	43 lb-ft		

Design Values



Comments: PROJECT -

D.E.Curve #: GH2022 (22kW)

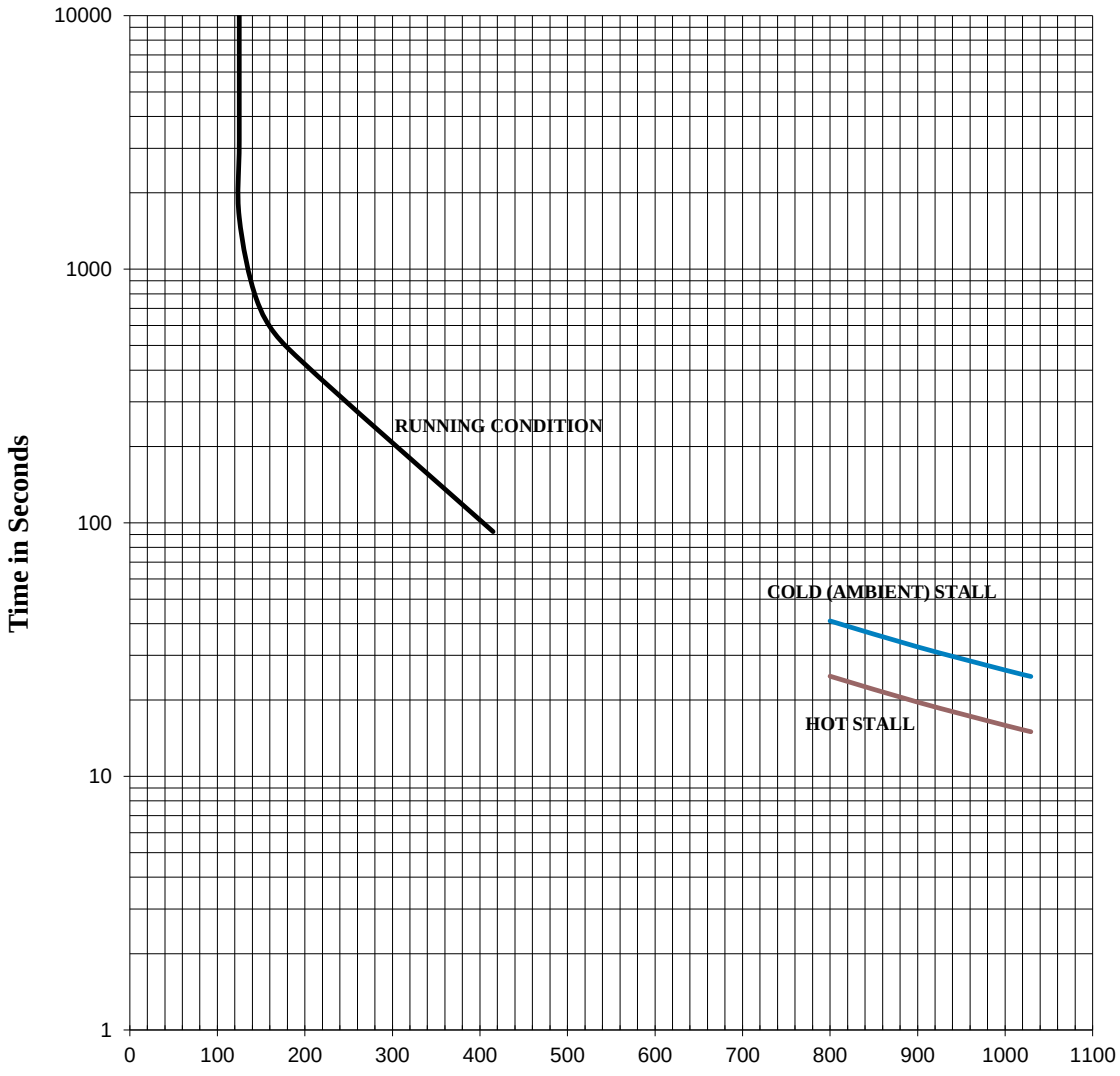
Prepared by: ZICHAO XIE	***Checked by:***

TOSHIBA INTERNATIONAL CORPORATION

Thermal Limit & Acceleration Curves

Design Values (For Reference Only)

Model #:	0222SDMW7FS-P			***FLAmps:***	34
Enclosure:	TEFC	***Voltage:***	460 V	***Frame:***	180M
Pole:	2	***Frequency:***	3 PH / 60 Hz	***Ins. Class:***	F
HP:	30	***Rotor Inertia:***	3.9 lb-ft²	***Date:***	1/14/2020
FLRPM:	3565	***Load Inertia:***	N/A	***File:***	GH2022 (22kW)



Comments: PROJECT -

D.E.Curve #: GH2022 (22kW)

Prepared by: ZICHAO XIE	***Checked by:***