marathon®

General Purpose Motors

Model No: 405TTFCD6038
Catalog No: GT1246A

General Purpose Motor, 100 & 75 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 405TC Frame, TEFC

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Product Information Packet: Model No: 405TTFCD6038, Catalog No: GT1246A General Purpose Motor, 100 & 75 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 405TC Frame, TEFC

Nameplate Specifications

Phase	**3**	Output HP	**100 & 75 Hp**
Output KW	**75.0 & 56.0 kW**	Voltage	**230/460 & 190/380 V**
Speed	**1785 & 1485 r/min**	Synchronous RPM	**1800 & 1500 r/min**
Service Factor	**1.15 & 1.15**	Frame	**405TC**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**95.4 & 94.6 %**	Ambient Temperature	**40 °C**
Frequency	**60 & 50 Hz**	Current	**226/113 & 206/103 A**
Power Factor	**87**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6316**
Opp Drive End Bearing Size	**6314**	UL	**Listed**
CSA	**Y**	CE	**Y**
IP Code	**55**	Number of Speeds	**1**
Hazardous Location	**DIVISION 2 T2B**		

Technical Specifications

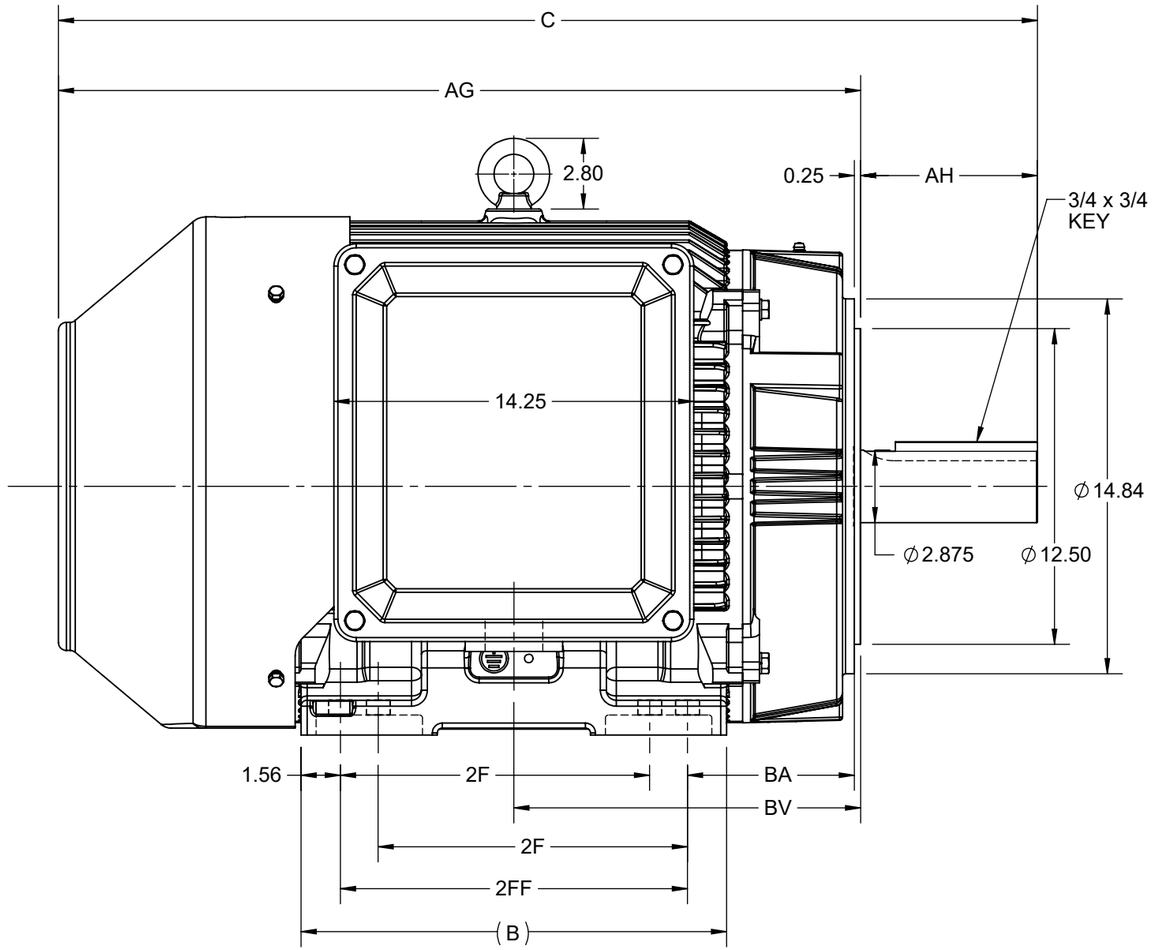
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Part Wdg Start Low Volt Only & Wye Start Delta Run Or Inverter**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**.0555 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Overall Length	**38.77 in**
Frame Length	**18.11 in**	Shaft Diameter	**2.875 in**
Shaft Extension	**7.25 in**	Assembly/Box Mounting	**F1/F2 Capable**
Inverter Load	**Constant 2:1/Variable 10:1**		

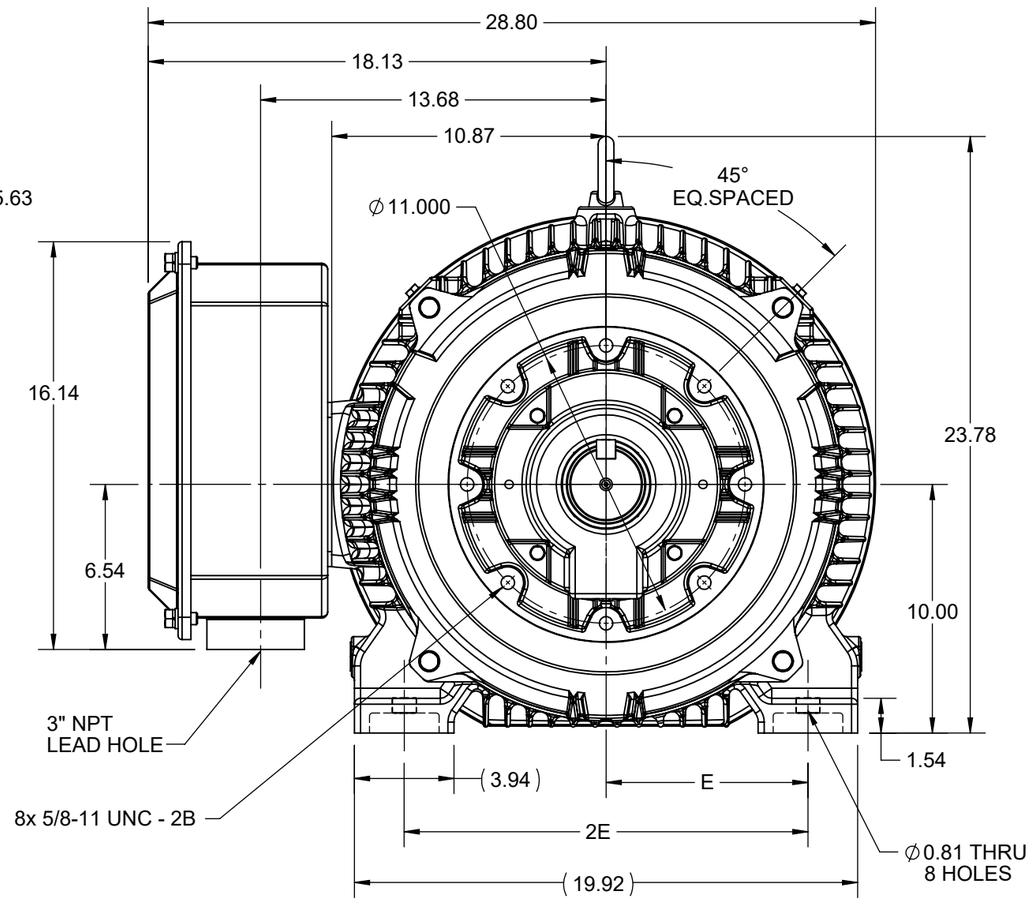
Drawings

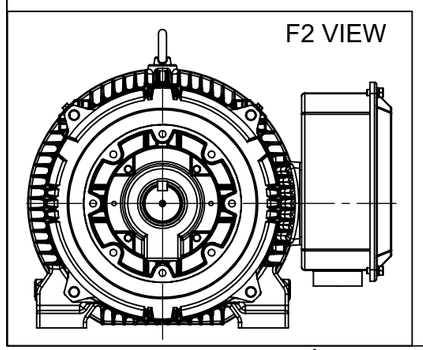
Connection Drawing	**EE7308AA**	Outline Drawing	**SS557007**

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B	C	E	2E	2F	2FF	AG	AH	BA	BV	MOUNTING
16.85	38.76	8.00	16.00	12.25	13.75	31.77	7.00	6.62	13.73	F1 OR F2







DRAWING REVISION	REVISION BY	REV DATE/© DATE
D	SB	08/13/2025
REQUEST NUMBER	APPROVED BY	DATE
CR-0023600	SBD	08/13/2025

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

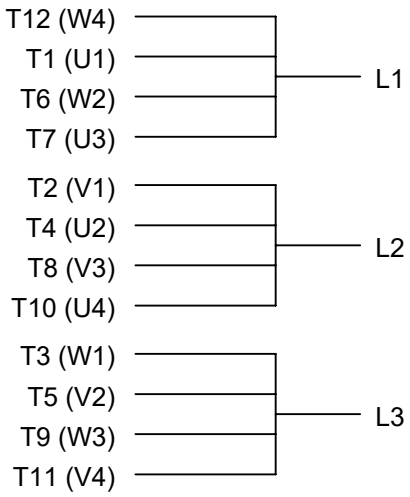
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PRIMARY DIMENSIONS ARE INCH
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ARE FOR REFERENCE ONLY

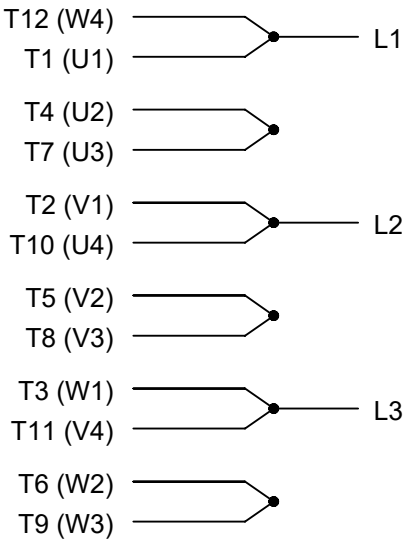
DRAWN BY	DESCRIPTION	
NIV	OUTLINE	
DATE	404/405TC FR NEMA TEFC	
29/03/2016		
APPROVED BY	MATERIAL	PROCESS/FINISH
SBD		
DATE		
29/03/2016		
REFERENCE		

THIRD ANGLE PROJECTION

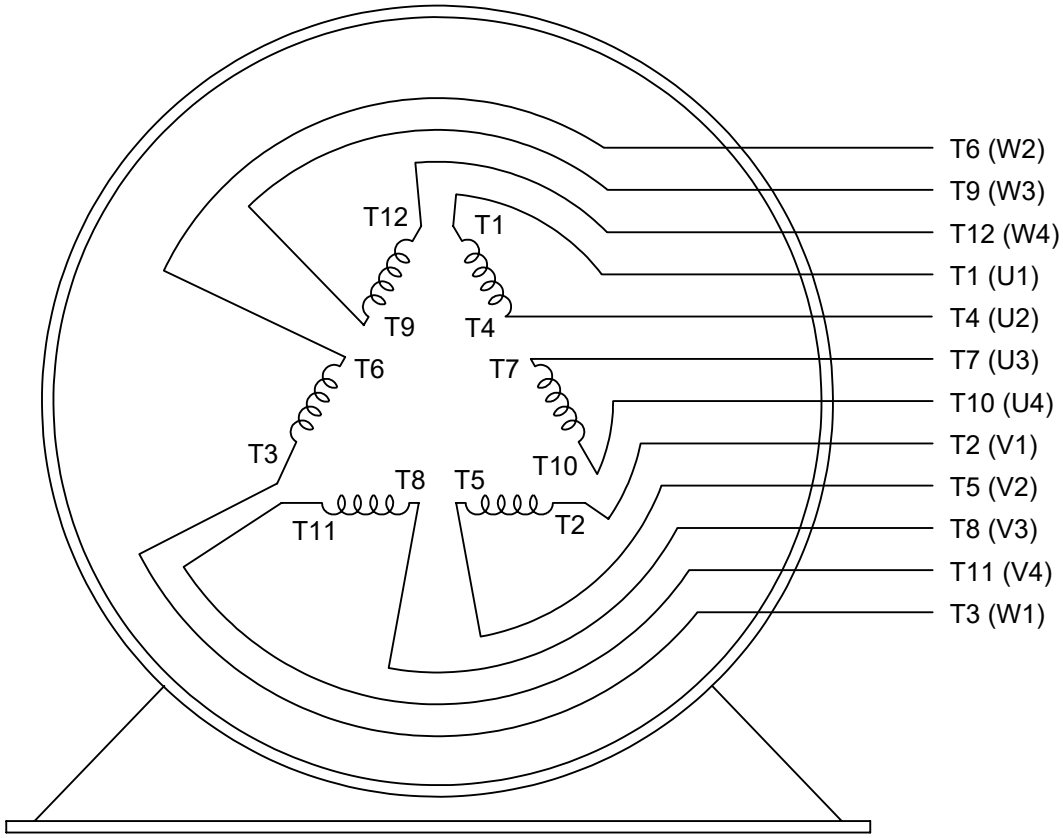
SIZE	DRAWING NUMBER	SHEET
B	SS557007	1 OF 1



LOW VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

DRAWING REVISION: L	REVISION BY: SB	REV DATE/© DATE: 08/01/2025	PRIMARY DIMENSIONS ARE INCH mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY	DRAWN BY: LZ	marathon™
REQUEST NUMBER: CR-0023654	APPROVED BY: SBD	DATE: 08/01/2025		DATE: 01-12-1994	
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED				APPROVED BY: GK	DESCRIPTION: CONN DIAGRAM-EXTERNAL 3Ø-2/1 DELTA-12 LEADS
				DATE: 01-14-1994	
				REFERENCE	MATERIAL / PROCESS/FINISH
				THIRD ANGLE PROJECTION	SIZE: A / DRAWING NUMBER: EE7308AA / SHEET: 1 OF 1

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Data Sheet

Date: 5/3/2018
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® electric

405TTFCD6038

Submittal

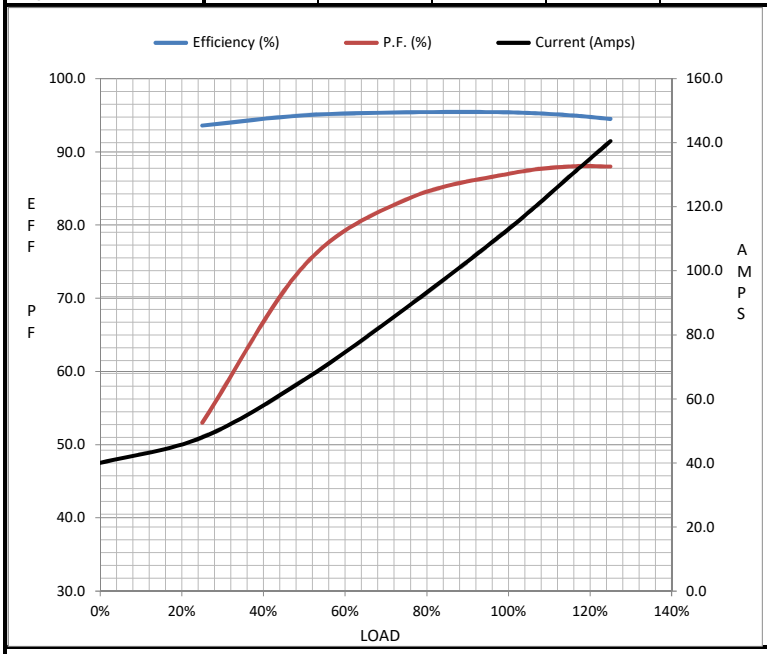
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	40.0	48.0	66.0	88.5	113	130	141	725	
Torque (ft-lb)	0.00	73.0	147	220	294	339	370	529	
RPM	1800	1796	1792	1790	1785	1,782	1780	0	
Efficiency (%)		93.6	95.0	95.4	95.4	95.0	94.5		
P.F. (%)	4.5	53.0	74.5	83.5	87.0	88.0	88.0	32.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1735	1785	1800
Current (Amps)	725	580	410	113	40.0
Torque (ft-lb)	529	445	764	294	0.00



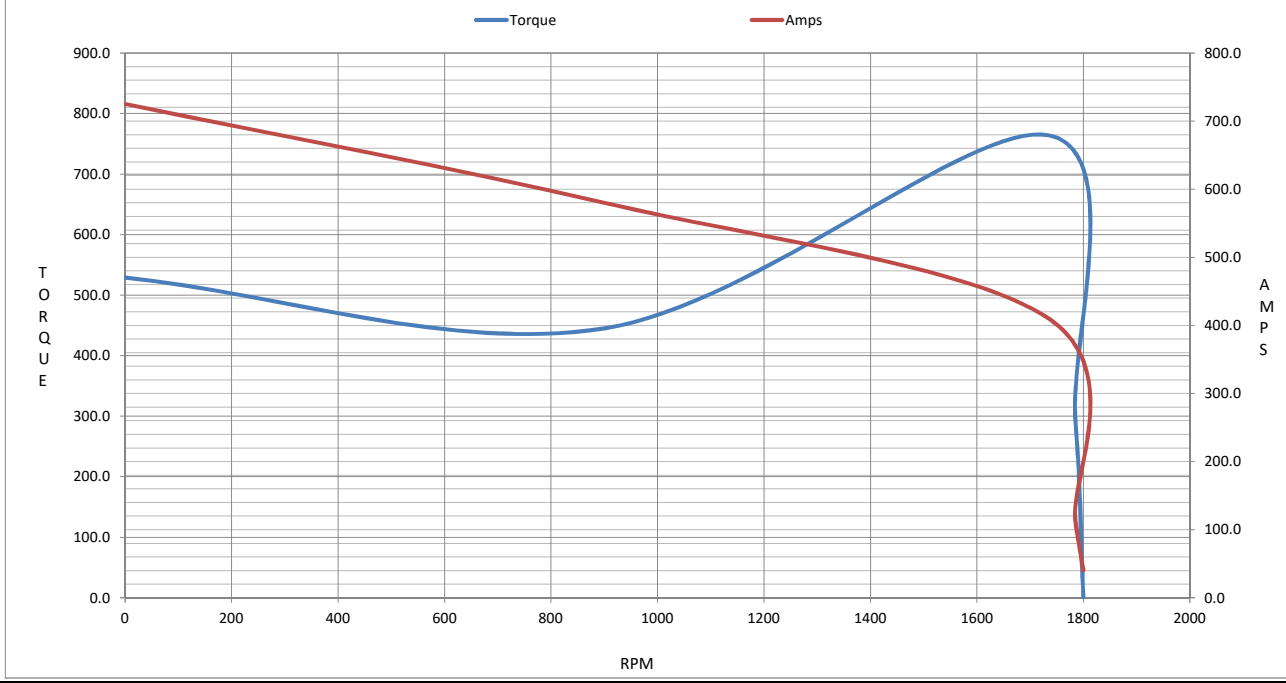
Information Block

HP	100.0
Sync. RPM	1800
Frame	405182TTFC6080
Enclosure	TEFC
Construction	TFC
Voltage	230/460#190/380 V
Frequency	60 Hz
Design	A
LR Code letter	G
Service Factor	1.15
Temp Rise @ FL	65 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	35.0 Lb-Ft²
Ref Wdg	HE32504006 NONE
Sound Pressure @ 1M	75 dBA
VFD Rating	VARIABLE 10:1
Outline Dwg	SS557007
Conn. Diag	EE7308AA
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0330	0.0200	0.1700	0.2840	6.5320

Speed -Torque Curve



Uncontrolled Copy

P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #:
CONN. DIAGRAM: EE7308AA
OUTLINE: SS557007
WINDING: HE32504006 NONE 2
SPEED:

CUSTOMER P.O. #:
REFERENCE MODEL #: 405TTFCD6038
CAT #: GT1246A
CUSTOMER PART #:
MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
100	75	1800	1785	405TC	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	226/113&208/104	START D RUN OR IN	CONT	F	1.15	40	3300

F.L. EFF	95.4	**3/4 LD EFF**	95.4	**1/2 LD EFF**	95.0	**GTD EFF**	**ELECT. TYPE**
F.L. PF	87.0	**3/4 LD PF**	83.5	**1/2 LD PF**	74.5	95.0	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)	
294 **LB-FT**	725	529 **LB-FT** 180%	764 **LB-FT** 260%	65	

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 **dBA**	84 **dBA**	35.0 **LB-FT²**	550 **LB-FT²**	25 **SEC.**	2	1575 **LB.**

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	NO	DIVISION 2 T2B	NO	NONE	BLUE - MARATHON

BEARINGS DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL 6316	BALL 6314	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.033	0.02	0.17	0.284	6.532	0.080	ODE

NOTES
*
*

INVERTER TORQUE: VARIABLE 10:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE
NONE NONE **PPR**

BRAKE: NONE
NONE NONE
FT-LB: NA
VOLTAGE: NONE **HZ:**

PREPARED BY: FAREEDA DUDEKULA
DATE: 5/3/2018

FORM: 3531 REV_4 2/27/06

UL: NO LETTER - ME,WUXI TEFC BLUEWHALE CLASS 1 DIV. 2 UL