marathon®

General Purpose Motors

Model No: 405TSTFCD6038
Catalog No: GT1263

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

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Product Information Packet: Model No: 405TSTFCD6038, Catalog No: GT1263 General Purpose Motor, 100 & 75 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 405TSC 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	**405TSC**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**95.4 & 94.5 %**	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

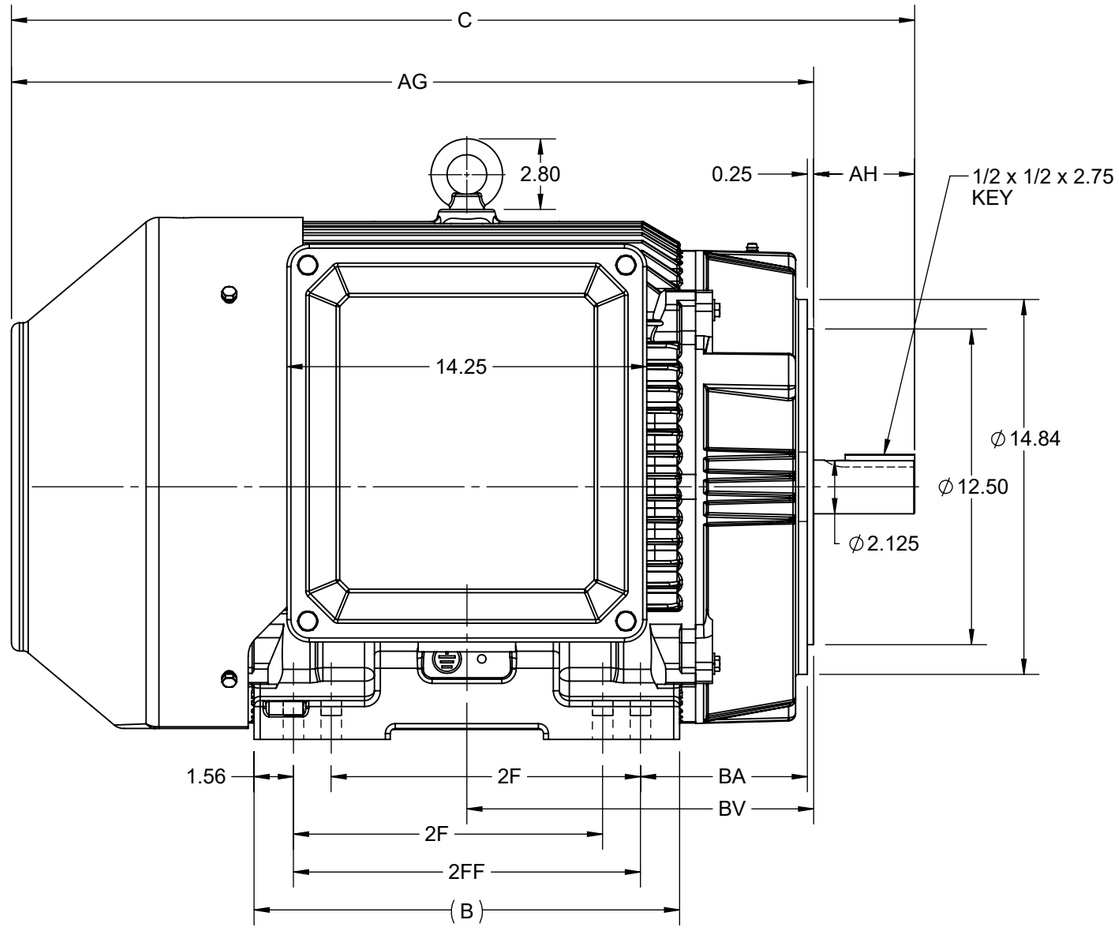
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Part Wdg Start Low Volt Only & Wye Start Delta Run Or Inverter**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**.0555 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**TS**	Shaft Diameter	**2.125 in**
Assembly/Box Mounting	**F1/F2 Capable**	Inverter Load	**Constant 2:1/Variable 20:1**

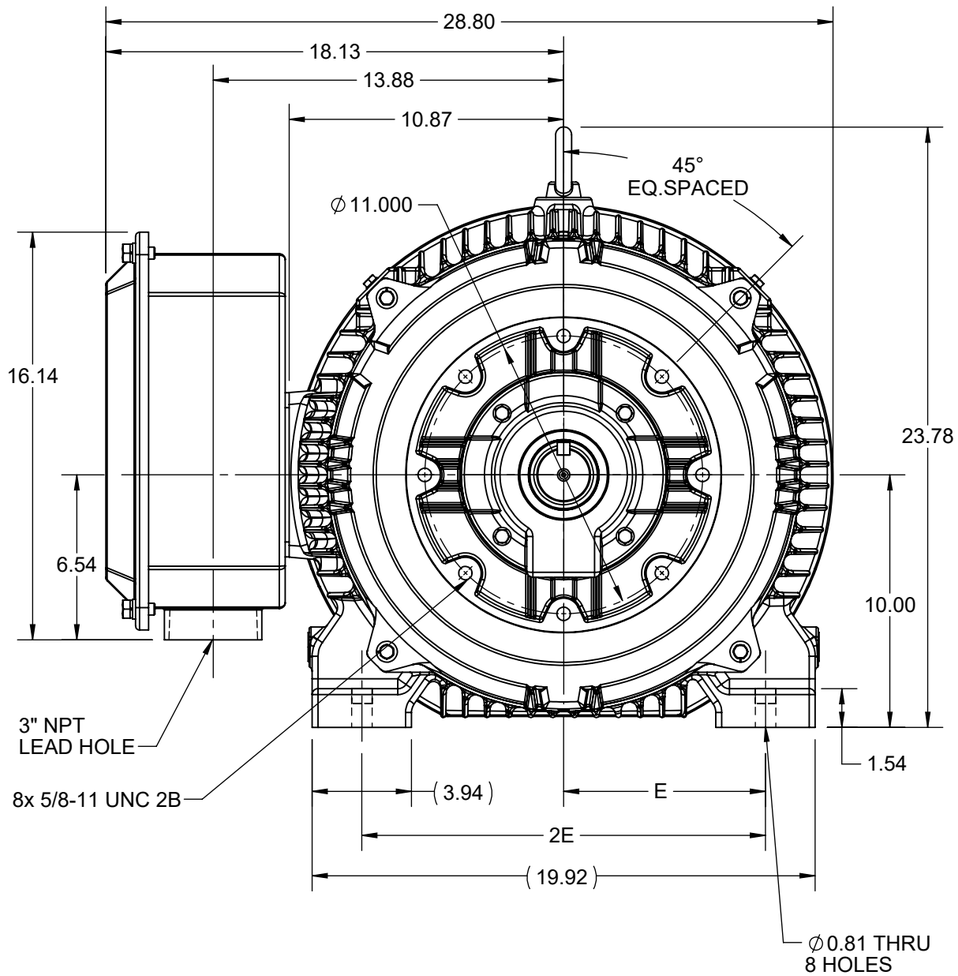
Drawings

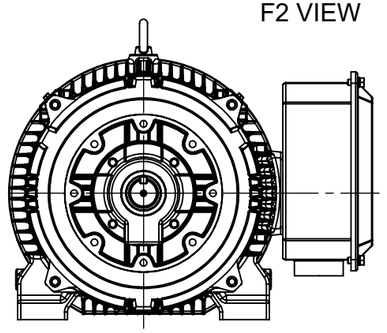
Connection Drawing	**EE7308AA**	Outline Drawing	**SS557006**

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B	C	E	2E	2F	2FF	AG	AH	BA	BV	MOUNTING
16.85	35.77	8.00	16.00	12.25	13.75	31.77	4.00	6.62	13.73	F1 OR F2





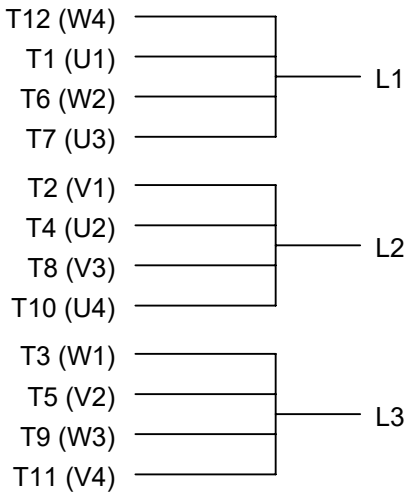


DRAWING REVISION: E	REVISION BY: SB	REV DATE/© DATE: 08/14/2025
REQUEST NUMBER: CR-0023600	APPROVED BY: SBD	DATE: 08/14/2025
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED		

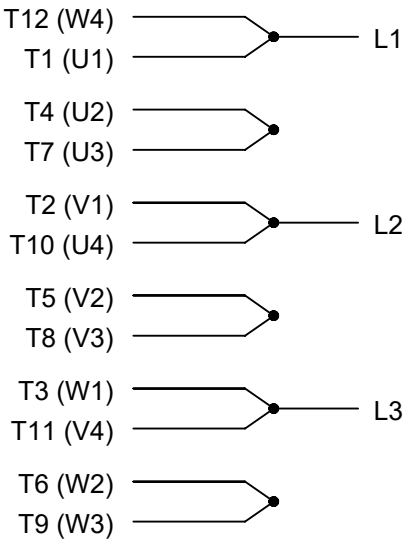
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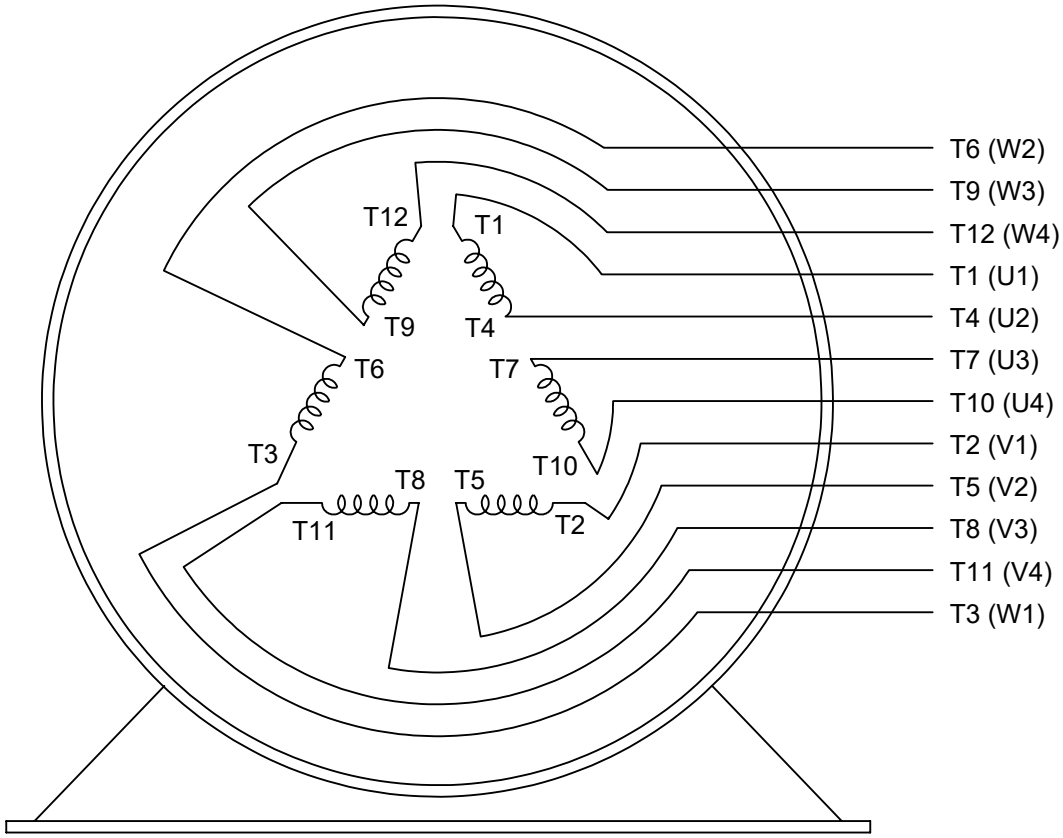
DRAWN BY: NIV	marathon™	
DATE: 29/03/2016	DESCRIPTION: OUTLINE 404/405TSC FR-NEMA-TEFC	
APPROVED BY: SBD		
DATE: 29/03/2016		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: B / DRAWING NUMBER: SS557006	SHEET: 1 OF 1



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: 8/30/2021
Customer:
Attention:
Submitted by:

marathon® Motors

405TSTFCD6038

Submittal

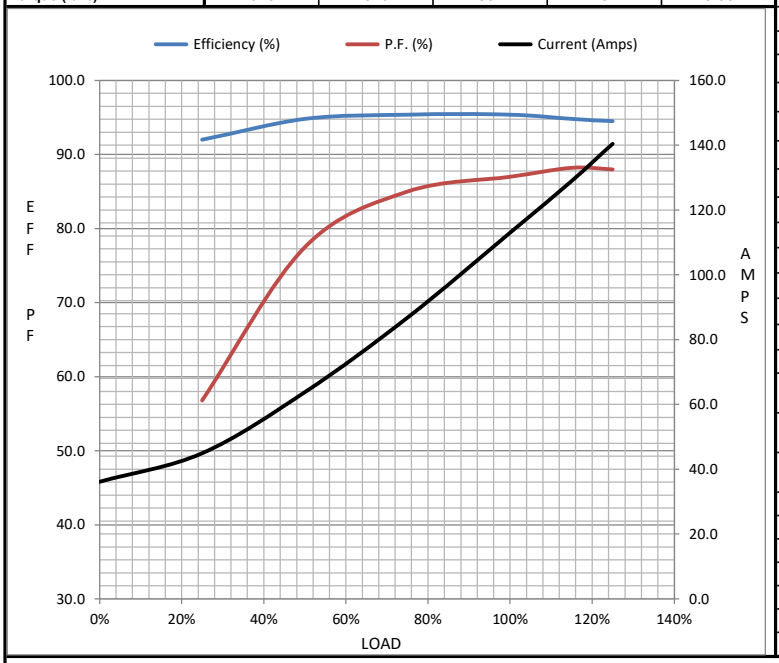
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	36.2	45.0	63.8	86.8	113	129	141	786	
Torque (ft-lb)	0.00	73.1	147	220	294	339	369	618	
RPM	1800	1796	1792	1788	1785	1,782	1780	0	
Efficiency (%)		92.0	94.8	95.4	95.4	94.8	94.5		
P.F. (%)	5.2	56.8	77.5	85.0	87.0	88.2	88.0	32.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1715	1785	1800
Current (Amps)	786	629	475	113	36.2
Torque (ft-lb)	618	519	854	294	0.00



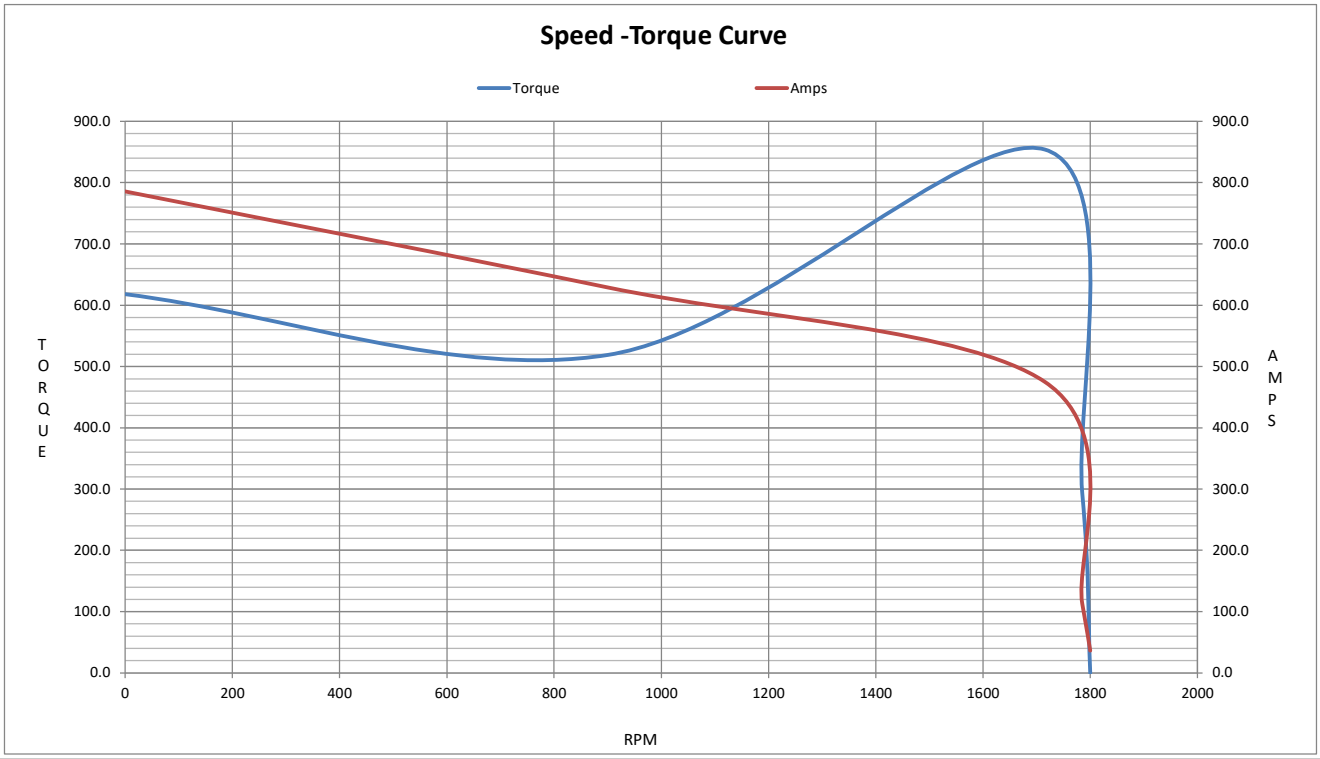
Information Block

HP	100.0	
Sync. RPM	1800	
Frame	405	
Enclosure	TEFC	
Construction	TFC	
Voltage	230/460#190/380	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	62	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	35.0	Lb-Ft²
Ref Wdg	HA32504013 NONE	
Sound Pressure @ 1M	75	dBA
VFD Rating	CONSTANT 2:1/VARIABLE 20:1	
Outline Dwg	SS557006	
Conn. Diag	EE7308AA	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0350	0.0220	0.1540	0.2610	6.0320

Speed -Torque Curve



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

marathon® Motors

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #:
CONN. DIAGRAM: EE7308AA
OUTLINE: SS557006
WINDING: HA32504013 NONE 2
SPEED:

CUSTOMER P.O. #:
REFERENCE MODEL #: 405TSTFCD6038
CAT #: GT1263
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	405TSC	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&206/103	PWS (LV ONLY) & YDRUN OR INV	CONT	F	1.15	40	3300

F.L. EFF	95.4	3/4 LD EFF	95.4	1/2 LD EFF	94.8	GTD EFF	ELECT. TYPE
F.L. PF	87.0	3/4 LD PF	85.0	1/2 LD PF	77.5	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	786	618 LB-FT 210%	854 LB-FT 290%	62	

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
75 dBA	84 dBA	35.0 LB-FT²	575 LB-FT²	25 SEC.	2	1230	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	YES	NONE	BLUE (ENAMEL)

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

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
0.035	0.022	0.154	0.261	6.032	0.150	ODE

*
NOTES
*

INVERTER TORQUE: CONSTANT 2:1/VARIABLE 20:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE
NONE NONE PPR

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

PREPARED BY:
DATE: 8/30/2021

FORM: 3531 REV_4 2/27/06

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