marathon®

General Purpose Motors

Model No: 324TTFCD6028
Catalog No: GT1234A

General Purpose Motor, 40 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 324TC Frame, TEFC

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Product Information Packet: Model No: 324TTFCD6028, Catalog No: GT1234A General Purpose Motor, 40 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 324TC Frame, TEFC

Nameplate Specifications

Phase	**3**	Output HP	**40 & 30 Hp**
Output KW	**30.0 & 22.4 kW**	Voltage	**230/460 & 190/380 V**
Speed	**1782 & 1485 r/min**	Synchronous RPM	**1800 & 1500 r/min**
Service Factor	**1.15 & 1.15**	Frame	**324TC**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**94.1 & 94.2 %**	Ambient Temperature	**40 °C**
Frequency	**60 & 50 Hz**	Current	**95/47.5 & 87/43.5 A**
Power Factor	**84**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6312**
Opp Drive End Bearing Size	**6212**	UL	**Listed**
CSA	**Y**	CE	**Y**
IP Code	**55**	Number of Speeds	**1**
Hazardous Location	**DIVISION 2 T2B**		

Technical Specifications

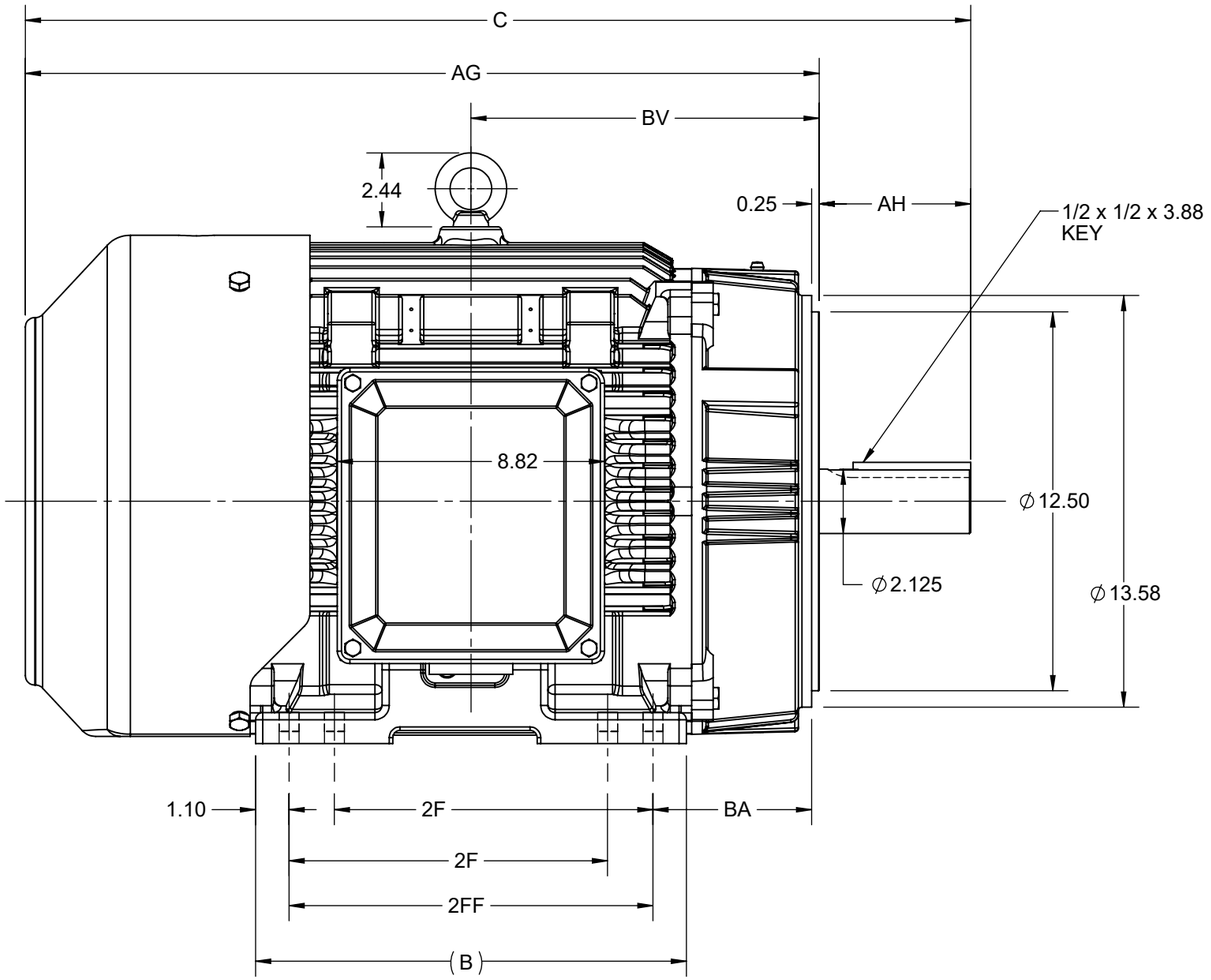
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Part Wdg Start Low Volt Only & Wye Start Delta Run Or Inverter**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**.18 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Overall Length	**29.69 in**
Frame Length	**13.07 in**	Shaft Diameter	**2.125 in**
Shaft Extension	**5.25 in**	Assembly/Box Mounting	**F1/F2 Capable**
Inverter Load	**Constant 10:1/Variable 20:1**		

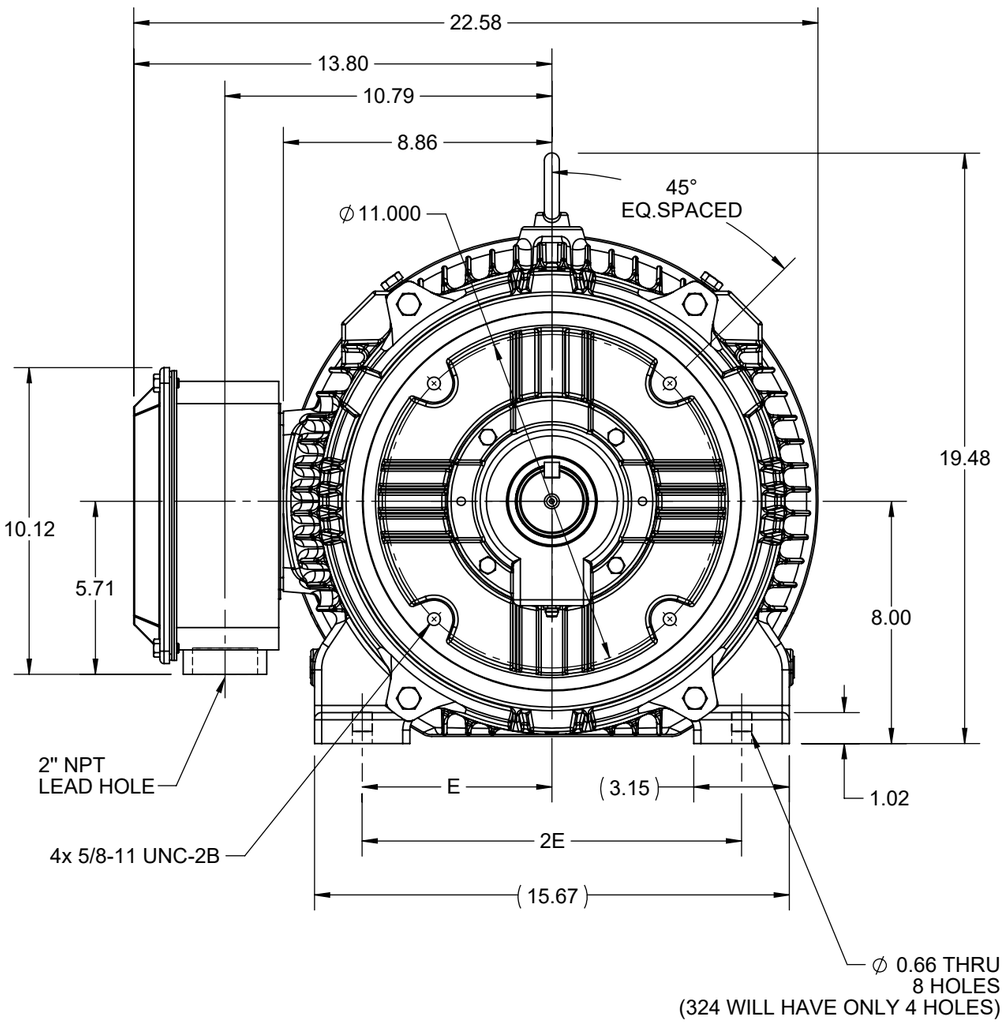
Drawings

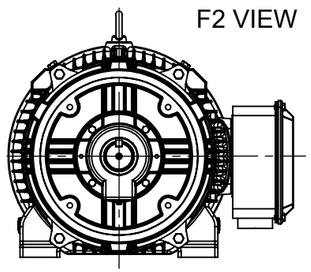
Connection Drawing	**EE7358**	Outline Drawing	**SS312784-100**

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DASH NO.	B	C	E	2E	2F	2FF	AG	AH	BA	BV	MOUNTING	FRAME
100	12.71	29.69	6.25	12.50	---	10.50	24.69	5.00	5.25	10.75	F1 OR F2	324TC
200	14.21	31.19			10.50	12.00	26.19			11.50		324/326TC







DRAWING REVISION	REVISION BY	REV DATE/© DATE
D	SB	08/12/2025
REQUEST NUMBER	APPROVED BY	DATE
CR-0023556	SBD	08/12/2025

REQUEST NUMBER DESCRIPTION
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DATE	29/03/2016
APPROVED BY	SBD
DATE	29/03/2016
REFERENCE	

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DESCRIPTION
OUTLINE
324/326TC FR-NEMA-TEFC

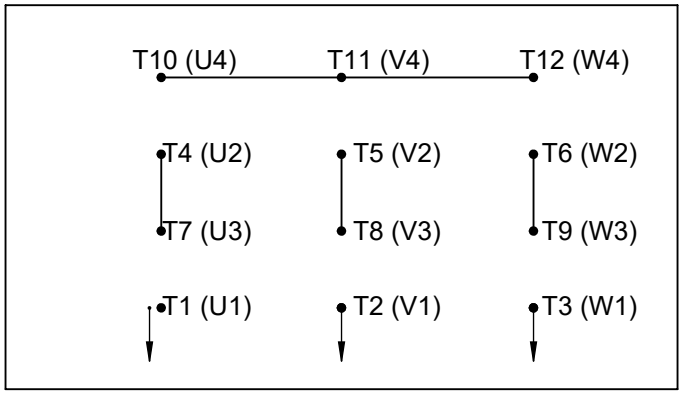
MATERIAL | PROCESS/FINISH

THIRD ANGLE PROJECTION

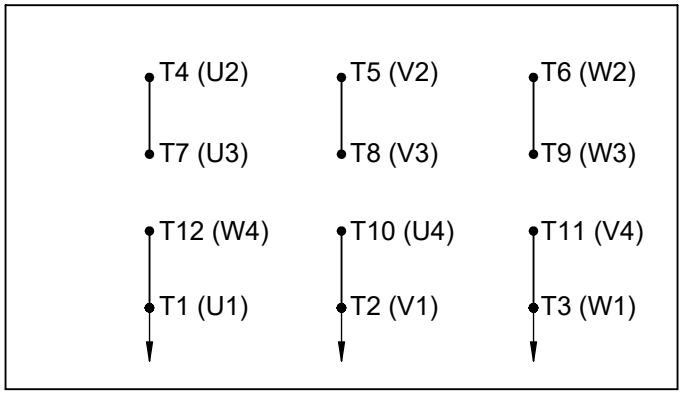
SIZE	DRAWING NUMBER	SHEET
B	SS312784	1 OF 1

HIGH VOLTAGE

WYE START

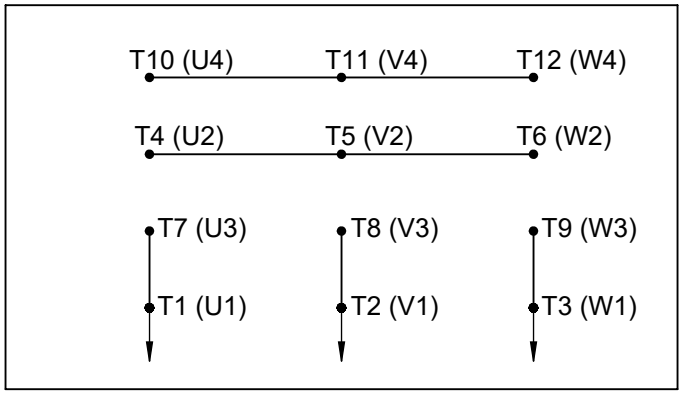


DELTA RUN

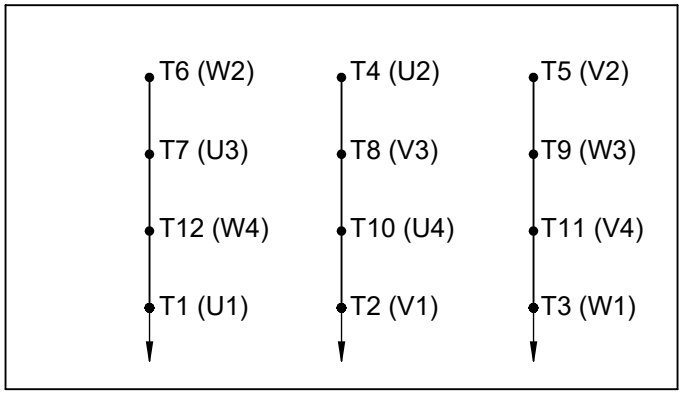


LOW VOLTAGE

WYE START



DELTA RUN



4/2 CKTY △

DRAWING REVISION	REVISION BY	REV DATE/© DATE
E	SB	08/01/2025
REQUEST NUMBER	APPROVED BY	DATE
CR-0023654	SBD	08/01/2025

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DRAWN BY	BLR
DATE	03-09-1998
APPROVED BY	GK
DATE	03-23-1998
REFERENCE	
THIRD ANGLE PROJECTION	

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DESCRIPTION
CONN DIAGRAM-EXTERNAL
12 LEAD - DUAL VOLT. - WYE START - DELTA RUN

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	EE7358	1 OF 1

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Data Sheet

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

marathon® electric

324TTFCD6028

Submittal

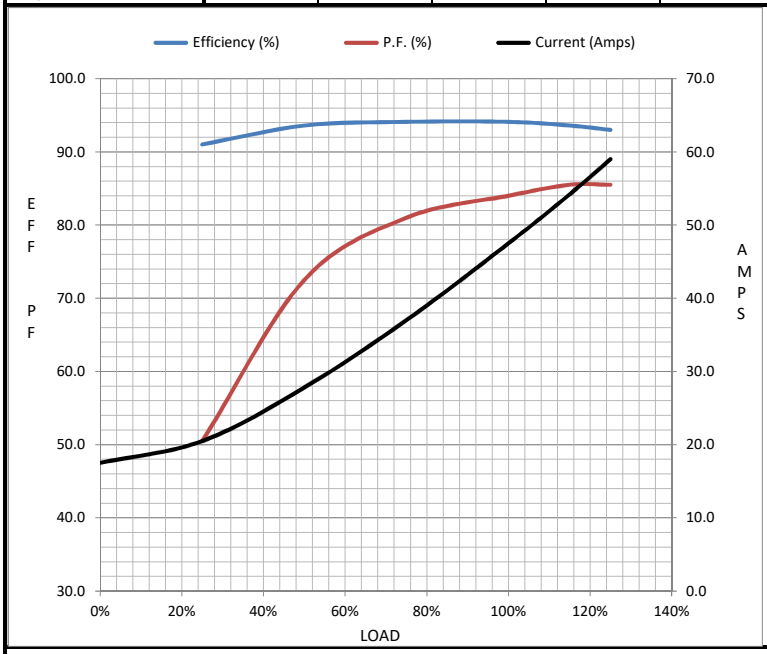
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	17.5	20.5	27.8	37.0	47.5	54.2	59.0	290	
Torque (ft-lb)	0.00	29.3	58.5	88.3	118	136	149	212	
RPM	1800	1795	1790	1788	1782	1,780	1778	0	
Efficiency (%)		91.0	93.6	94.1	94.1	93.6	93.0		
P.F. (%)	5.0	50.5	72.5	81.0	84.0	85.5	85.5	32.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1710	1782	1800
Current (Amps)	290	230	170	47.5	17.5
Torque (ft-lb)	212	180	313	118	0.00



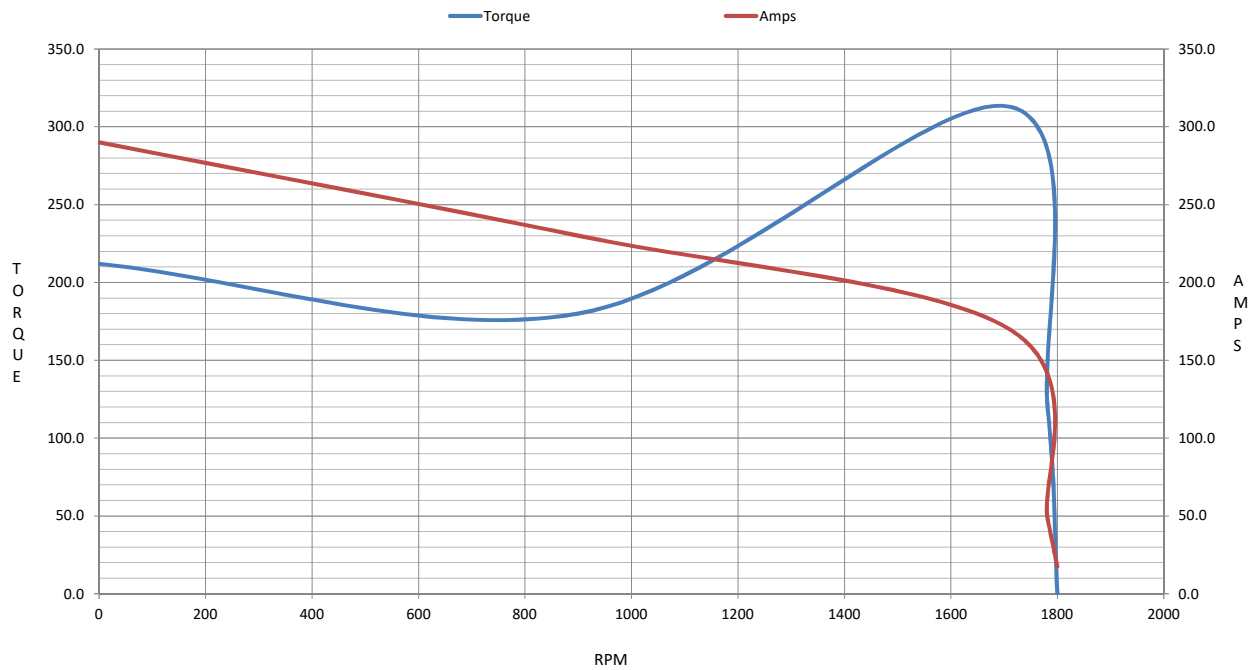
Information Block

HP	40.0
Sync. RPM	1800
Frame	324182TTFC6080
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	55 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	11.2 Lb-Ft²
Ref Wdg	HE32004007 NONE
Sound Pressure @ 1M	60 dBA
VFD Rating	VARIABLE 10:1
Outline Dwg	SS312784
Conn. Diag	EE7308AA
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.1130	0.0610	0.4680	0.8300	15.3850

Speed -Torque Curve



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #:
CONN. DIAGRAM: EE7308AA
OUTLINE: SS312784
WINDING: HE32004007 NONE 2
SPEED:

CUSTOMER P.O. #:
REFERENCE MODEL #: 324TTFCD6028
CAT #: GT1234A
CUSTOMER PART #:
MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
40	30	1800	1782	324TC	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	95/47.5&86/43	START D RUN OR IN	CONT	F	1.15	40	3300

F.L. EFF	94.1	3/4 LD EFF	94.1	1/2 LD EFF	93.6	GTD EFF	ELECT. TYPE
F.L. PF	84.0	3/4 LD PF	81.0	1/2 LD PF	72.5	93.6	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)	
118 LB-FT	290	212 LB-FT 180%	313 LB-FT 265%	55	

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
60 dBA	69 dBA	11.2 LB-FT²	0 LB-FT²	20 SEC.	2	650 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 6312	BALL 6212	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
0.113	0.061	0.468	0.83	15.385	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