marathon®

General Purpose Motors

Model No: 324TSTFCD6003
Catalog No: GT1233A

General Purpose Motor, 40 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 RPM, 324TSC Frame, TEFC

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Product Information Packet: Model No: 324TSTFCD6003, Catalog No: GT1233A General Purpose Motor, 40 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 RPM, 324TSC 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	**3565 & 2968 r/min**	Synchronous RPM	**3600 & 3000 r/min**
Service Factor	**1.15 & 1.15**	Frame	**324TSC**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**92.4 & 92.7 %**	Ambient Temperature	**40 °C**
Frequency	**60 & 50 Hz**	Current	**92/46 & 84/42 A**
Power Factor	**88**	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

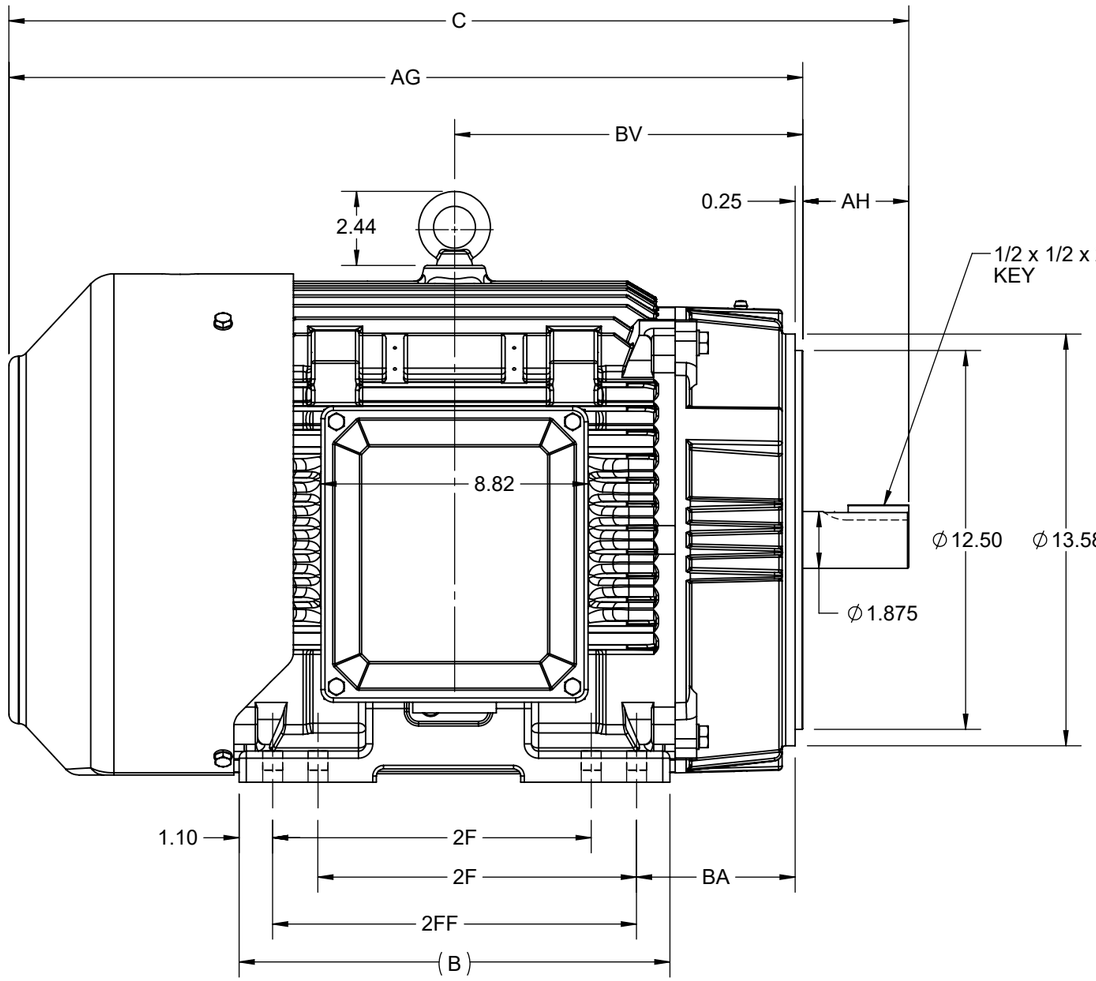
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Part Wdg Start Low Volt Only & Wye Start Delta Run Or Inverter**
Poles	**2**	Rotation	**Reversible**
Resistance Main	**.1736 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**TS**	Overall Length	**28.19 in**
Frame Length	**13.07 in**	Shaft Diameter	**1.875 in**
Shaft Extension	**3.75 in**	Assembly/Box Mounting	**F1/F2 Capable**
Inverter Load	**Constant 2:1/Variable 10:1**		

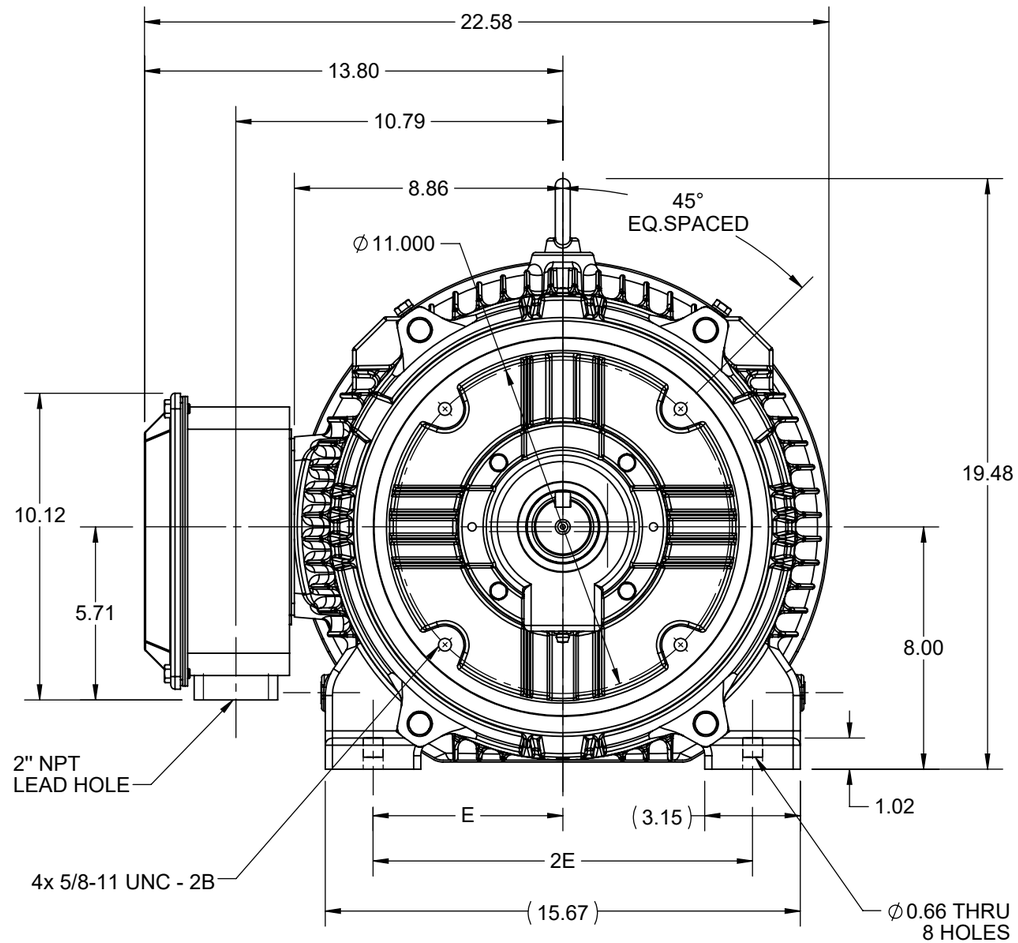
Drawings

Connection Drawing	**EE7308AA**	Outline Drawing	**SS312783-100**

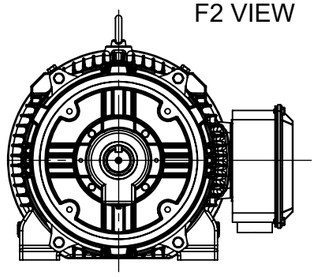
This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created: 16/10/2026

DASH NO.	B	C	E	2E	2F	2FF	AG	AH	BA	BV	MOUNTING	FRAME
100	12.71	28.19	6.25	12.50	---	10.50	24.69	3.50	5.25	10.75	F1 OR F2	324TSC
200	14.21	29.69			10.50	12.00	26.19			11.50		324/326TSC





F2 VIEW



DRAWING REVISION	REVISION BY	REV DATE/© DATE
D	SB	08/21/2025
REQUEST NUMBER	APPROVED BY	DATE
CR-0023556	SBD	08/21/2025

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

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PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

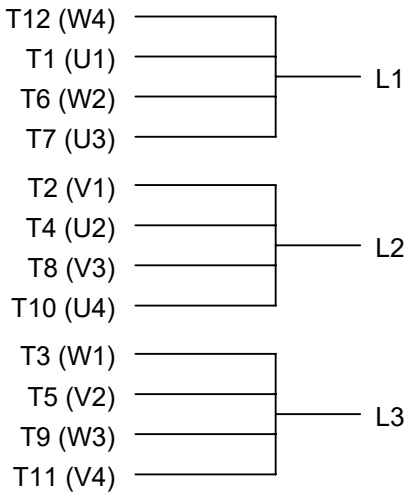
DRAWN BY	NIV
DATE	29/03/2016
APPROVED BY	RMS
DATE	29/03/2016
REFERENCE	
THIRD ANGLE PROJECTION	

marathon™

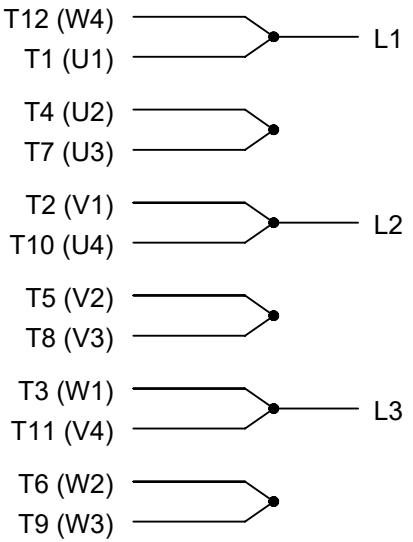
DESCRIPTION
OUTLINE
324/326TSC FR-NEMA-TEFC

MATERIAL	PROCESS/FINISH

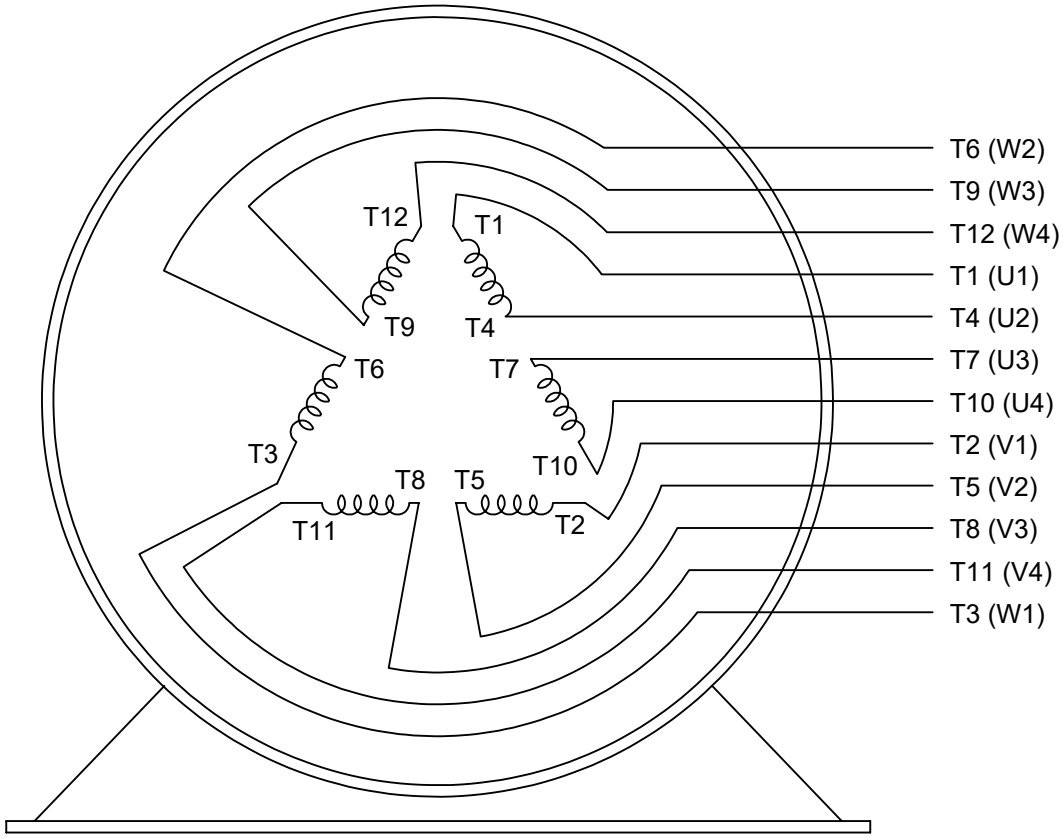
SIZE	DRAWING NUMBER	SHEET
B	SS312783	1 OF 1



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

324TSTFCD6003

Submittal

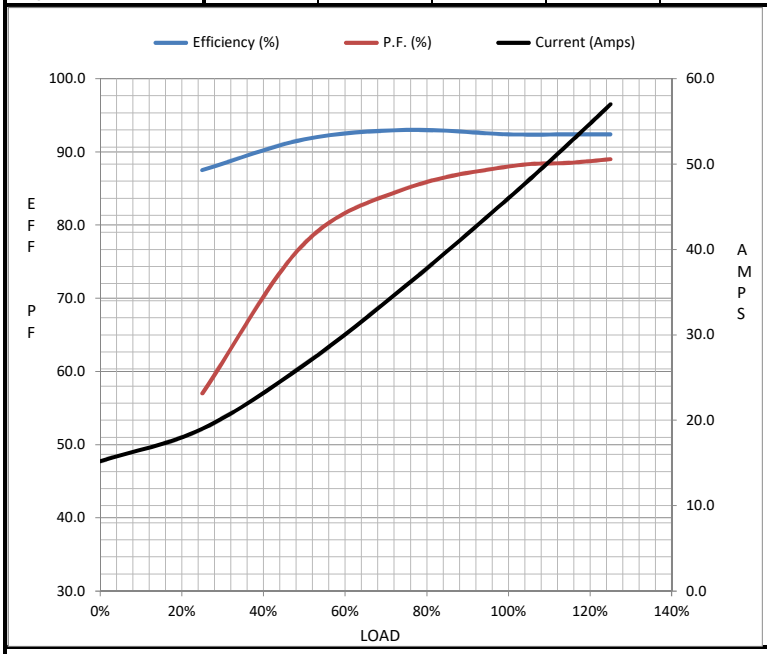
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	15.2	19.0	26.5	35.8	46.0	52.5	57.0	290	
Torque (ft-lb)	0.00	14.6	29.3	44.0	59.0	68.0	74.0	95.0	
RPM	3600	3592	3582	3575	3565	3,560	3555	0	
Efficiency (%)		87.5	91.7	93.0	92.4	92.4	92.4		
P.F. (%)	8.0	57.0	77.5	85.0	88.0	88.5	89.0	30.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3425	3565	3600
Current (Amps)	290	232	175	46.0	15.2
Torque (ft-lb)	95.0	80.0	162	59.0	0.00



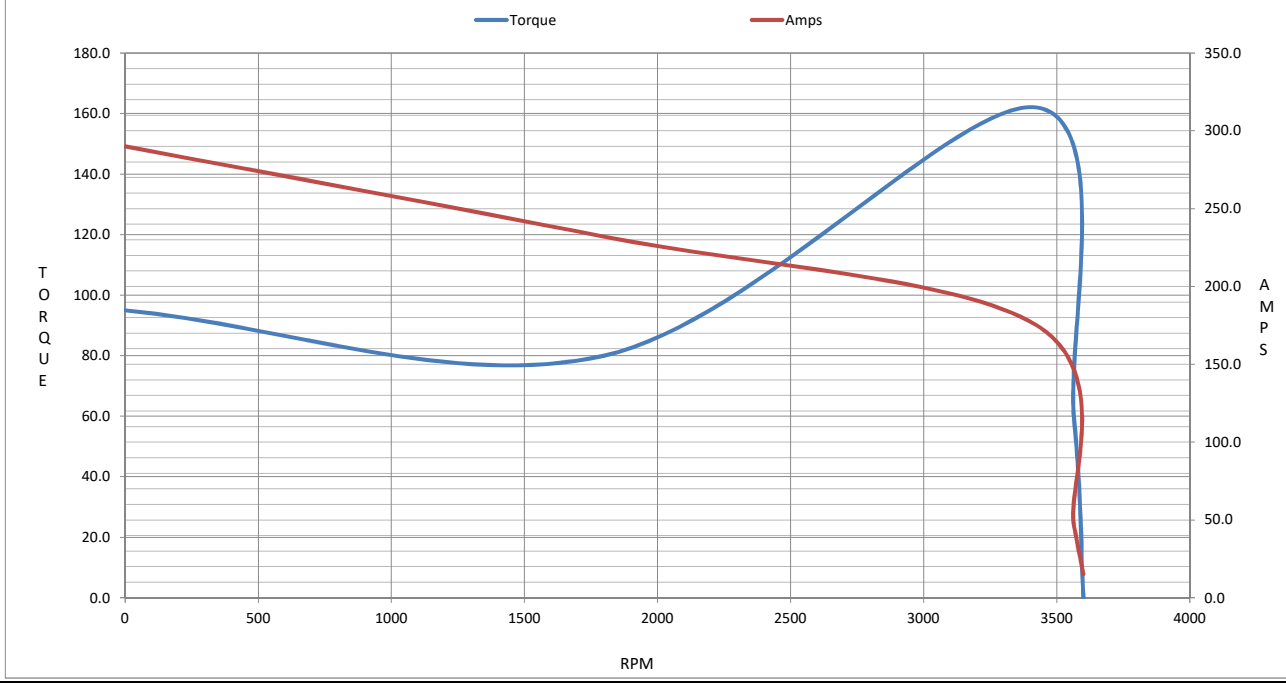
Information Block

HP	40.0	
Sync. RPM	3600	
Frame	324182TTFC6080	
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	60	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	4.8	Lb-Ft²
Ref Wdg	HE32002008 NONE	
Sound Pressure @ 1M	75	dBA
VFD Rating	VARIABLE 10:1	
Outline Dwg	SS312783	
Conn. Diag	EE7308AA	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.1100	0.0570	0.5390	0.5960	17.3730

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: SS312783
WINDING: HE32002008 NONE 2
SPEED:

CUSTOMER P.O. #:
REFERENCE MODEL #: 324TSTFCD6003
CAT #: GT1233A
CUSTOMER PART #:
MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
40	30	3600	3565	324TSC	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	92.5/46&84/42	START D RUN OR IN	CONT	F	1.15	40	3300

F.L. EFF	92.4	3/4 LD EFF	93.0	1/2 LD EFF	91.7	GTD EFF	ELECT. TYPE
F.L. PF	88.0	3/4 LD PF	85.0	1/2 LD PF	77.5	91.7	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)	
59.0 LB-FT	290	95.0 LB-FT 161%	162 LB-FT 275%	60	

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 dBA	84 dBA	4.8 LB-FT²	25 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	TS	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
0.11	0.057	0.539	0.596	17.373	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