marathon®

Severe Duty Motors

Model No: 449TTFCD6588
Catalog No: E687A

Severe Duty Motor, 200 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 449T Frame, TEFC

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Product Information Packet: Model No: 449TTFCD6588, Catalog No: E687A Severe Duty Motor, 200 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 449T Frame, TEFC

Nameplate Specifications

Phase	**3**	Output HP	**200 Hp**
Output KW	**149.0 kW**	Voltage	**460 V**
Speed	**1190 r/min**	Synchronous RPM	**1200 r/min**
Service Factor	**1.15**	Frame	**449T**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**95.8 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**230.0 A**
Power Factor	**85**	Duty	**Continuous**
Insulation Class	**H**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**NU319**
Opp Drive End Bearing Size	**6317**	UL	**Listed**
CSA	**Y**	CE	**Y**
IP Code	**55**	Number of Speeds	**1**
Hazardous Location	**DIVISION 2 T2B**		

Technical Specifications

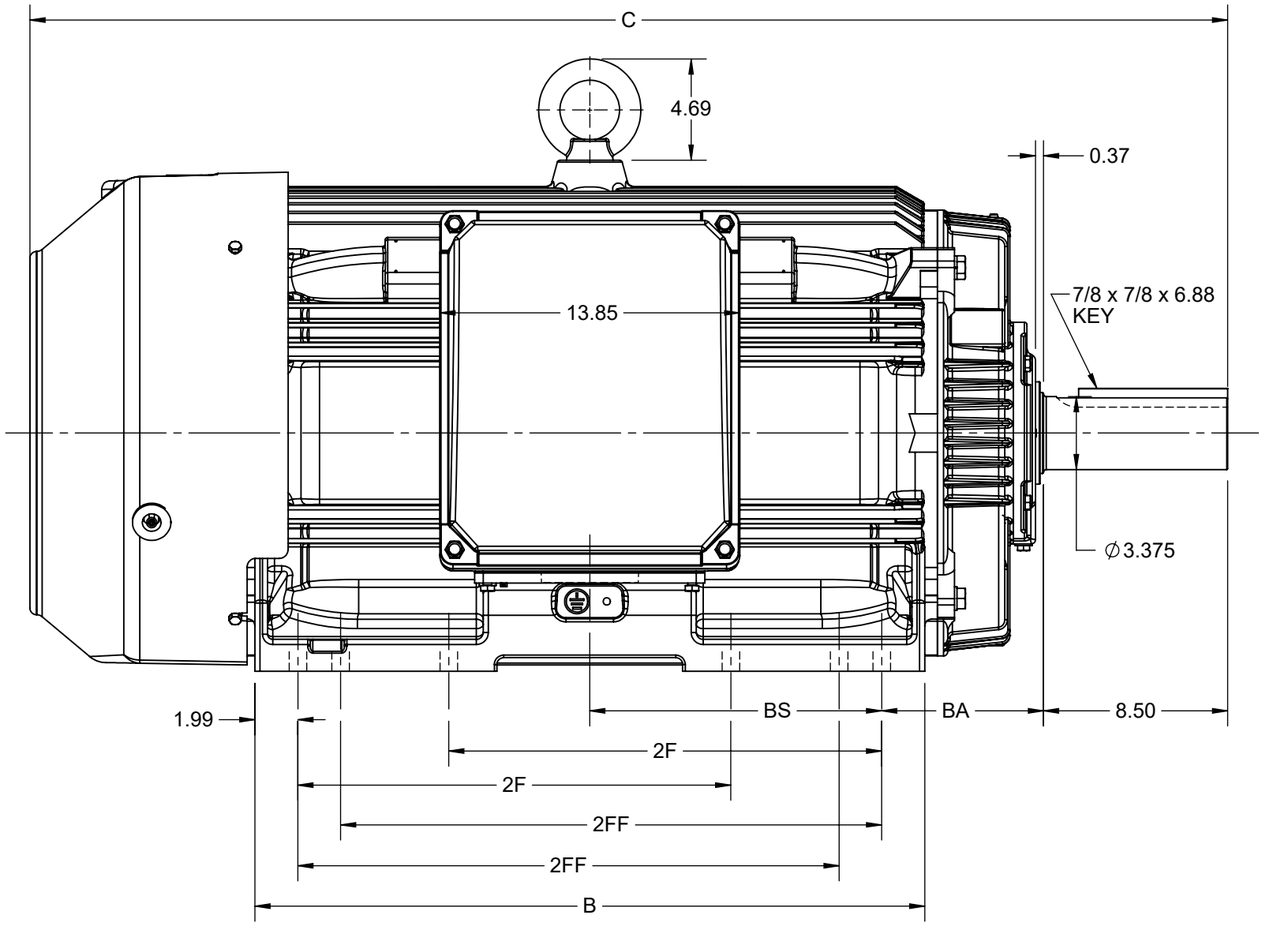
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**6**	Rotation	**Reversible**
Resistance Main	**.0186 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Roller**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Shaft Diameter	**3.375 in**
Assembly/Box Mounting	**F1/F2 Capable**	Inverter Load	**Constant 2:1/Variable 10:1**

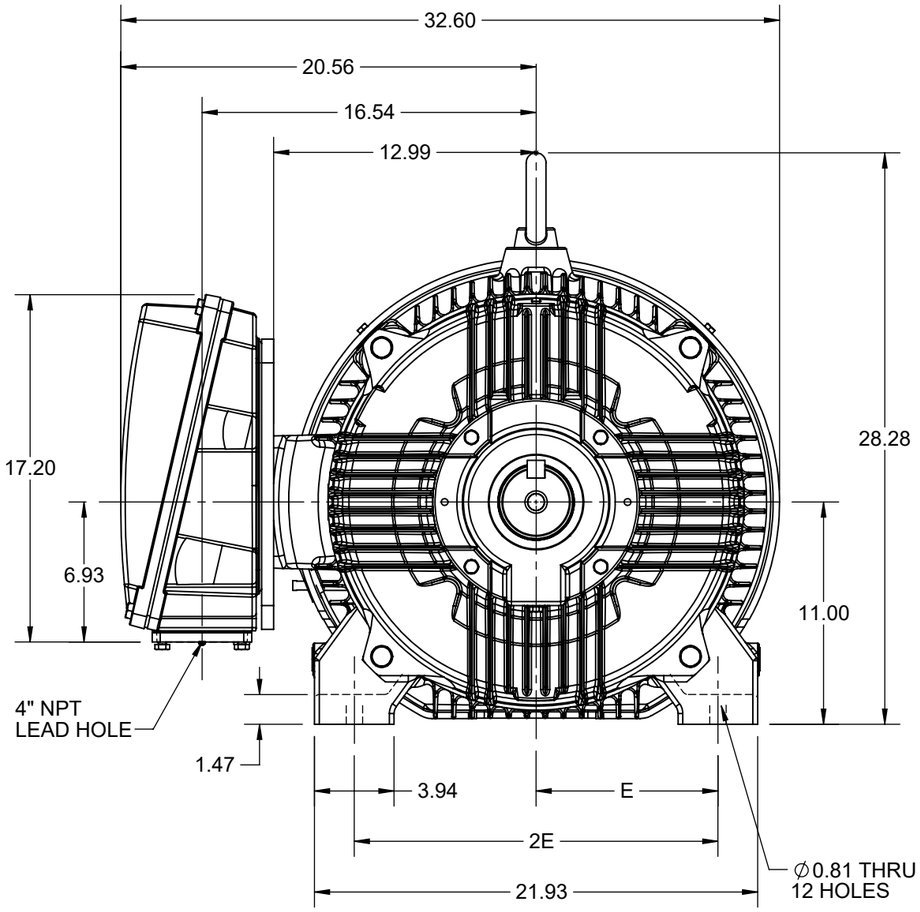
Drawings

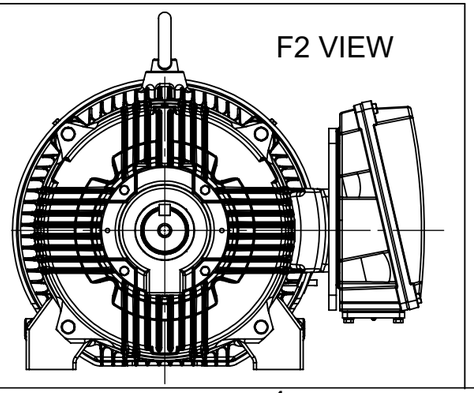
Connection Drawing	**EE7300**	Outline Drawing	**SS557671**

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B	C	E	2E	2F	2FF	BA	BS	MOUNTING
30.94	55.33	9.00	18.00	20.00	25.00	7.50	13.48	F1 OR F2







DRAWING REVISION	REVISION BY	REV DATE/© DATE
C	SB	07/23/2025
REQUEST NUMBER	APPROVED BY	DATE
CR-0023556	SBD	07/23/2025

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

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DATE	04/05/2019
APPROVED BY	SBD
DATE	04/05/2019
REFERENCE	
THIRD ANGLE PROJECTION	

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DESCRIPTION
OUTLINE
447/449T FR-SD & IEEE 841

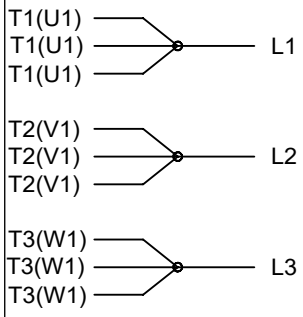
MATERIAL | PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
B	SS557671	1 OF 1

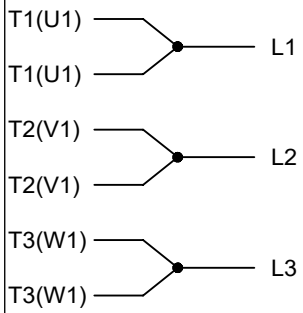
THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS

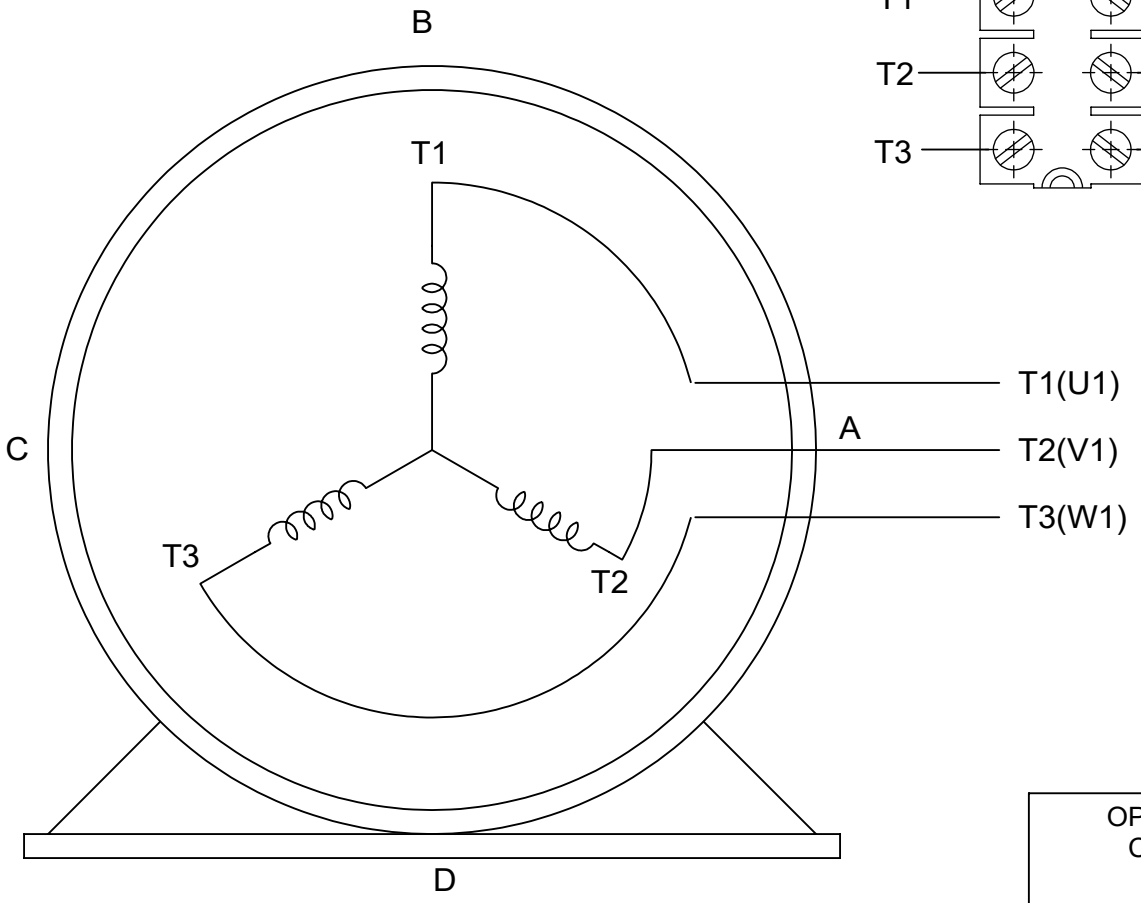
IF MOTOR HAS
9 LEADS



IF MOTOR HAS
6 LEADS



A-9806 DECAL



VIEW OF TERMINAL END

TERMINAL BLOCK WHEN SPECIFIED

OPTIONAL CORD
CONNECTION

L1	WHITE
L2	RED
L3	BLACK

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

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DATE: 03-26-1993	
APPROVED BY: TB	
DATE: 03-26-1993	
REFERENCE	
THIRD ANGLE PROJECTION	

marathon™

DESCRIPTION
CONNECTION DIAGRAM
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	EE7300	1 OF 1

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Data Sheet

Date: 5/6/2020
Customer:
Attention:
Submitted by:

marathon® Motors

449TTFCD6588

Submittal

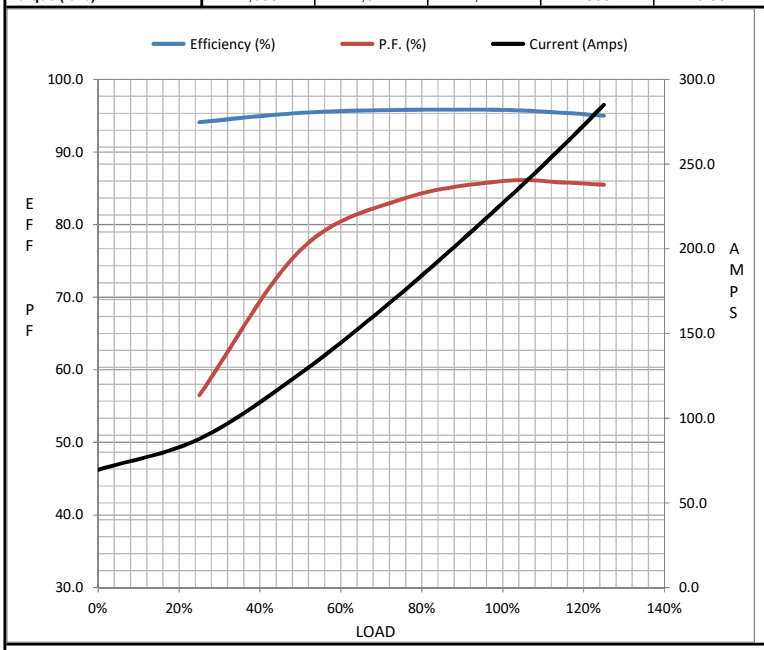
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	69.5	87.8	127	174	227	261	285	1,450	
Torque (ft-lb)	0.00	220	440	661	883	1,018	1,106	1,635	
RPM	1200	1198	1195	1192	1190	1,188	1188	0	
Efficiency (%)		94.1	95.4	95.8	95.8	95.4	95.0		
P.F. (%)	4.0	56.5	76.5	83.5	86.0	85.8	85.5	31.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1155	1190	1200
Current (Amps)	1,450	1,160	780	227	69.5
Torque (ft-lb)	1,635	1,372	2,247	883	0.00



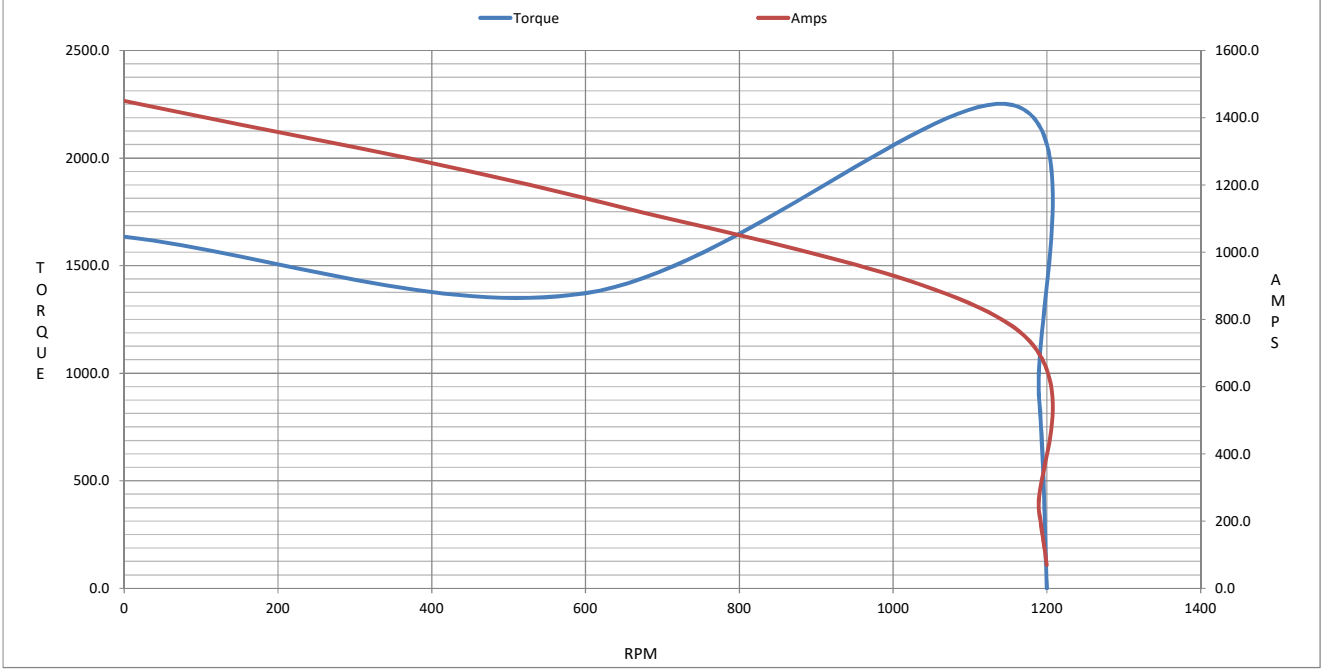
Information Block

HP	200.0
Sync. RPM	1200
Frame	449
Enclosure	TEFC
Construction	TFC
Voltage	460 V
Frequency	60 Hz
Design	B
LR Code letter	G
Service Factor	1.15
Temp Rise @ FL	65 ° C
Duty	CONT
Ambient	40 ° C
Elevation	3,300 feet
Rotor/Shaft wk²	145 Lb-Ft²
Ref Wdg	HE32806008 NONE
Sound Pressure @ 1M	75 dBA
VFD Rating	CONSTANT 2:1/VARIABLE 10:1
Outline Dwg	SS557671
Conn. Diag	EE7300U
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0110	0.0100	0.1090	0.1850	3.8340

Speed -Torque Curve



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DATA VOLTS: 460

CERTIFICATION DATA SHEET

REFERENCE MODEL #: 449TTFCD6588
CONN. DIAGRAM: EE7300U **CAT #:** E687A
OUTLINE: SS557671
WINDING: HE32806008 NONE 4 **MOUNTING:** F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
200	149	1200	1190	447/449T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	460	227	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	95.8	3/4 LD EFF	95.8	1/2 LD EFF	95.4	GTD EFF	ELECT. TYPE
F.L. PF	86.0	3/4 LD PF	83.5	1/2 LD PF	76.5	95.4	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)	
883 LB-FT	1,450	1,635 LB-FT 185%	2,247 LB-FT 254%	65	

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
75 dBA	84 dBA	145 LB-FT²	1700 LB-FT²	25 SEC.	2	2570 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	NO	NONE	BLUE (EPOXY)

BEARINGS DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
ROLLER	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
NU319	6317						

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
0.011	0.01	0.109	0.185	3.834	0.080	NONE

NOTES
*
*

If Inverter equals NONE, contact factory for further information
INVERTER TORQUE: CONSTANT 2:1/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:
DATE: 5/13/2020

FORM: 3531 REV_4 2/27/06
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