marathon®

Severe Duty Motors

Model No: 449TTFCD16553
Catalog No: E776A

Severe Duty Motor, 400 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 449T Frame, TEFC

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Product Information Packet: Model No: 449TTFCD16553, Catalog No: E776A Severe Duty Motor, 400 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 449T Frame, TEFC

Nameplate Specifications

Phase	**3**	Output HP	**400 Hp**
Output KW	**300.0 kW**	Voltage	**460 V**
Speed	**1788 r/min**	Synchronous RPM	**1800 r/min**
Service Factor	**1.15**	Frame	**449T**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**96.5 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**440.0 A**
Power Factor	**88**	Duty	**Continuous**
Insulation Class	**H**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6319**
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

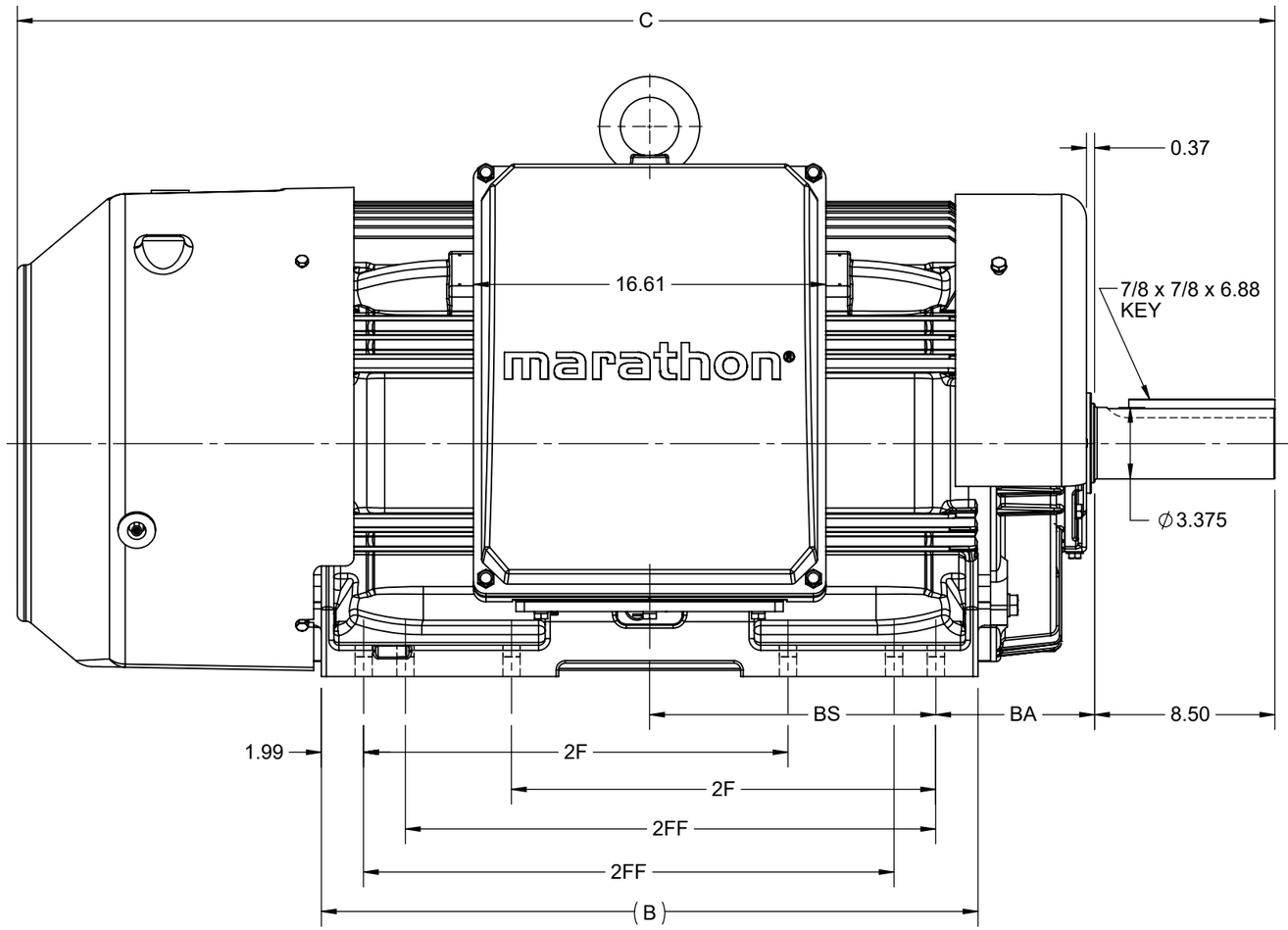
Electrical Type	**Squirrel Cage Induction Run**	Starting Method	**Across The Line**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**.009 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Shaft Diameter	**3.375 in**
Assembly/Box Mounting	**F1 Only**		

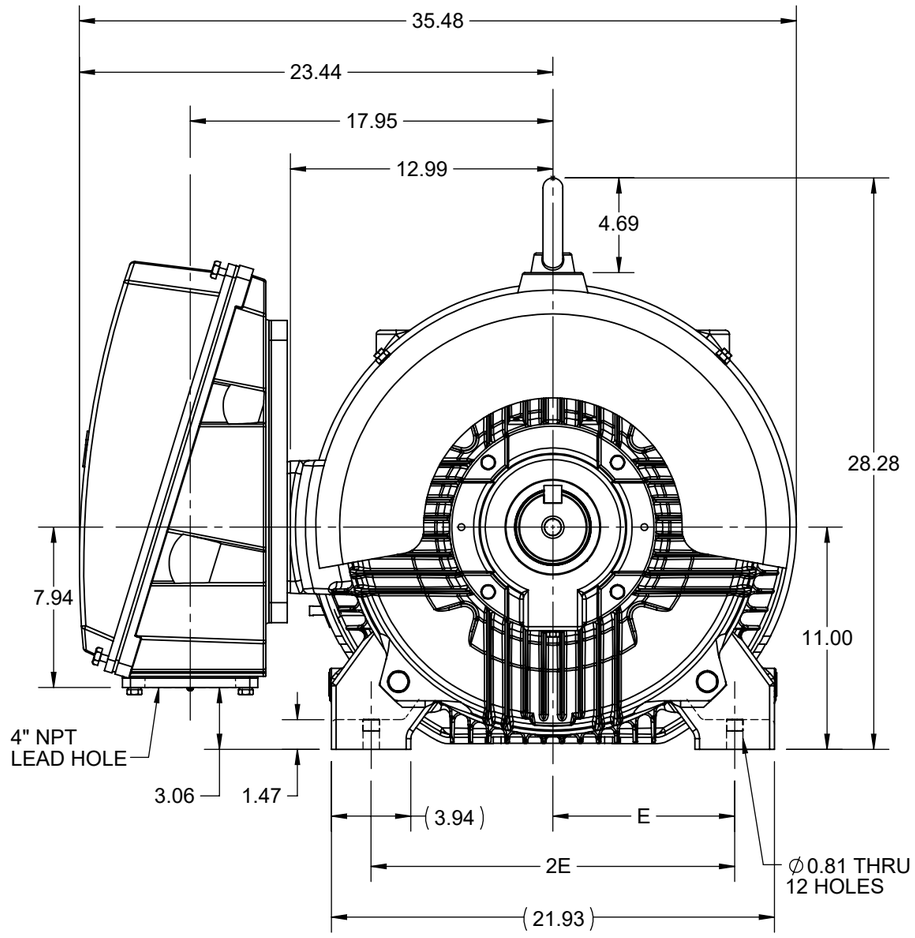
Drawings

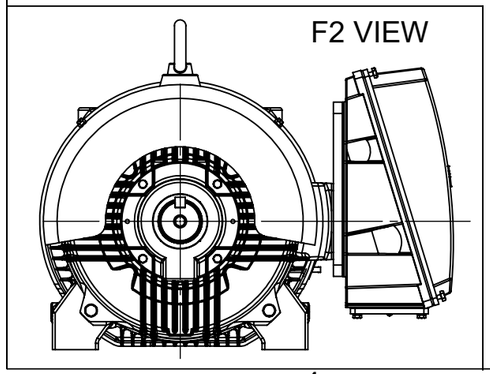
Connection Drawing	**EE7300U**	Outline Drawing	**SS620973**

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B	C	E	2E	2F	2FF	BA	BS	MOUNTING
30.94	59.27	9.00	18.00	20.00	25.00	7.50	13.48	F1 OR F2







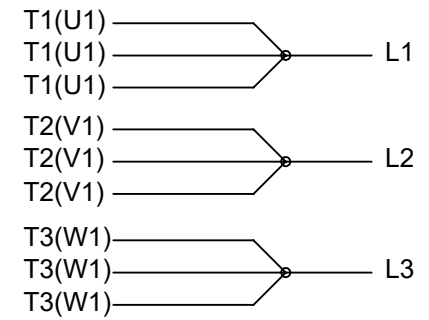
DRAWING REVISION: C	REVISION BY: SB	REV DATE/© DATE: 08/22/2025
REQUEST NUMBER: CR-0023600	APPROVED BY: SBD	DATE: 08/22/2025
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED		

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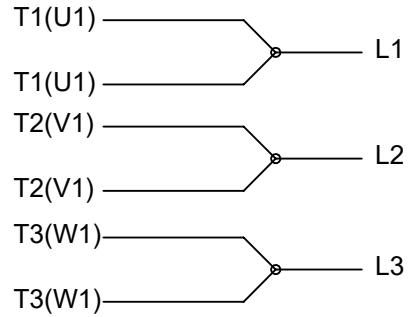
PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY: BISWA	marathon™	
DATE: 03/05/2020	DESCRIPTION: OUTLINE 447/449T FR H/O-SD & IEEE 841	
APPROVED BY: SBD		
DATE: 03/05/2020		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: B / DRAWING NUMBER: SS620973	SHEET: 1 OF 1

IF MOTOR HAS 9 LEADS

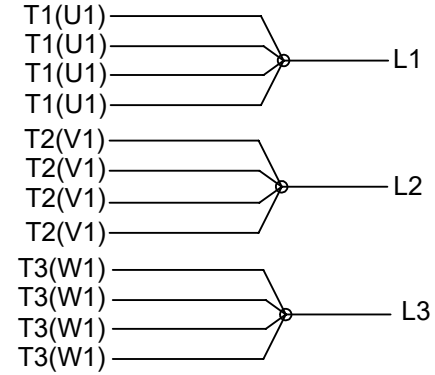


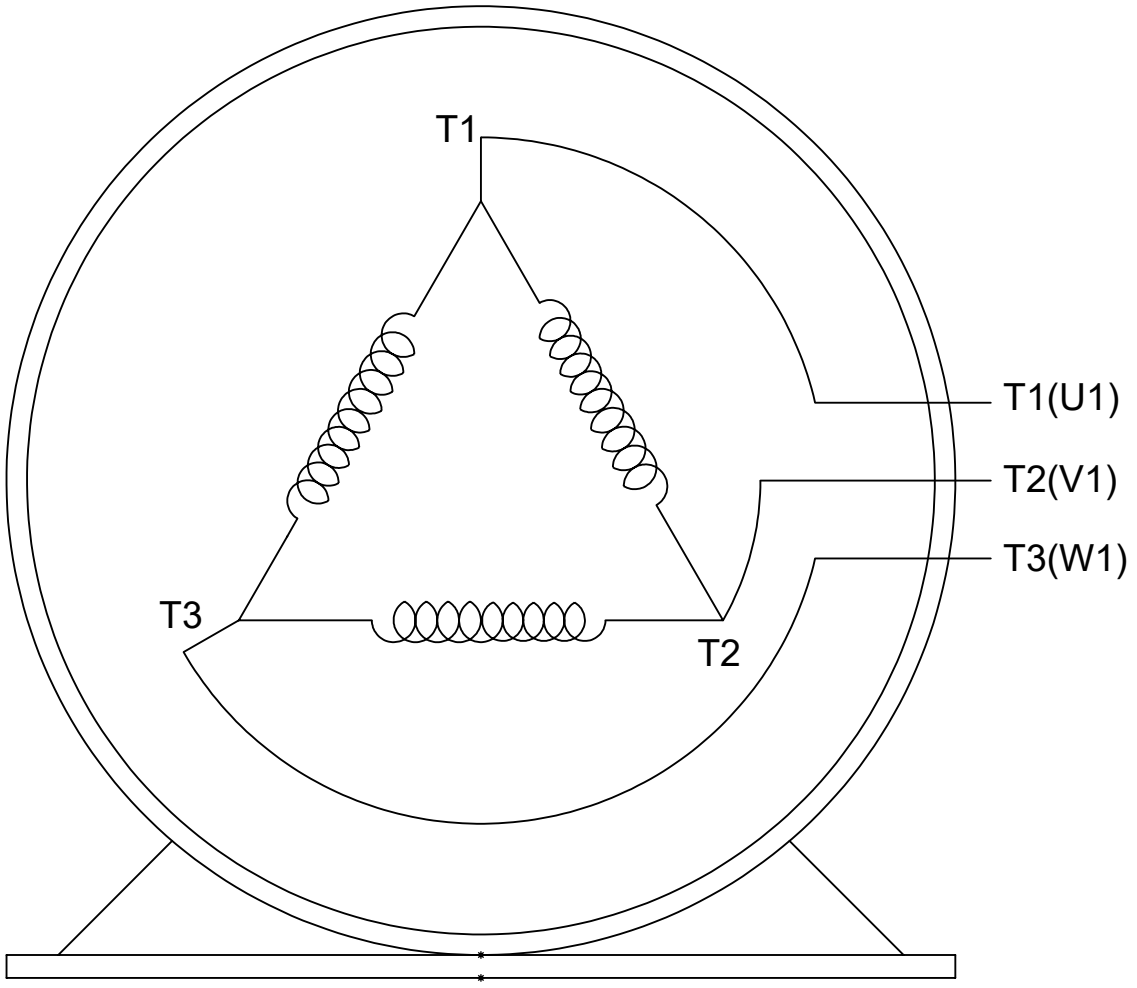
IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS





VIEW OF TERMINAL END

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

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

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DRAWN BY	DRS
DATE	09-27-1996
APPROVED BY	GK
DATE	09-30-1996
REFERENCE	
THIRD ANGLE PROJECTION	

marathon™

DESCRIPTION
CONN DIAGRAM-EXTERNAL
3Ø SINGLE VOLTAGE

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	EE7300U	1 OF 1

Data Sheet

Date: 6/3/2020
Customer:
Attention:
Submitted by:

449TTFCD16553

Submittal

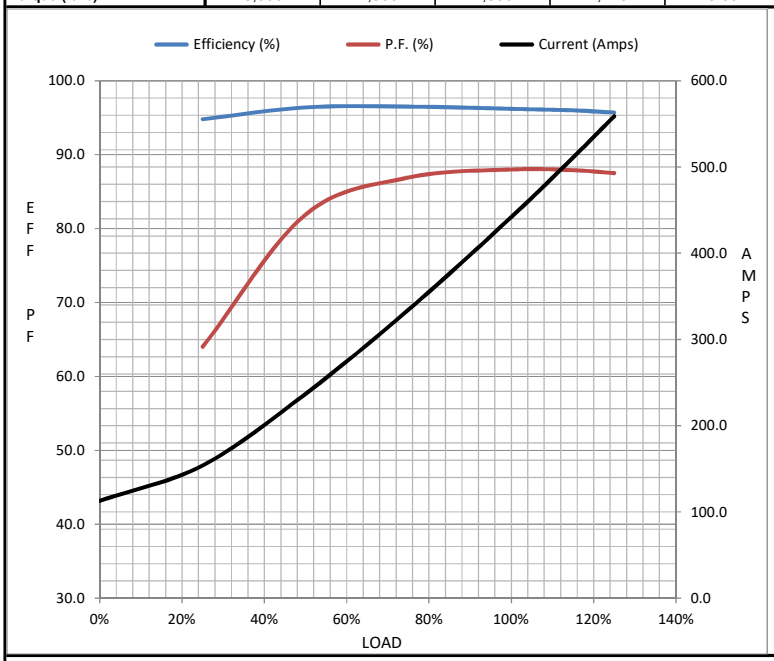
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	113	154	237	335	442	511	559	2,960	
Torque (ft-lb)	0.00	292	585	880	1,175	1,353	1,472	3,000	
RPM	1800	1797	1794	1791	1788	1,786	1784	0	
Efficiency (%)		94.8	96.4	96.5	96.2	96.0	95.7		
P.F. (%)	4.0	64.0	81.9	86.9	88.0	87.9	87.5	42.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1746	1788	1800
Current (Amps)	2,960	2,370	1,390	442	113
Torque (ft-lb)	3,000	2,500	2,500	1,175	0.00

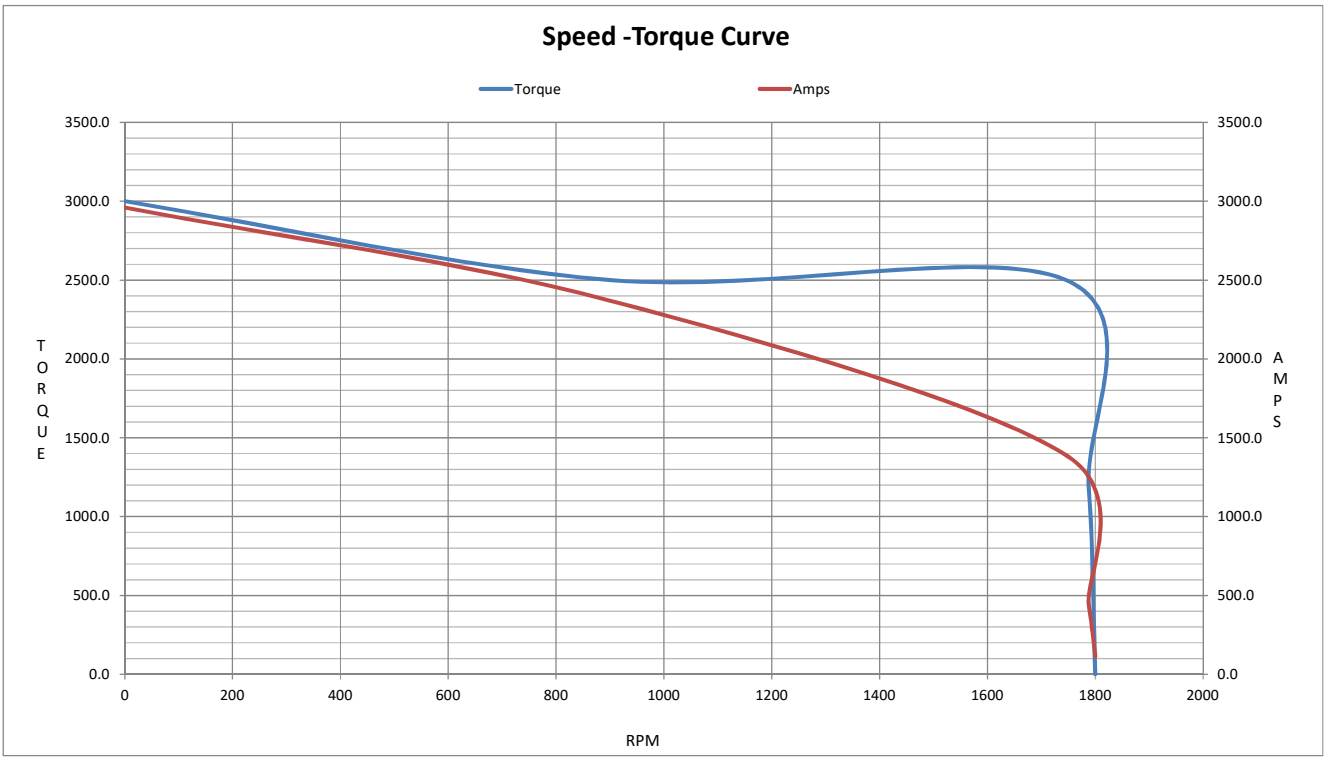


Information Block

HP	400.0	
Sync. RPM	1800	
Frame	160L	
Enclosure	TEFC	
Construction	TFC	
Voltage	460	V
Frequency	60	Hz
Design	N	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	85	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	131.5	Lb-Ft²
Ref Wdg	HA32804032 NONE	
Sound Pressure @ 1M	85	dBA
VFD Rating	CONSTANT 2:1/VARIABLE 10:1	
Outline Dwg	037898-912	
Conn. Diag	EE7300BH	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0060	0.0040	0.0420	0.1130	2.3750



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marathon® Motors

DATA VOLTS: 460

CERTIFICATION DATA SHEET

REFERENCE MODEL #: 449TTFCD16553
CONN. DIAGRAM: EE7300BH **CAT #:** E776A
OUTLINE: SS620973
WINDING: HA32804032 NONE 1 **MOUNTING:** F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
400	298	1800	1788	447/449T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB(° C)	ELEV.(Ft)
3	60	460	442	PWS & YDRUN OR INV	CONT	H	1.15	40	3300

F.L. EFF	96.2	3/4 LD EFF	96.5	1/2 LD EFF	96.4	GTD EFF	ELECT. TYPE	
F.L. PF	88.0	3/4 LD PF	86.9	1/2 LD PF	81.9	95.8	SQ CAGE INV RATED	

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)	
1,175 LB-FT	2,960	3,000 LB-FT 255%	2,500 LB-FT 213%	85	

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
85 dBA	94 dBA	131.5 LB-FT²	2500 LB-FT²	20 SEC.	2	3154	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
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6319	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)	
0.006	0.004	0.042	0.113	2.375	0.080	

*
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: 6/3/2020

** Subject to change without notice.
FORM: 3531 REV_4 2/27/06