

Severe Duty Motors

Model No: 444TTFCD16582

Catalog No: E405B

Severe Duty Motor, 100 HP, 3 Ph, 60 Hz, 575 V, 1200 RPM, 444T Frame, TEFC

Product Information Packet: Model No: 444TTFCD16582, Catalog No: E405B Severe Duty Motor, 100 HP, 3 Ph, 60 Hz, 575 V, 1200 RPM, 444T Frame, TEFC

Nameplate Specifications

Phase	3	Output HP	100 Hp
Output KW	75.0 kW	Voltage	575 V
Speed	1190 r/min	Synchronous RPM	1200 r/min
Service Factor	1.15	Frame	444T
Enclosure	Totally Enclosed Fan Cooled	Thermal Protection	No Protection
Efficiency	95 %	Ambient Temperature	40 °C
Frequency	60 Hz	Current	91.5 A
Power Factor	86	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		

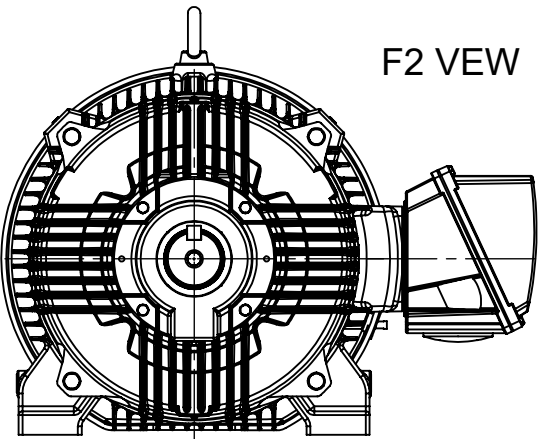
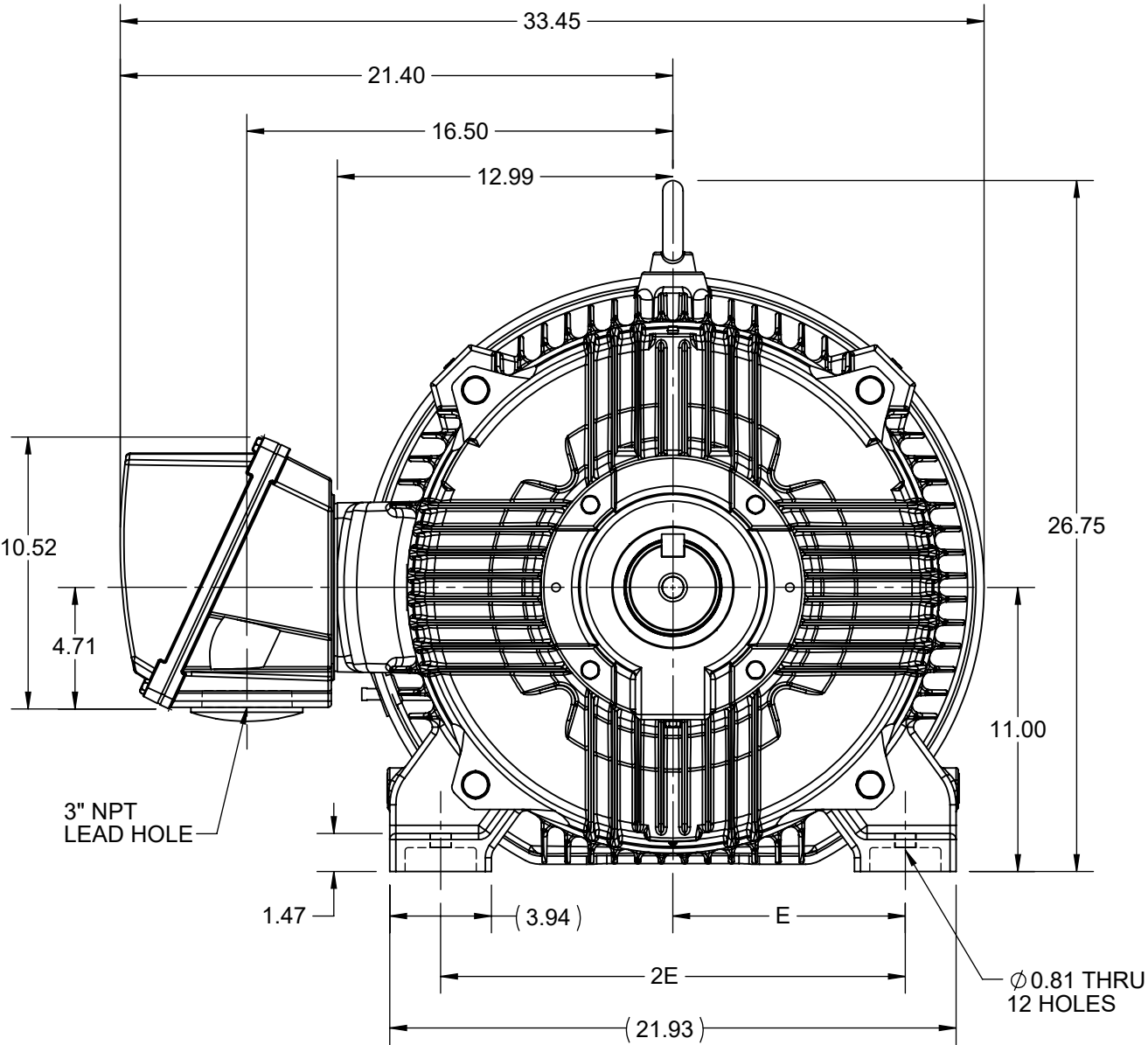
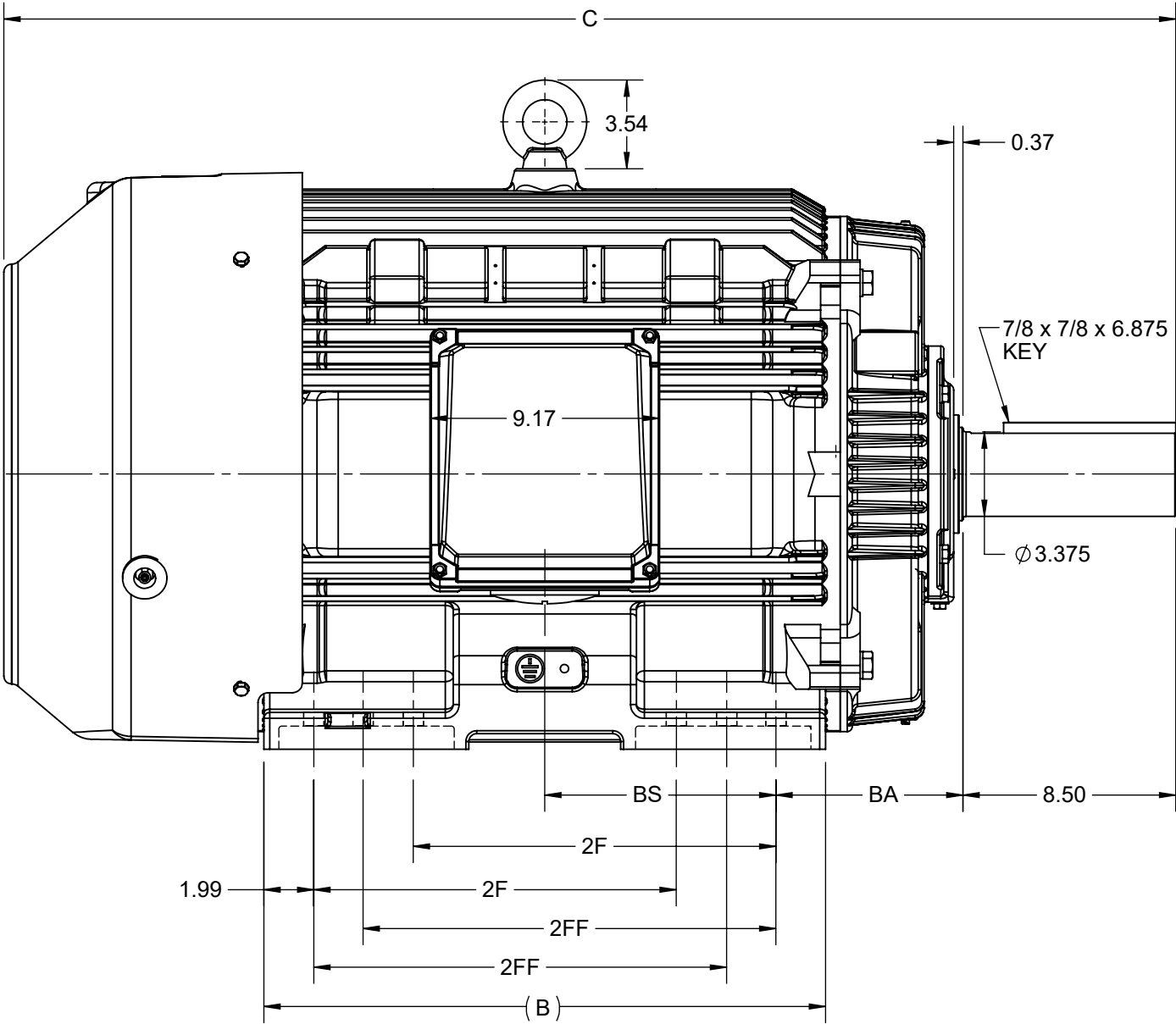
Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	.0444 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/F2 Capable	Inverter Load	Constant 2:1/Variable 10:1

Drawings

Connection Drawing	EE7300	Outline Drawing	SS557668
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4						3		
B	C	E	2E	2F	2FF	BA	BS	MOUNTING
22.44	46.83	9.00	18.00	14.50	16.50	7.50	9.24	F1 OR F2



DRAWING REVISION D	REVISION BY SB	REV DATE/© DATE 07/23/2025
REQUEST NUMBER CR-0023556	APPROVED BY SBD	DATE 07/23/2025
REQUEST NUMBER DESCRIPTION DRAWING TITLE BLOCK UPDATED		
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ARE FOR REFERENCE ONLY

DRAWN BY BISWA	marathon™		
DATE 24/12/2018			
APPROVED BY SBD	DESCRIPTION OUTLINE		
DATE 24/12/2018	444/445T FR-NEMA-SD & IEEE841		
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS557668	SHEET 1 OF 1

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

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS

TERMINAL BLOCK WHEN SPECIFIED

IF MOTOR HAS 9 LEADS

T1(U1)

T1(U1)

T1(U1)

L1

T2(V1)

T2(V1)

T2(V1)

L2

T3(W1)

T3(W1)

T3(W1)

L3

IF MOTOR HAS 6 LEADS

T1(U1)

T1(U1)

L1

T2(V1)

T2(V1)

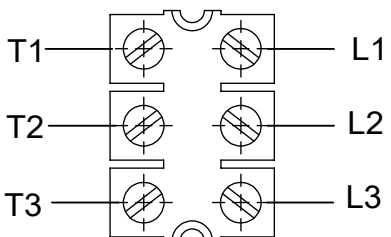
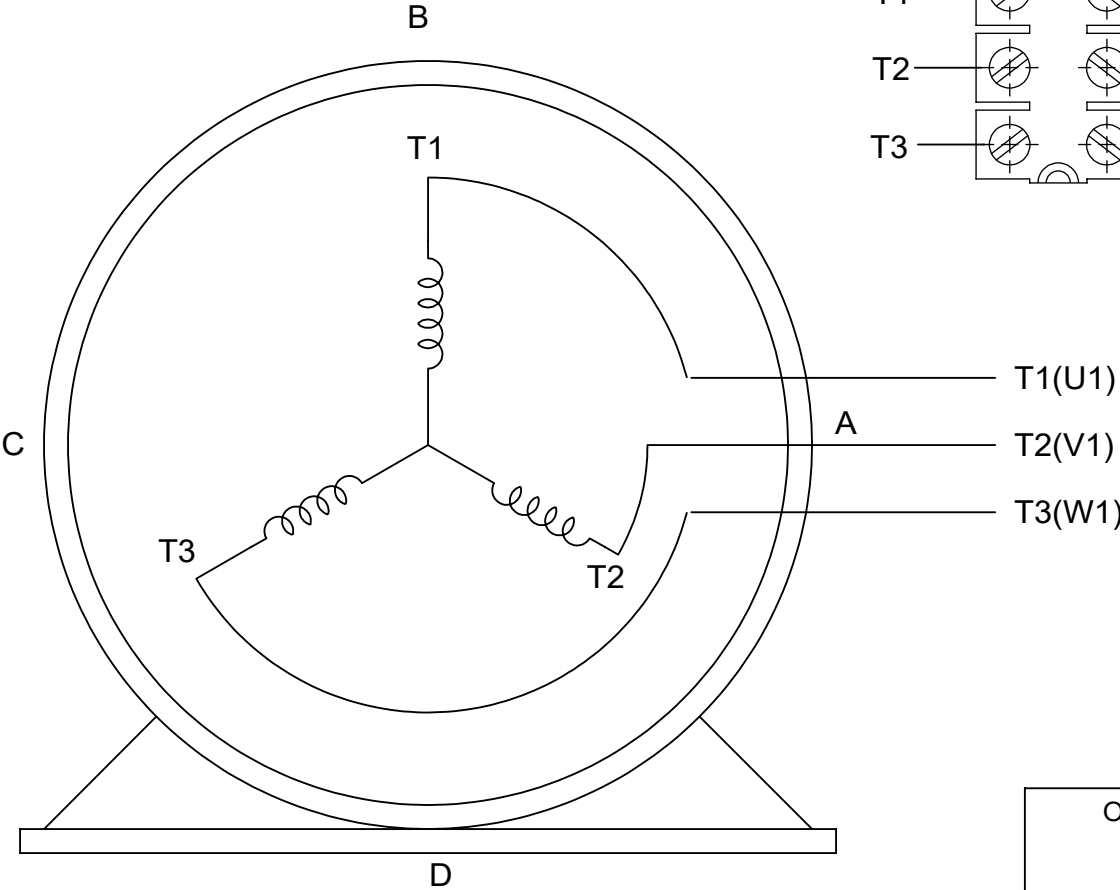
L2

T3(W1)

T3(W1)

L3

A-9806 DECAL



VIEW OF TERMINAL END

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
REQUEST NUMBER DESCRIPTION DRAWING TITLE BLOCK UPDATED		
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DRAWN BY DA
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 A	DRAWING NUMBER EE7300	SHEET 1 OF 1

Data Sheet

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

marathon
 Motors

444TTFCD16582

Submittal

Data @ 575 V

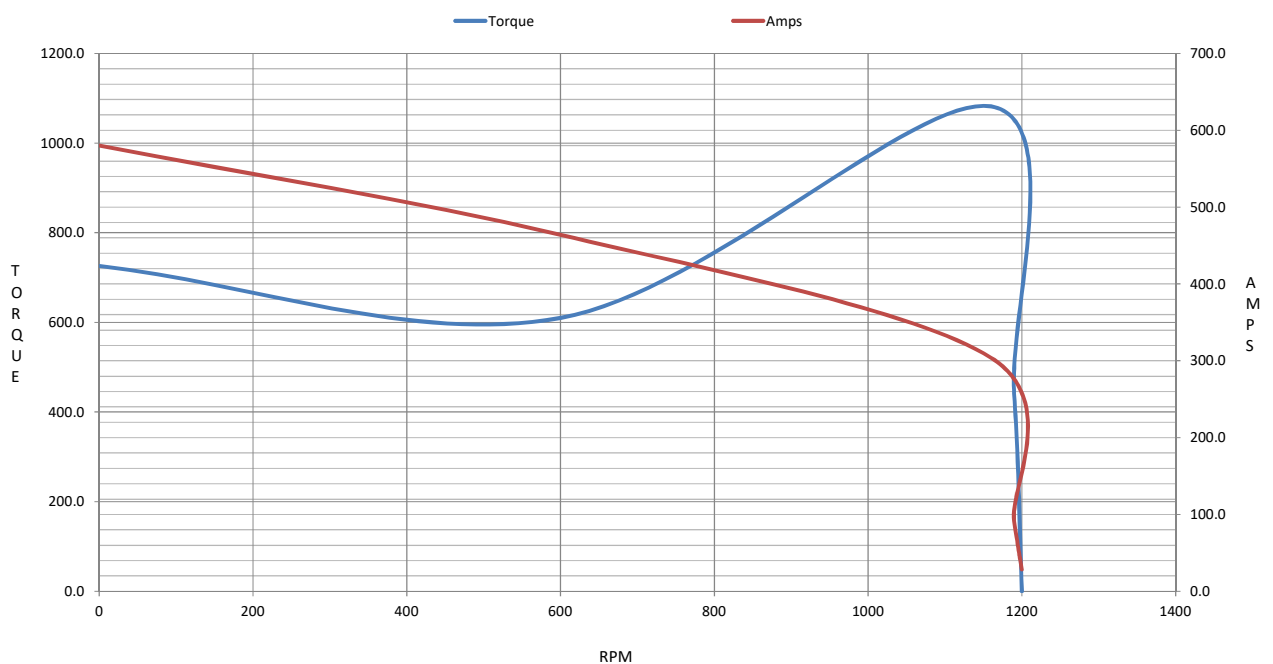
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	28.4	35.6	51.4	70.4	91.6	105	115	580	
Torque (ft-lb)	0.00	110	220	331	441	510	554	726	
RPM	1200	1198	1195	1192	1190	1,188	1186	0	
Efficiency (%)		91.7	94.5	95.0	95.0	95.0	94.5		
P.F. (%)	5.5	57.0	77.0	84.0	86.0	86.2	86.0	30.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle					
Speed (RPM)	0	600	1160	1190	1200					
Current (Amps)	580	464	304	91.6	28.4					
Torque (ft-lb)	726	610	1,082	441	0.00					
— Efficiency (%) — P.F. (%) — Current (Amps) EFFICIENCY (%) P.F. (%) CURRENT (AMPS)						Information Block				
						HP		100.0		
						Sync. RPM		1200		
						Frame		444		
						Enclosure		TEFC		
						Construction		TFC		
						Voltage		575	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		3,300	feet	
						Rotor/Shaft wk²		95.0	Lb-Ft²	
						Ref Wdg		HE32806005 NONE		
Sound Pressure @ 1M		68 dBA								
VFD Rating		CONSTANT 2:1/VARIABLE 10:1								
Outline Dwg		SS557668-444T								
Conn. Diag		EE7300								
Additional Specifications:										
0										
0										
EQUIV CKT (OHMS / PHASE)										
R1		R2		X1		X2		Xm		
0.0420		0.0310		0.3380		0.5450		11.5410		

Speed -Torque Curve





DATA VOLTS: 575

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300
 REFERENCE MODEL #: 444TTFC16582
 OUTLINE: SS557668-444T
 CAT #: E405B
 WINDING: HE32806005 NONE 5
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
100	75	1200	1190	444T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	575	91.5	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	95.0	3/4 LD EFF	95.0	1/2 LD EFF	94.5	GTD EFF	94.5	ELECT. TYPE
F.L. PF	86.0	3/4 LD PF	84.0	1/2 LD PF	77.0	94.5 <td colspan="2">SQ CAGE INV RATED</td>	SQ CAGE INV RATED	

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
441 LB-FT	580	726 LB-FT 165%	1,082 LB-FT 245%	55

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
68 dBA	77 dBA	95.0 LB-FT²	1400 LB-FT²	25 SEC.	2	1859 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	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT	MATERIAL	FRAME MATERIAL
DE ODE							
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)	FLOAT
0.065625	0.0484375	0.528125	0.8515625	18.0328125	0.080	ODE

* N O T E S *	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	

PREPARED BY:	BRAKE: NONE
DATE: 5/13/2020	NONE NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:

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