

Severe Duty Motors

Model No: 445TTFCD6537

Catalog No: E682A

Severe Duty Motor, 150 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 445T Frame, TEFC

Product Information Packet: Model No: 445TTFCD6537, Catalog No: E682A Severe Duty Motor, 150 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 445T Frame, TEFC

Nameplate Specifications

Phase	3	Output HP	150 Hp
Output KW	112.0 kW	Voltage	575 V
Speed	1790 r/min	Synchronous RPM	1800 r/min
Service Factor	1.15	Frame	445T
Enclosure	Totally Enclosed Fan Cooled	Thermal Protection	No Protection
Efficiency	95.8 %	Ambient Temperature	40 °C
Frequency	60 Hz	Current	135.0 A
Power Factor	87	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		

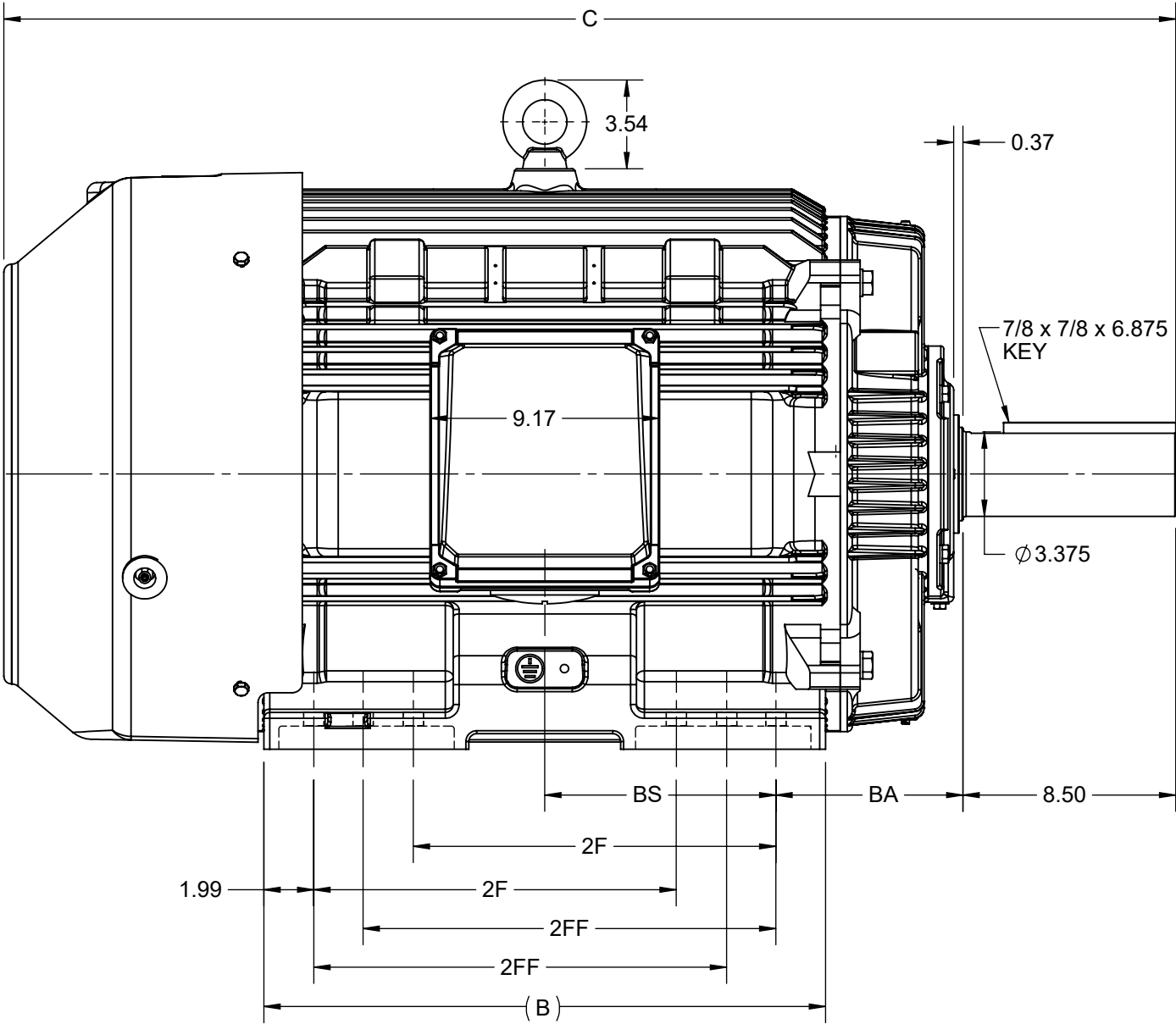
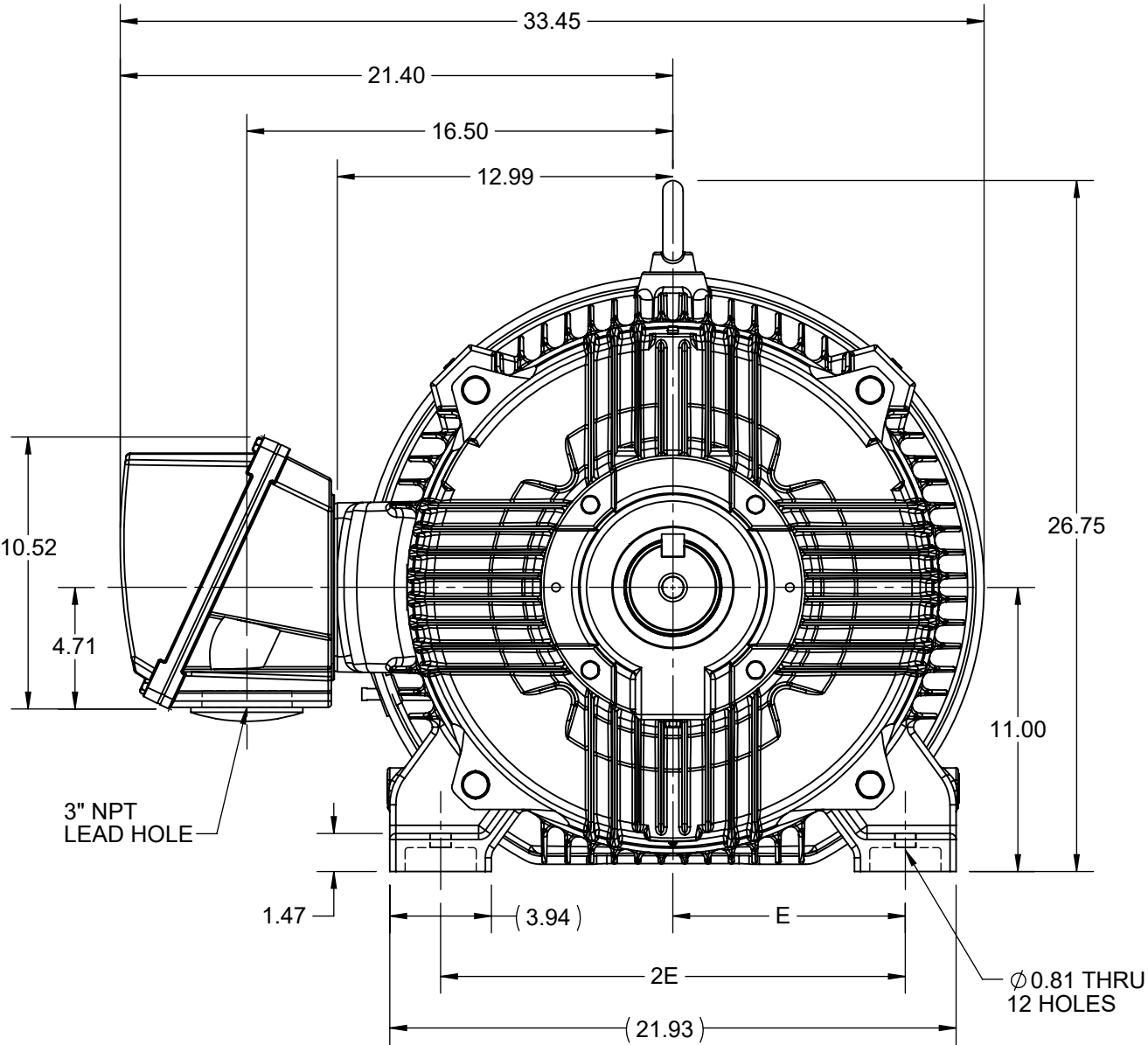
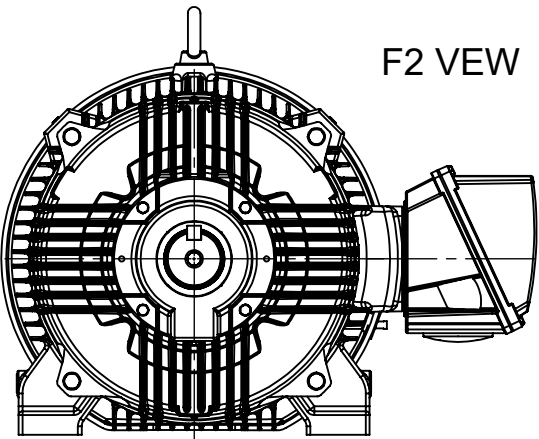
Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.0294 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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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)

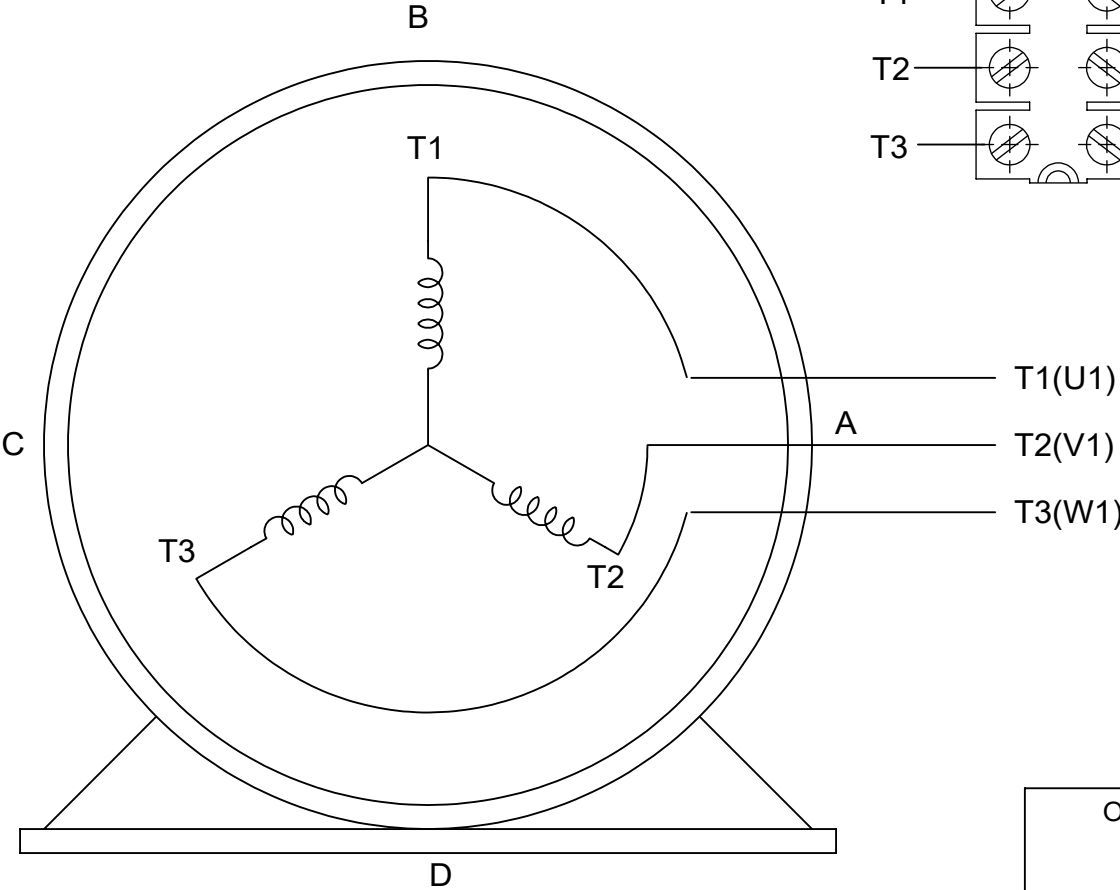
L2

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
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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

445TTFC6537

Submittal

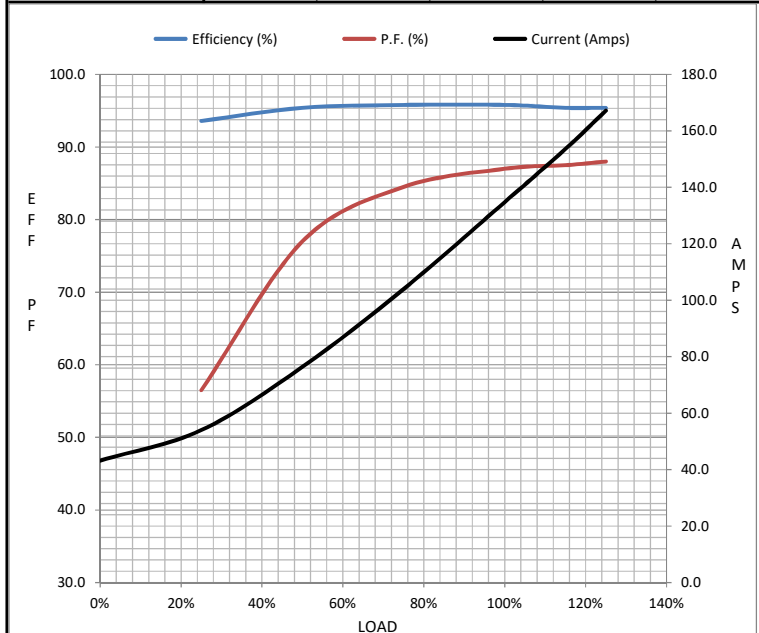
Data @ 575 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	43.2	54.0	76.4	104	135	154	167	868	
Torque (ft-lb)	0.00	110	220	330	440	508	553	926	
RPM	1800	1798	1795	1792	1790	1,790	1788	0	
Efficiency (%)		93.6	95.4	95.8	95.8	95.4	95.4		
P.F. (%)	5.0	56.5	77.0	84.5	87.0	87.5	88.0	37.0	

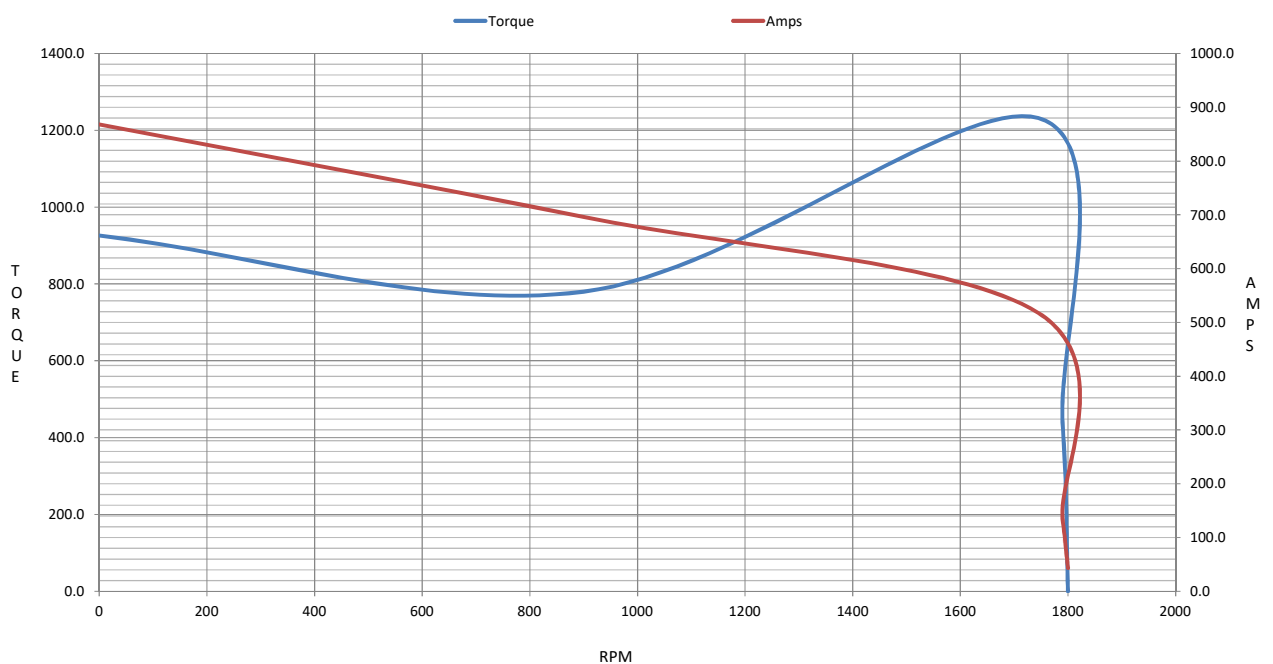
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1745	1790	1800
Current (Amps)	868	696	518	135	43.2
Torque (ft-lb)	926	780	1,232	440	0.00



Information Block				
HP		150.0		
Sync. RPM		1800		
Frame		445		
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		80.0 Lb-Ft²		
Ref Wdg		HE32804011 NONE		
Sound Pressure @ 1M		75 dBA		
VFD Rating		CONSTANT 2:1/VARIABLE 10:1		
Outline Dwg		SS557668-445T		
Conn. Diag		EE7300		
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0280	0.0140	0.1740	0.3600	7.6780

Speed -Torque Curve





DATA VOLTS: 575

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300
 REFERENCE MODEL #: 445TTFC6537
 OUTLINE: SS557668-445T
 CAT #: E682A
 WINDING: HE32804011 NONE 5
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
150	112	1800	1790	445T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	575	135	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	87.0	3/4 LD PF	84.5	1/2 LD PF	77.0	95.4	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
440 LB-FT	868	926 LB-FT 210%	1,232 LB-FT 280%	55

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
75 dBA	84 dBA	80.0 LB-FT²	1000 LB-FT²	25 SEC.	2	1900 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
0.04375	0.021875	0.271875	0.5625	11.996875	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 NONE NONE FT-LB: NA VOLTAGE: NONE HZ:
DATE: 5/13/2020	

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