marathon®

Severe Duty Motors

Model No: 449THFCD9078
Catalog No: W657

Severe Duty Motor, 300 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 449T Frame, TEFC

©2026 Marathon, All Rights Reserved.

marathon®

Product Information Packet: Model No: 449THFCD9078, Catalog No: W657 Severe Duty Motor, 300 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 449T Frame, TEFC

Nameplate Specifications

Phase	**3**	Output HP	**300 Hp**
Output KW	**224.0 kW**	Voltage	**460 V**
Speed	**1189 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	**342.0 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	**56**	Number of Speeds	**1**
Hazardous Location	**DIVISION 2 T2B**		

Technical Specifications

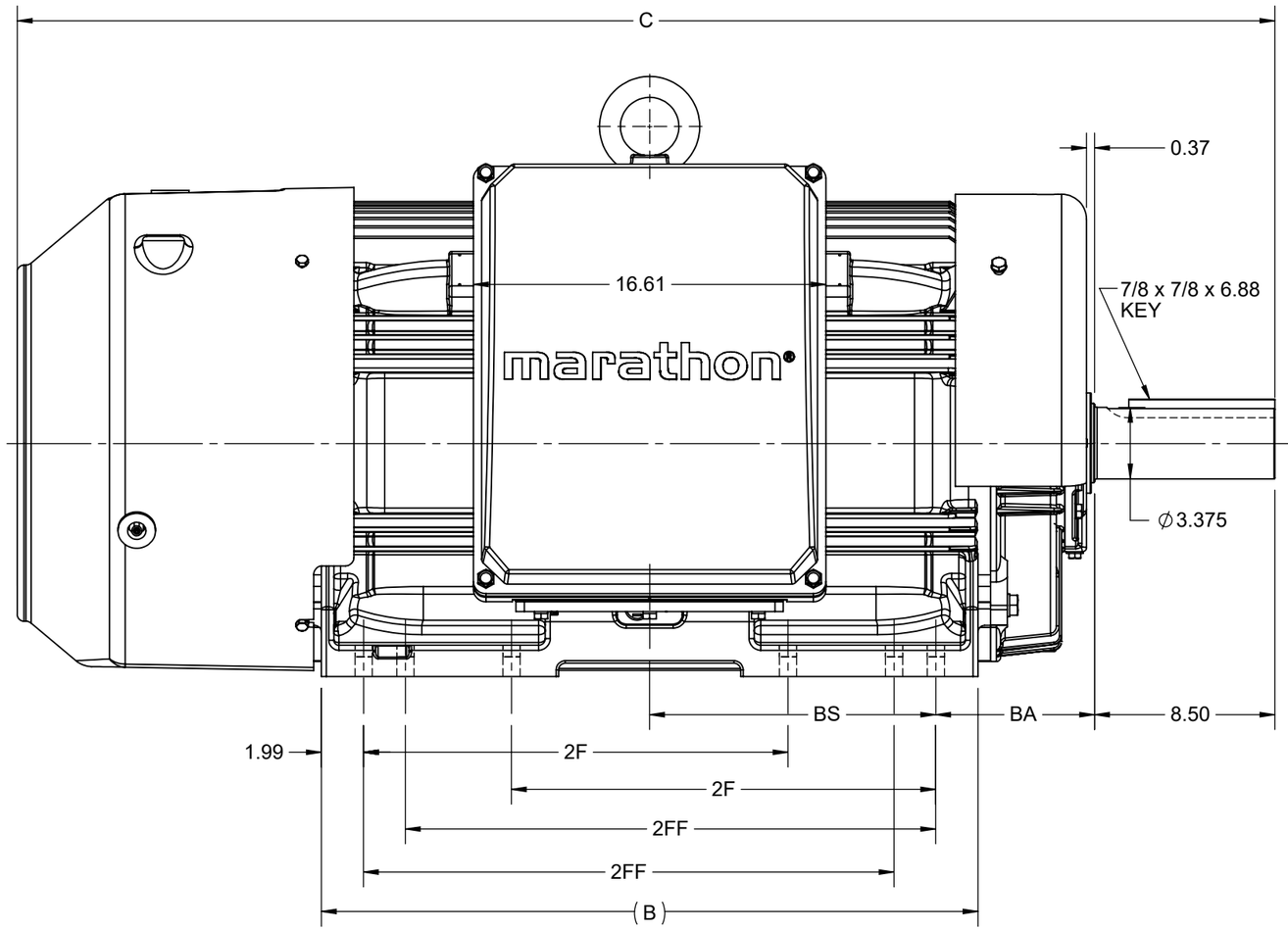
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**6**	Rotation	**Reversible**
Resistance Main	**.0119 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Shaft Diameter	**3.375 in**
Assembly/Box Mounting	**F1 Only**	Inverter Load	**Constant 2:1/Variable 10:1**

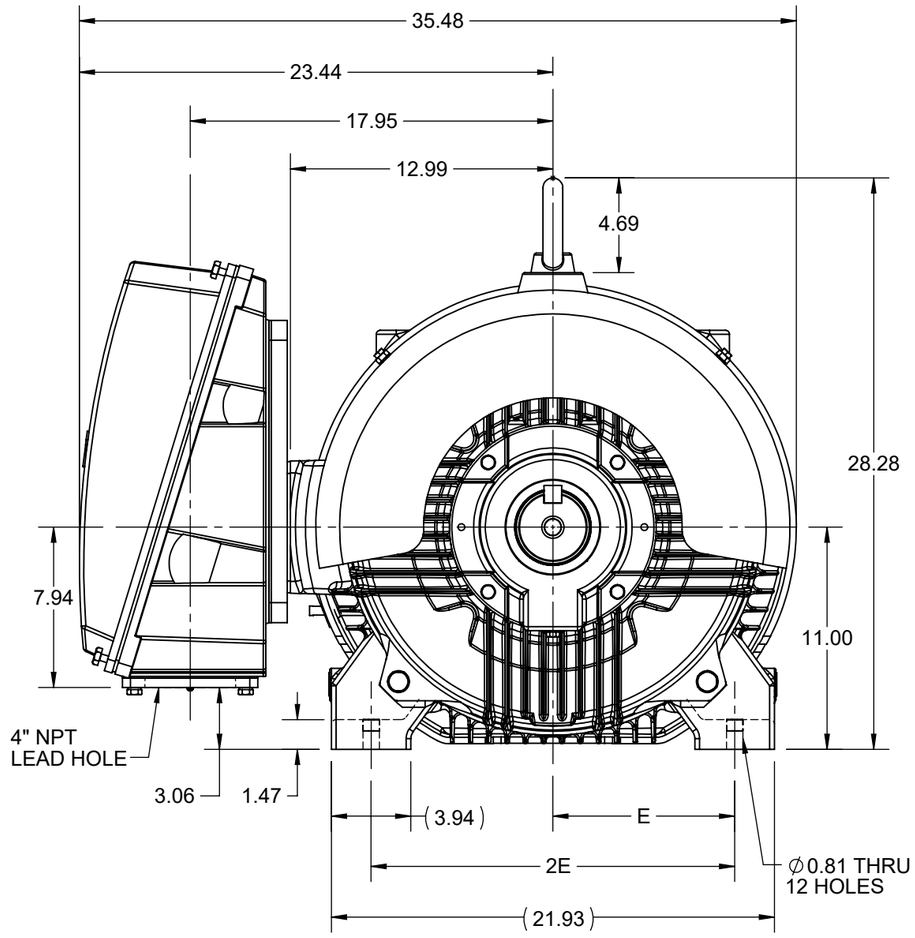
Drawings

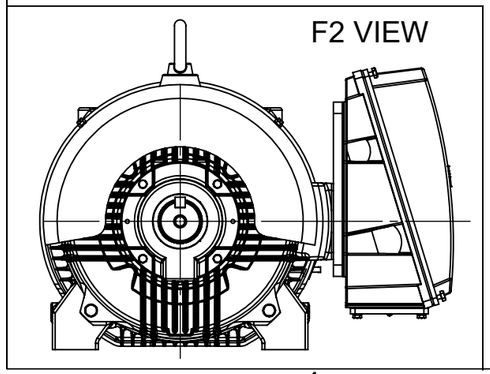
Connection Drawing	**EE7300**	Outline Drawing	**SS620973**

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

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		

COPYRIGHT (PER REVISION DATE) MARATHON ELECTRIC, LLC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF MARATHON ELECTRIC, LLC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.

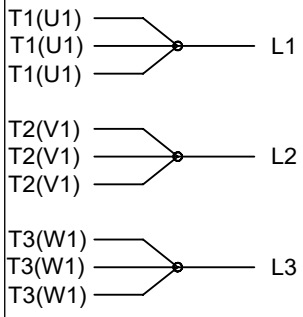
PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

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

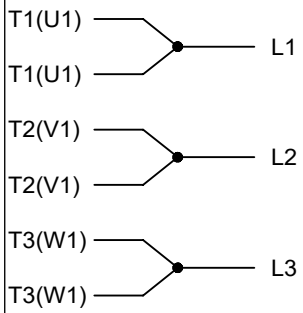
THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS

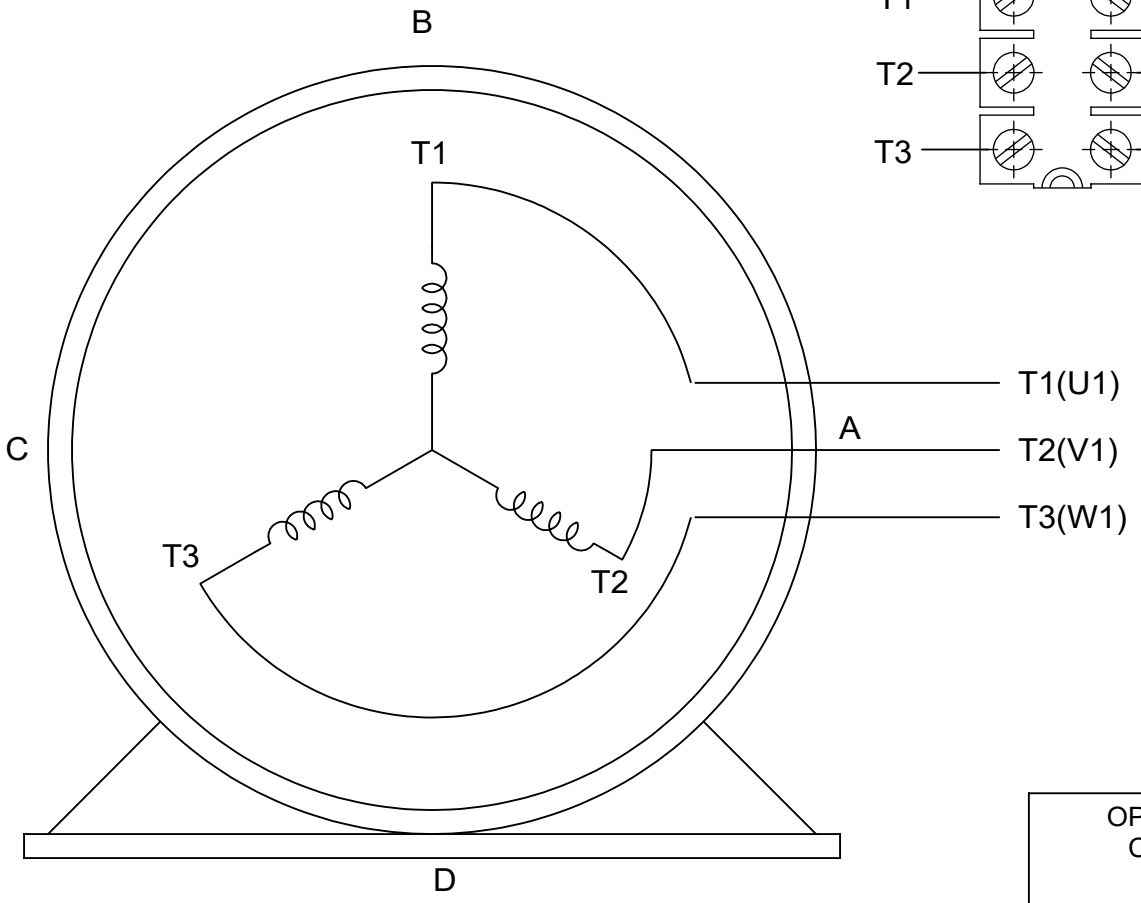
IF MOTOR HAS
9 LEADS



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

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

COPYRIGHT (PER REVISION DATE) MARATHON ELECTRIC, LLC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF MARATHON ELECTRIC, LLC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.

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

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	DRAWING NUMBER	SHEET
A	EE7300	1 OF 1

Data Sheet

Date: 3/9/2021
Customer:
Attention:
Submitted by:

marathon® Motors

449THFCD9078

Submittal

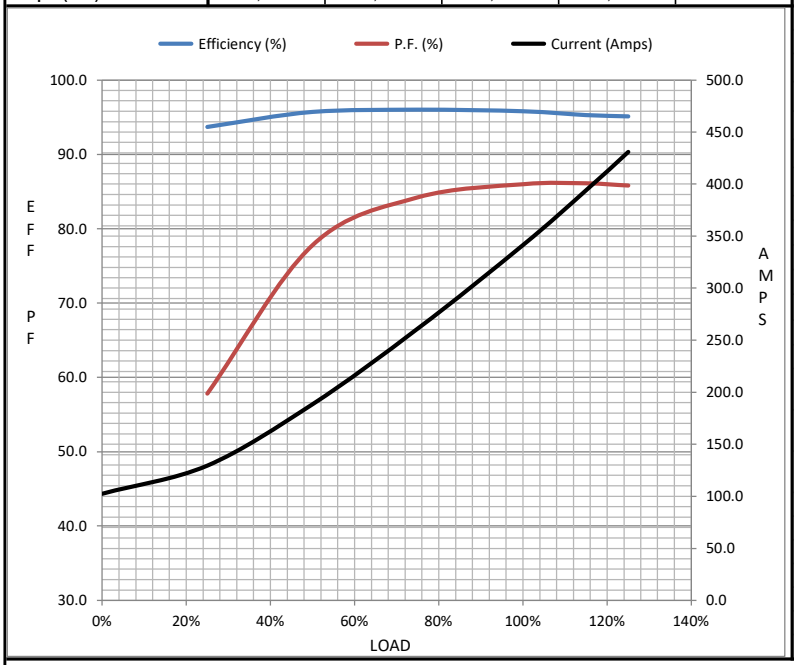
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	103	130	189	261	342	394	431	2,300	
Torque (ft-lb)	0.00	329	659	991	1,325	1,526	1,661	2,600	
RPM	1200	1198	1195	1192	1189	1,187	1186	0	
Efficiency (%)		93.7	95.7	96.0	95.8	95.3	95.1		
P.F. (%)	4.2	57.8	77.8	84.2	86.0	86.1	85.8	31.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1152	1189	1200
Current (Amps)	2,300	1,830	1,115	342	103
Torque (ft-lb)	2,600	2,050	2,935	1,325	0.00



Information Block

HP	300.0	
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	80	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	187	Lb-Ft²
Ref Wdg	HA32806026 NONE	
Sound Pressure @ 1M	85	dBA
VFD Rating	CONSTANT 2:1/VARIABLE 10:1	
Outline Dwg	SS620973	
Conn. Diag	EE7300U	

Additional Specifications:

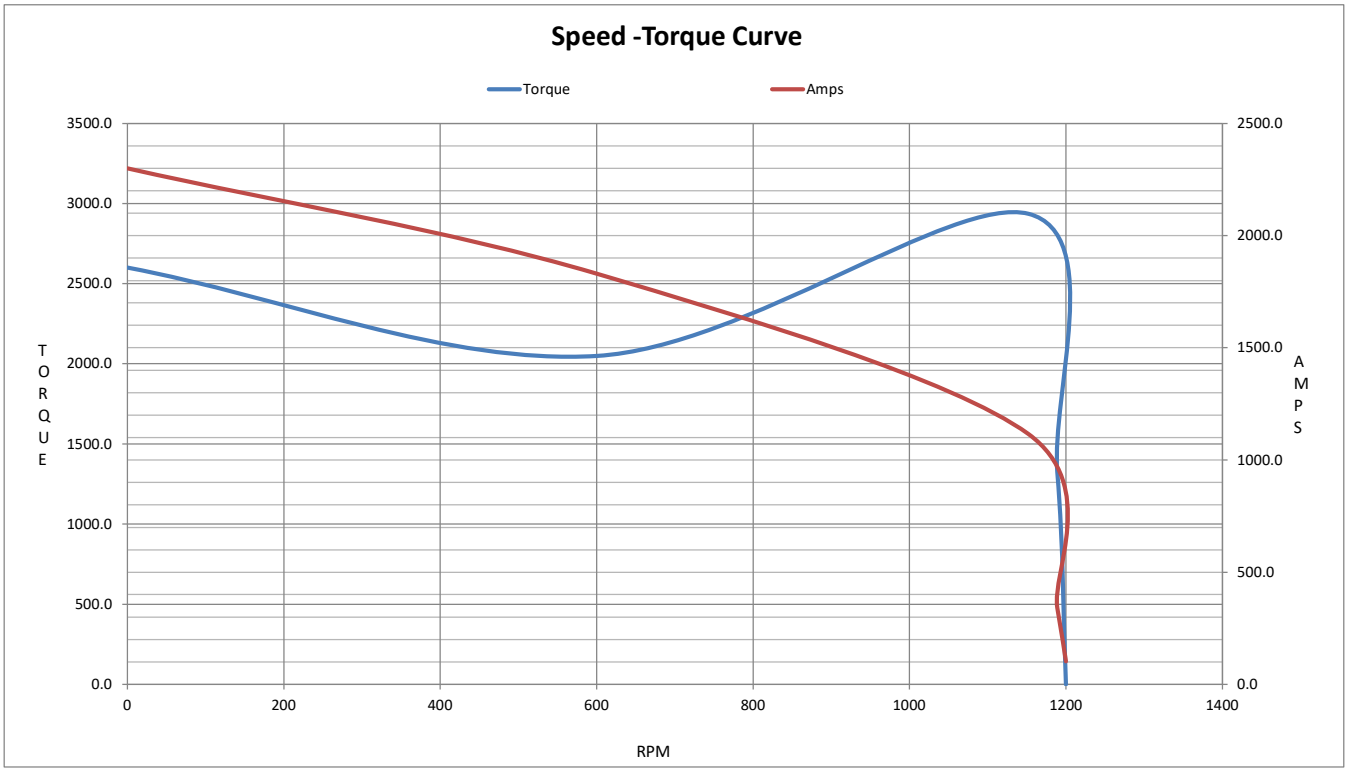
0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0070	0.0070	0.0760	0.1280	2.6150

Speed -Torque Curve



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

marathon® Motors

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #:
CONN. DIAGRAM: EE7300U
OUTLINE: SS620973
WINDING: HA32806026 NONE 1
SPEED:

CUSTOMER P.O. #:
REFERENCE MODEL #: 449THFCD9078
CAT #: W657
CUSTOMER PART #:
MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
300	224	1200	1189	447/449T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB(° C)	ELEV.(Ft.)
3	60	460	342	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	95.8	3/4 LD EFF	96.0	1/2 LD EFF	95.7	GTD EFF	ELECT. TYPE
F.L. PF	86.0	3/4 LD PF	84.2	1/2 LD PF	77.8	95.4	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
1,325 LB-FT	2,300	2,600 LB-FT 196%	2,935 LB-FT 222%	80

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX. MOTOR WGT
85 dBA	94 dBA	187 LB-FT²	- LB-FT²	51 SEC.	2	3200 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)	FLOAT
0.007	0.007	0.076	0.128	2.615	0.080	NONE

*
NOTES
*

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:

UL: NO LETTER - ME,WUXI TEFC BLUEWHALE CLASS 1 DIV. 2 UL LISTED

PREPARED BY: 0
DATE: 3/9/2021

FORM: 3531 REV_4 2/27/06