marathon®

Severe Duty Motors

Model No: 449TSTFCD6503
Catalog No: E699A

Severe Duty Motor, 250 HP, 3 Ph, 60 Hz, 460 V, 3600 RPM, 449TS Frame, TEFC

©2026 Marathon, All Rights Reserved.

marathon®

Product Information Packet: Model No: 449TSTFCD6503, Catalog No: E699A Severe Duty Motor, 250 HP, 3 Ph, 60 Hz, 460 V, 3600 RPM, 449TS Frame, TEFC

Nameplate Specifications

Phase	**3**	Output HP	**250 Hp**
Output KW	**187.0 kW**	Voltage	**460 V**
Speed	**3580 r/min**	Synchronous RPM	**3600 r/min**
Service Factor	**1.15**	Frame	**449TS**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**95.8 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**266.0 A**
Power Factor	**92**	Duty	**Continuous**
Insulation Class	**H**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6314**
Opp Drive End Bearing Size	**6314**	UL	**Listed**
CSA	**Y**	CE	**Y**
IP Code	**55**	Number of Speeds	**1**
Hazardous Location	**DIVISION 2 T2B**		

Technical Specifications

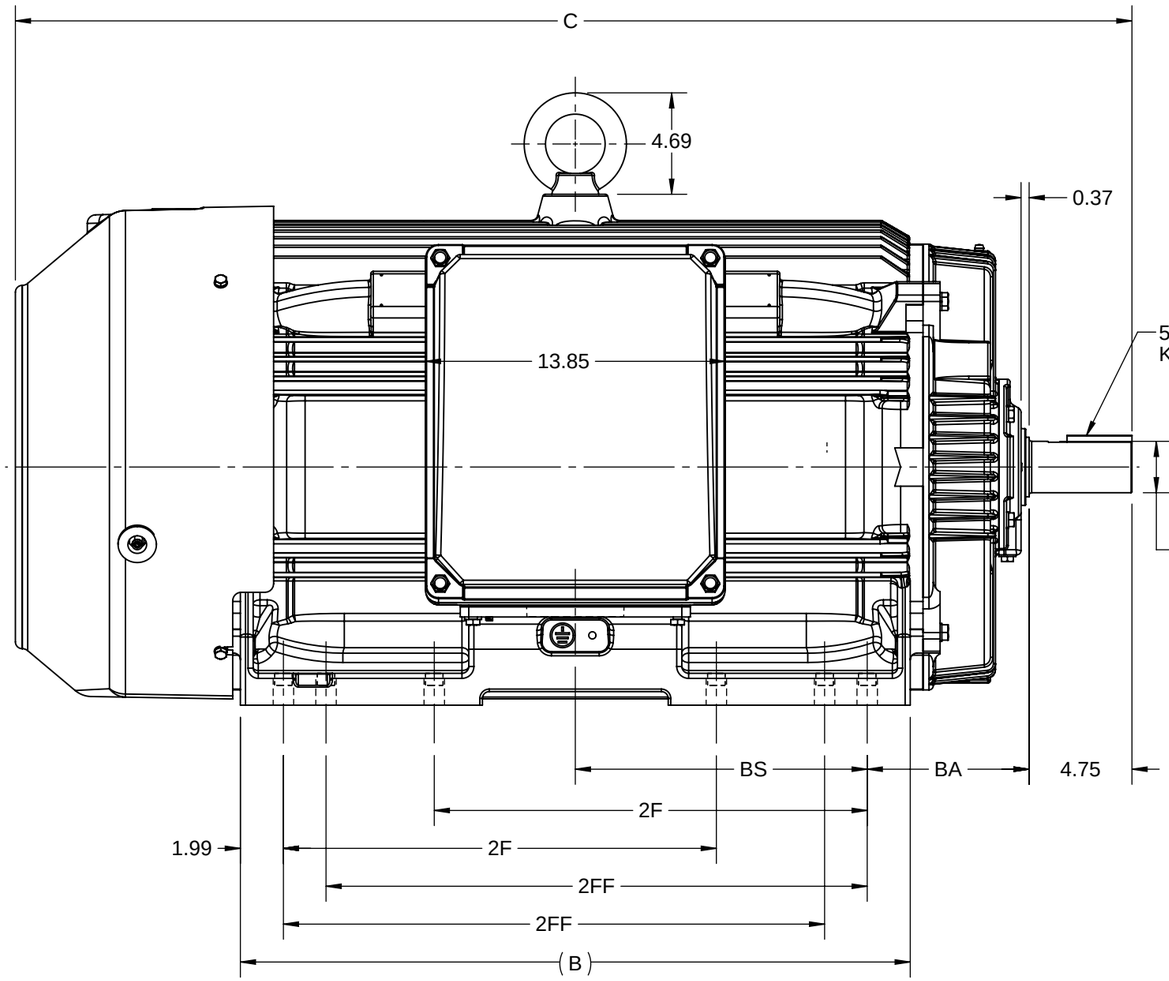
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**2**	Rotation	**Reversible**
Resistance Main	**.0128 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**TS**	Shaft Diameter	**2.375 in**
Assembly/Box Mounting	**F1/F2 Capable**	Inverter Load	**Constant 2:1/Variable 10:1**

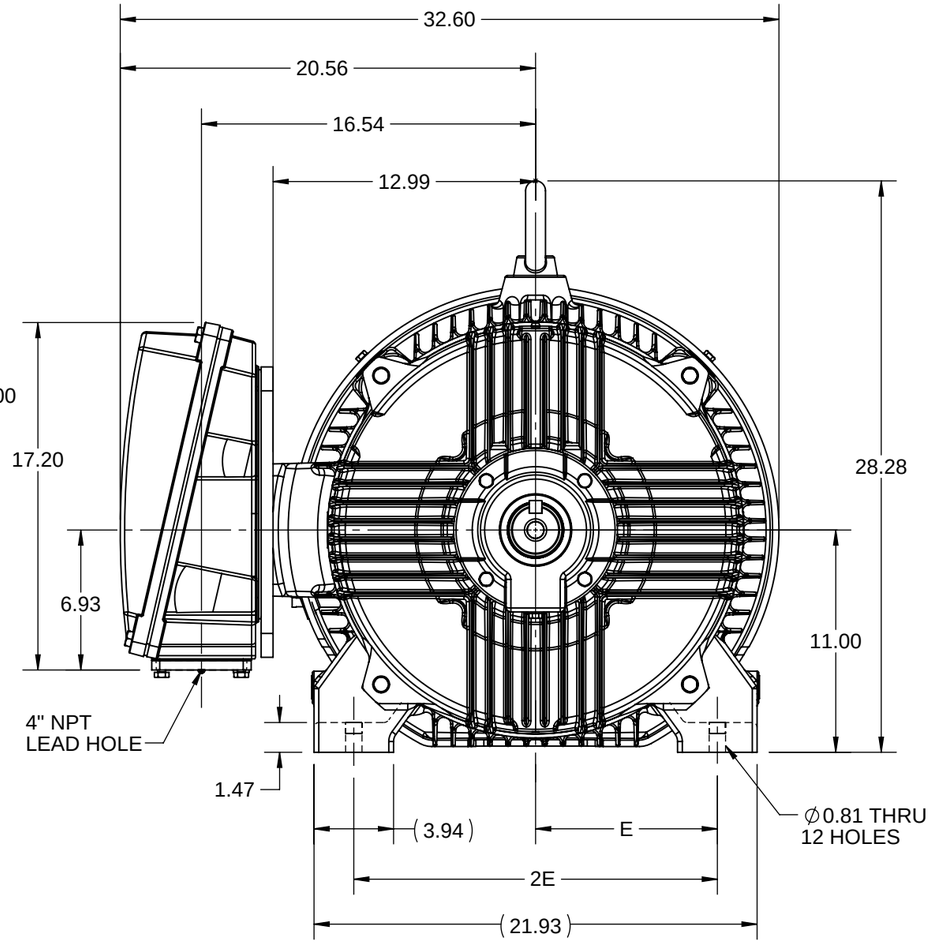
Drawings

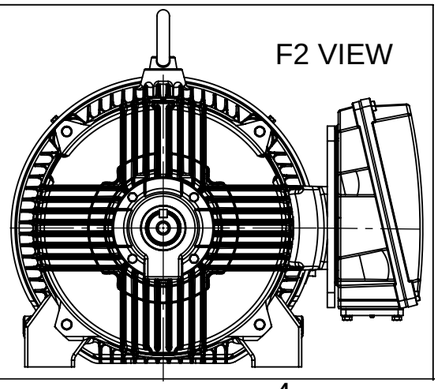
Connection Drawing	**EE7300U**	Outline Drawing	**SS557672**

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	51.58	9.00	18.00	20.00	25.00	7.50	13.48	F1 OR F2







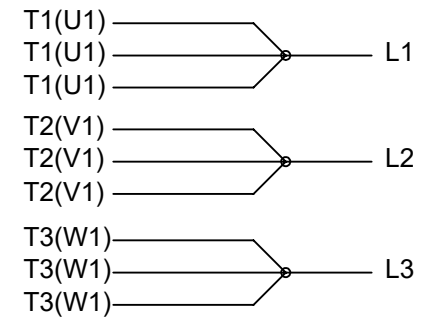
DRAWING REVISION: C	REVISION BY: SB	REV DATE/© DATE: 05/21/2026
REQUEST NUMBER: CR-0026353	APPROVED BY: RMS	DATE: 05/21/2026
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED		

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.

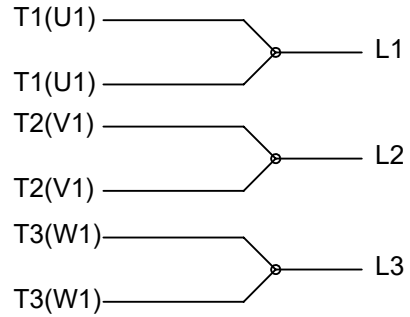
PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY: BISWA	marathon™	
DATE: 05/04/2019	DESCRIPTION: OUTLINE 447/449TS FR-SD & IEEE841	
APPROVED BY: SBD		
DATE: 05/04/2019		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: B / DRAWING NUMBER: SS557672	SHEET: 1 OF 1

IF MOTOR HAS 9 LEADS

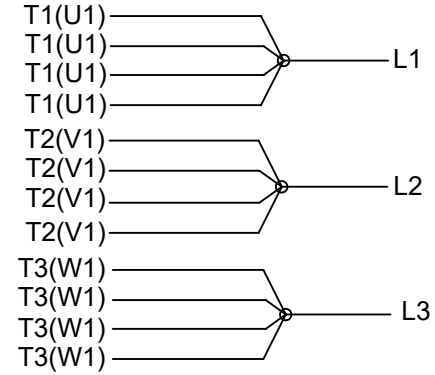


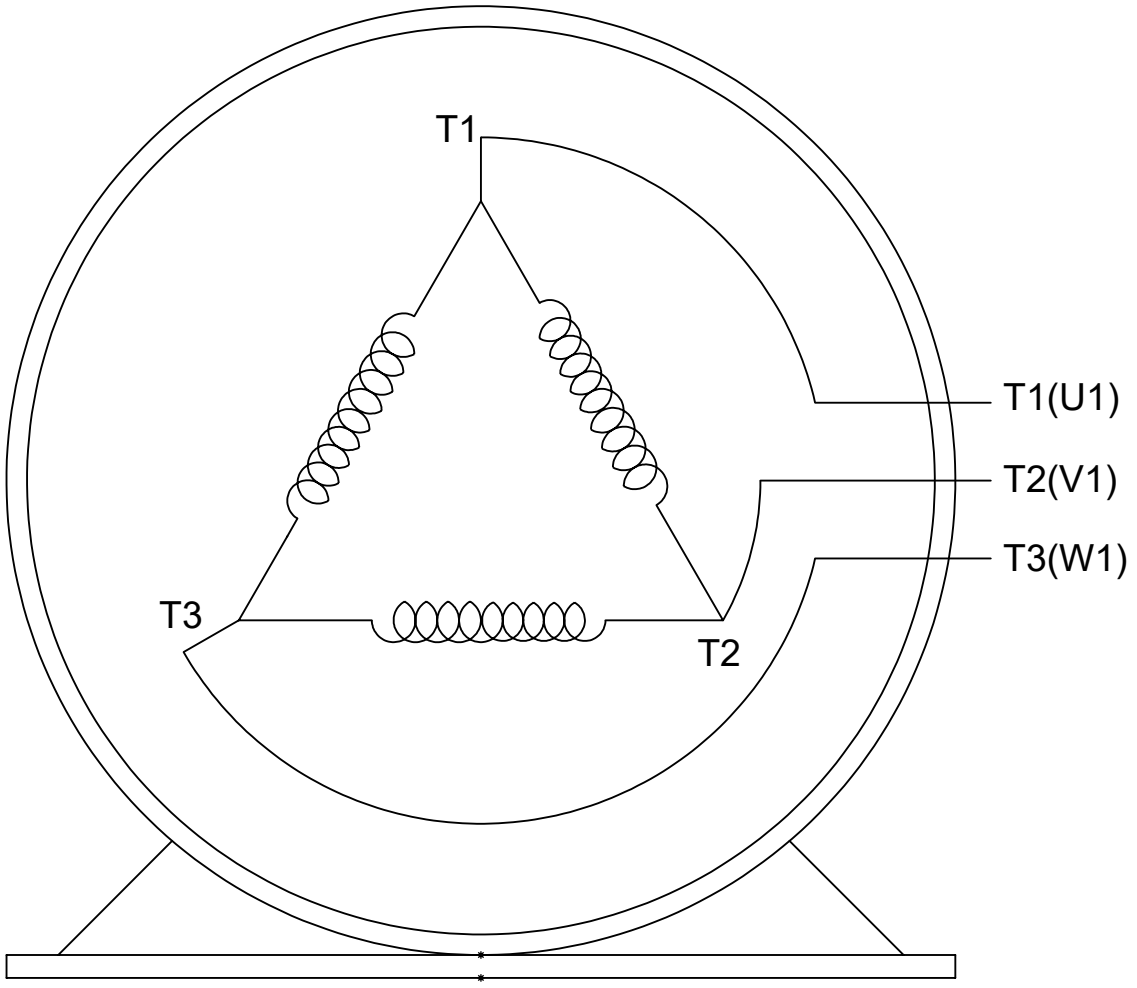
IF MOTOR HAS 6 LEADS



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

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	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: 5/7/2020
Customer:
Attention:
Submitted by:

marathon® Motors

449TSTFCD6503

Submittal

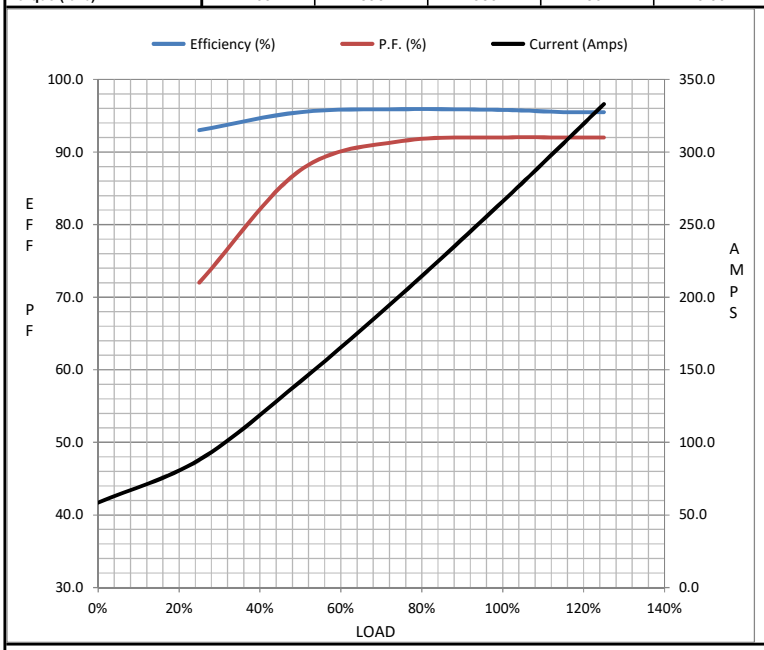
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	58.5	88.0	142	202	266	306	333	1,880	
Torque (ft-lb)	0.00	91.0	183	275	367	422	459	460	
RPM	3600	3595	3590	3585	3580	3,576	3574	0	
Efficiency (%)		93.0	95.5	95.9	95.8	95.5	95.5		
P.F. (%)	7.0	72.0	87.5	91.5	92.0	92.0	92.0	30.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3470	3580	3600
Current (Amps)	1,880	1,520	1,100	266	58.5
Torque (ft-lb)	460	590	956	367	0.00



Information Block

HP	250.0	
Sync. RPM	3600	
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	75	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	48.9	Lb-Ft²
Ref Wdg	HA32802019 NONE	
Sound Pressure @ 1M	85	dBA
VFD Rating	CONSTANT 2:1/VARIABLE 10:1	
Outline Dwg	SS557672	
Conn. Diag	EE7300U	

Additional Specifications:

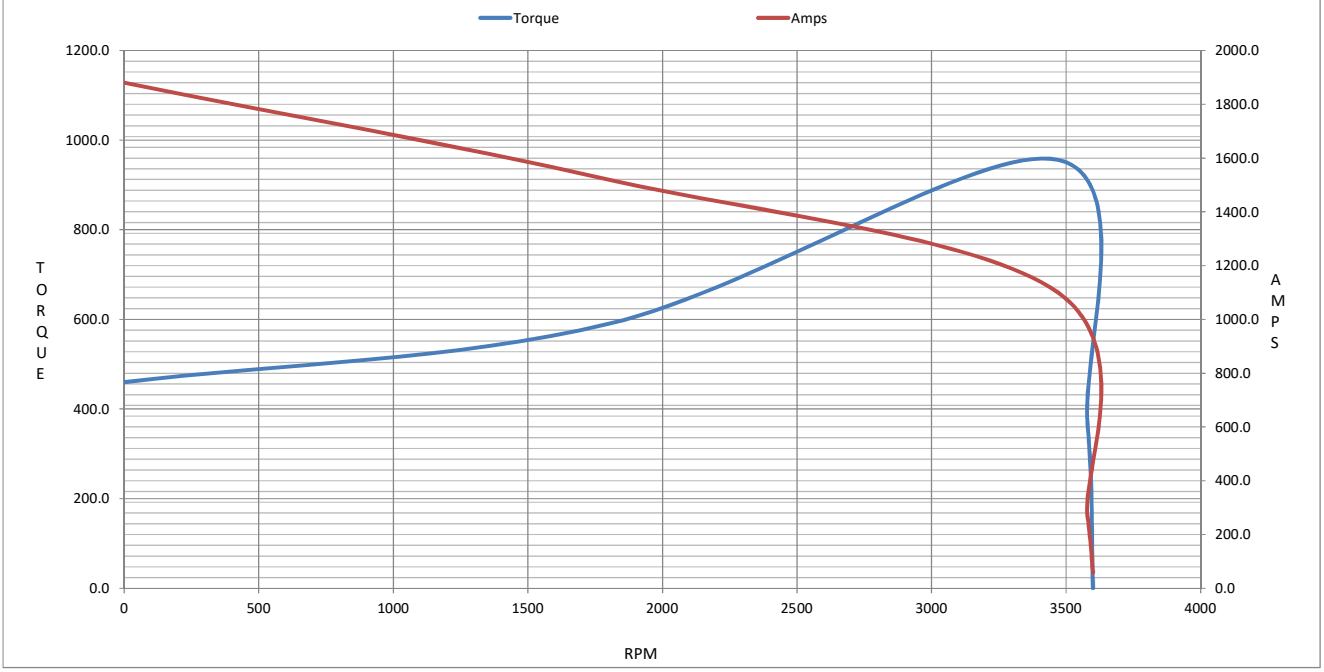
0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0080	0.0060	0.0660	0.0760	4.4970

Speed -Torque Curve



Uncontrolled Copy

marathon® Motors

DATA VOLTS: 460

CERTIFICATION DATA SHEET

REFERENCE MODEL #: 449TSTFCD6503
CAT #: E691A

CONN. DIAGRAM: EE7300U
OUTLINE: SS557672
WINDING: HA32802019 NONE 1
MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
250	187	3600	3580	447/449TS	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	460	266	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	95.8	3/4 LD EFF	95.9	1/2 LD EFF	95.5	GTD EFF	ELECT. TYPE
F.L. PF	92.0	3/4 LD PF	91.5	1/2 LD PF	87.5	95.4	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)	
367 LB-FT	1,880	460 LB-FT 125%	956 LB-FT 260%	75	

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
85 dBA	94 dBA	0.00 LB-FT²	150 LB-FT²	20 SEC.	2	2458 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 6314	BALL 6314	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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
0.008	0.006	0.066	0.076	4.497	0.080	ODE

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
** Subject to change without notice.