

Severe Duty Motors

Model No: 215THFCD9001

Catalog No: W537B

Severe Duty Motor, 10 HP, 3 Ph, 60 Hz, 460 V, 3600 RPM, 215T Frame, TEFC

Product Information Packet: Model No: 215THFCD9001, Catalog No: W537B Severe Duty Motor, 10 HP, 3 Ph, 60 Hz, 460 V, 3600 RPM, 215T Frame, TEFC

Nameplate Specifications

Phase	3	Output HP	10 Hp
Output KW	7.5 kW	Voltage	460 V
Speed	3518 r/min	Synchronous RPM	3600 r/min
Service Factor	1.15	Frame	215T
Enclosure	Totally Enclosed Fan Cooled	Thermal Protection	No Protection
Efficiency	90.2 %	Ambient Temperature	40 °C
Frequency	60 Hz	Current	11.8 A
Power Factor	88	Duty	Continuous
Insulation Class	H	Design Code	B
KVA Code	H	Drive End Bearing Size	6308
Opp Drive End Bearing Size	6208	UL	Listed
CSA	Y	CE	Y
IP Code	56	Number of Speeds	1
Hazardous Location	DIVISION 2 T2B		

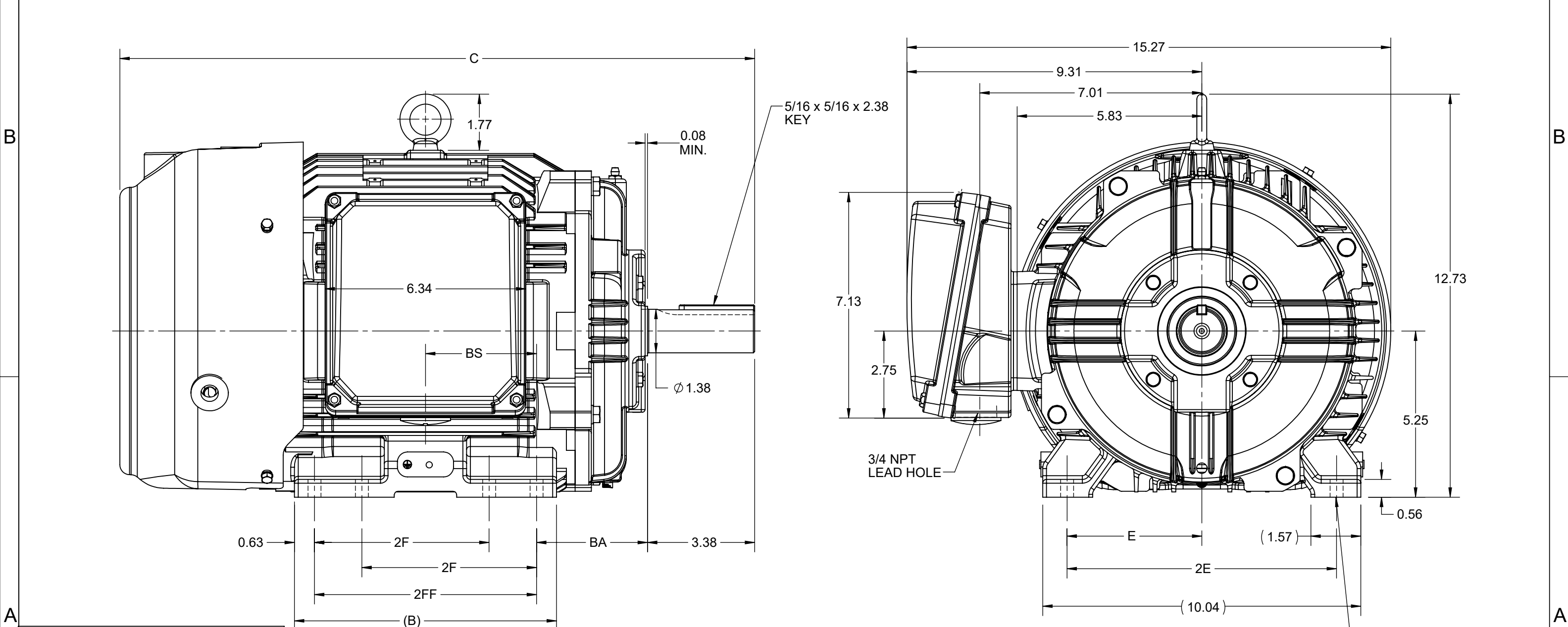
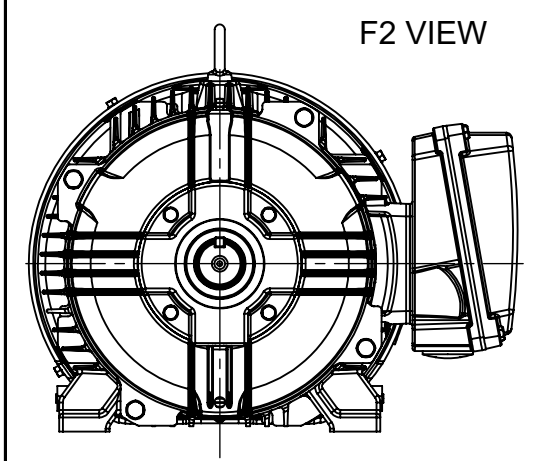
Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	1.218 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	1.375 in
Assembly/Box Mounting	F1/F2 Capable	Inverter Load	Constant 2:1/Variable 10:1

Drawings

Connection Drawing	EE7300	Outline Drawing	SS810116-200
--------------------	---------------	-----------------	---------------------

4					3						
DASH NO.	B	C	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME	
100	6.76	18.53	4.25	8.50	---	5.50	3.50	2.75	F1 OR F2	213T	
200	8.26	20.03			5.50	7.00		3.50		213/215T	



DRAWING REVISION E	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		
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 24/12/2018			
APPROVED BY SBD	DESCRIPTION OUTLINE		
DATE 24/12/2018	213/215T FR NEMA- SD & IEEE841		
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS810116	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)

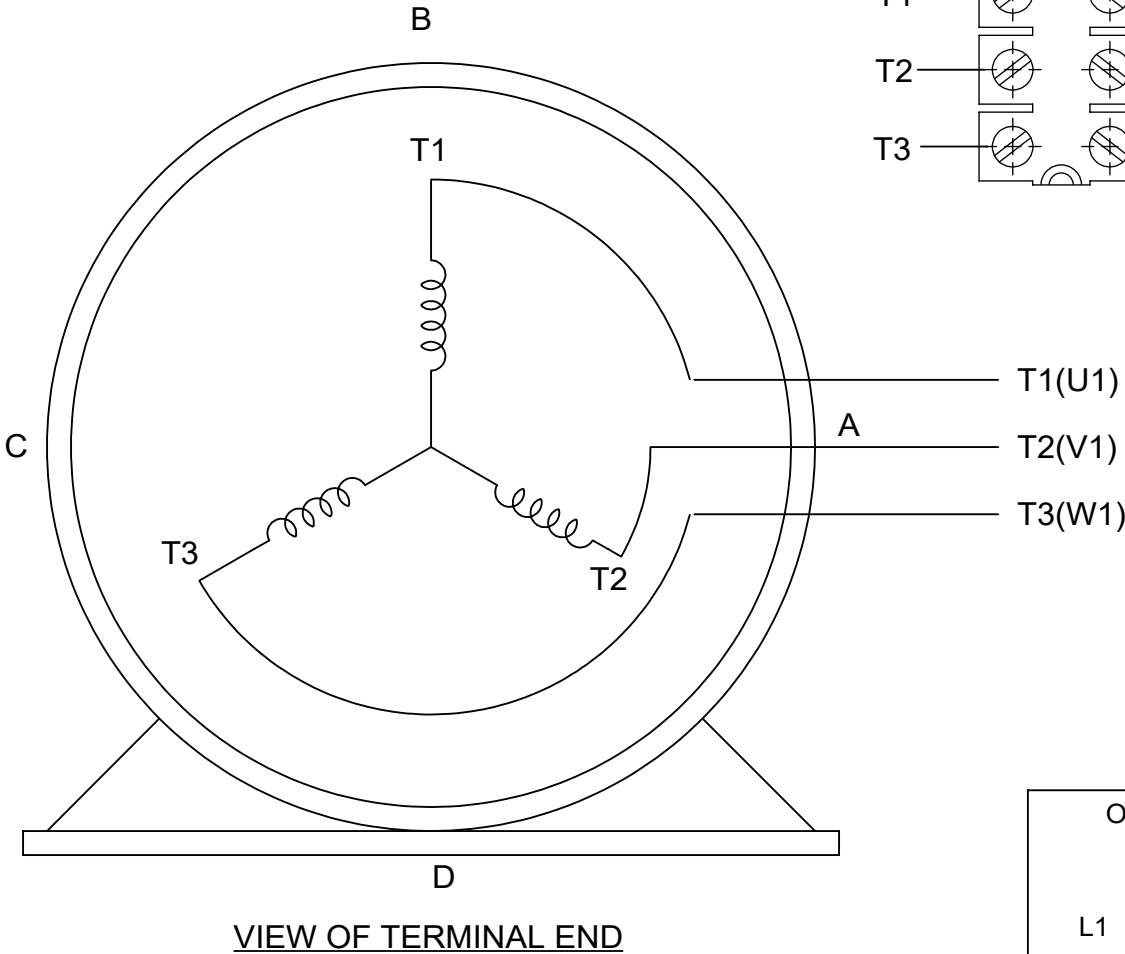
L2

T3(W1)

T3(W1)

L3

A-9806 DECAL



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 A	DRAWING NUMBER EE7300	SHEET 1 OF 1

Data Sheet

Date: 5/6/2020

215THFCD9001

Customer: _____

Attention: _____

Submitted by: _____



Submittal

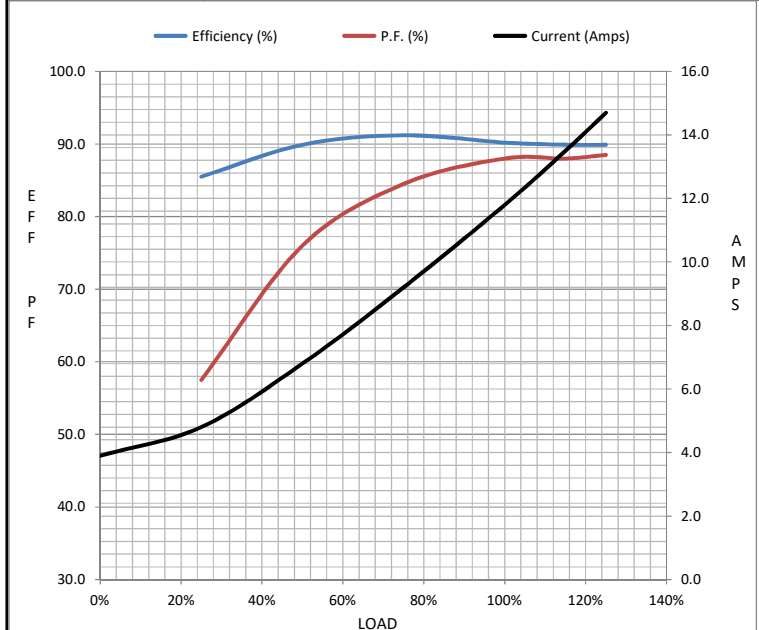
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	3.9	4.8	6.8	9.2	11.8	13.5	14.7	79.0	
Torque (ft-lb)	0.00	3.7	7.4	11.1	14.9	17.3	18.9	28.0	
RPM	3600	3580	3560	3540	3518	3,502	3492	0	
Efficiency (%)		85.5	89.9	91.2	90.2	89.9	89.9		
P.F. (%)	12.9	57.5	76.0	84.5	88.0	88.0	88.5	45.0	

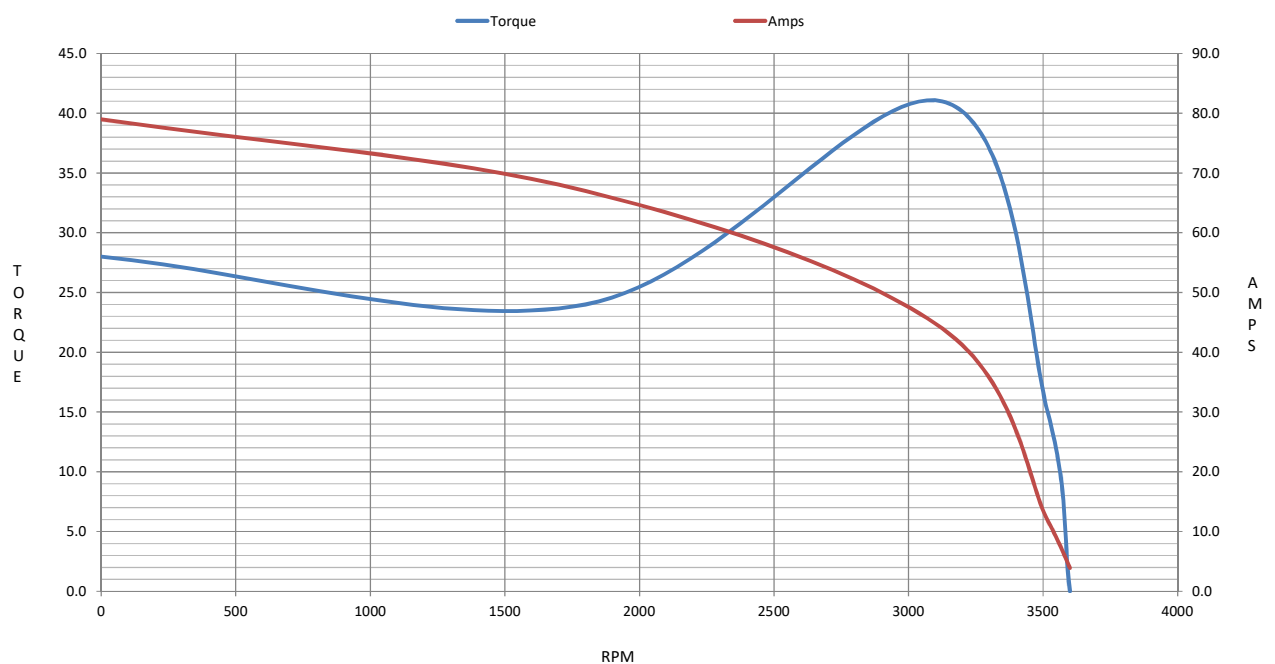
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3125	3518	3600
Current (Amps)	79.0	67.0	44.0	11.8	3.9
Torque (ft-lb)	28.0	24.0	41.0	14.9	0.00



Information Block				
HP		10.0		
Sync. RPM		3600		
Frame		215		
Enclosure		TEFC		
Construction		TFC		
Voltage		460	V	
Frequency		60	Hz	
Design		B		
LR Code letter		H		
Service Factor		1.15		
Temp Rise @ FL		55	° C	
Duty		CONT		
Ambient		40	° C	
Elevation		3,300	feet	
Rotor/Shaft wk²		0.60	Lb-Ft²	
Ref Wdg		HA31322010 NONE		
Sound Pressure @ 1M		72	dBA	
VFD Rating		CONSTANT 2:1/VARIABLE 10:1		
Outline Dwg		SS810116		
Conn. Diag		EE7300		
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.7920	0.5340	2.1190	1.4680	69.2960

Speed -Torque Curve





DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300
 OUTLINE: SS810116
 WINDING: HA31322010 NONE 1

MODEL #: 215THFCD9001
 CAT #: W537B

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
10	7.5	3600	3518	215T	TEFC	TFC	H	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	460	11.8	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	90.2	3/4 LD EFF	91.2	1/2 LD EFF	89.9	GTD EFF	ELECT. TYPE
F.L. PF	88.0	3/4 LD PF	84.5	1/2 LD PF	76.0	89.5	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
14.9 LB-FT	79.0	28.0 LB-FT 188%	41.0 LB-FT 275%	55

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX. MOTOR
72 dBA	81 dBA	0.60 LB-FT²	18 LB-FT²	15 SEC.	2	176 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	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL 6308	BALL 6208						

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)
0.792	0.534	2.119	1.468	69.296	0.080

* N O T E s *			<p style="color: red;">If Inverter equals NONE, contact factory for further information</p> <p>INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1</p> <p>INV. HP SPEED RANGE: NONE</p>
		<p>ENCODER: NONE</p> <p>NONE</p> <p>NONE</p> <p>NONE PPR</p>	
<p>PREPARED BY: ANUSHA M</p> <p>DATE: 3/31/2020</p>		<p>BRAKE: NONE</p> <p>NONE</p> <p>FT-LB: NA</p> <p>VOLTAGE: NONE</p> <p>HZ:</p>	

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