

Severe Duty Motors

Model No: 215THFCD19033

Catalog No: W540B

Severe Duty Motor, 10 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 215T Frame, TEFC

Product Information Packet: Model No: 215THFCD19033, Catalog No: W540B Severe Duty Motor, 10 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 215T Frame, TEFC

Nameplate Specifications

Phase	3	Output HP	10 Hp
Output KW	7.5 kW	Voltage	575 V
Speed	1762 r/min	Synchronous RPM	1800 r/min
Service Factor	1.15	Frame	215T
Enclosure	Totally Enclosed Fan Cooled	Thermal Protection	No Protection
Efficiency	91.7 %	Ambient Temperature	40 °C
Frequency	60 Hz	Current	10.0 A
Power Factor	81.3	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		

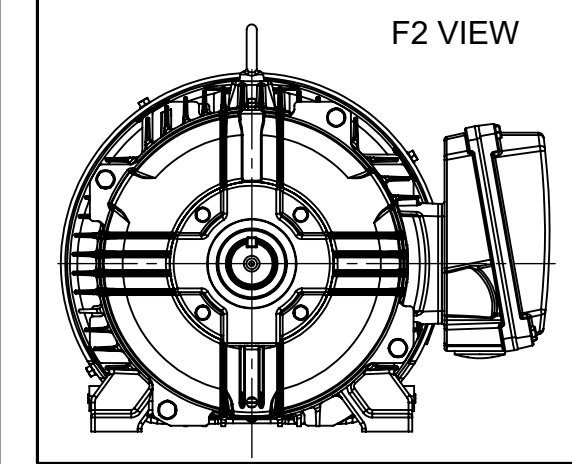
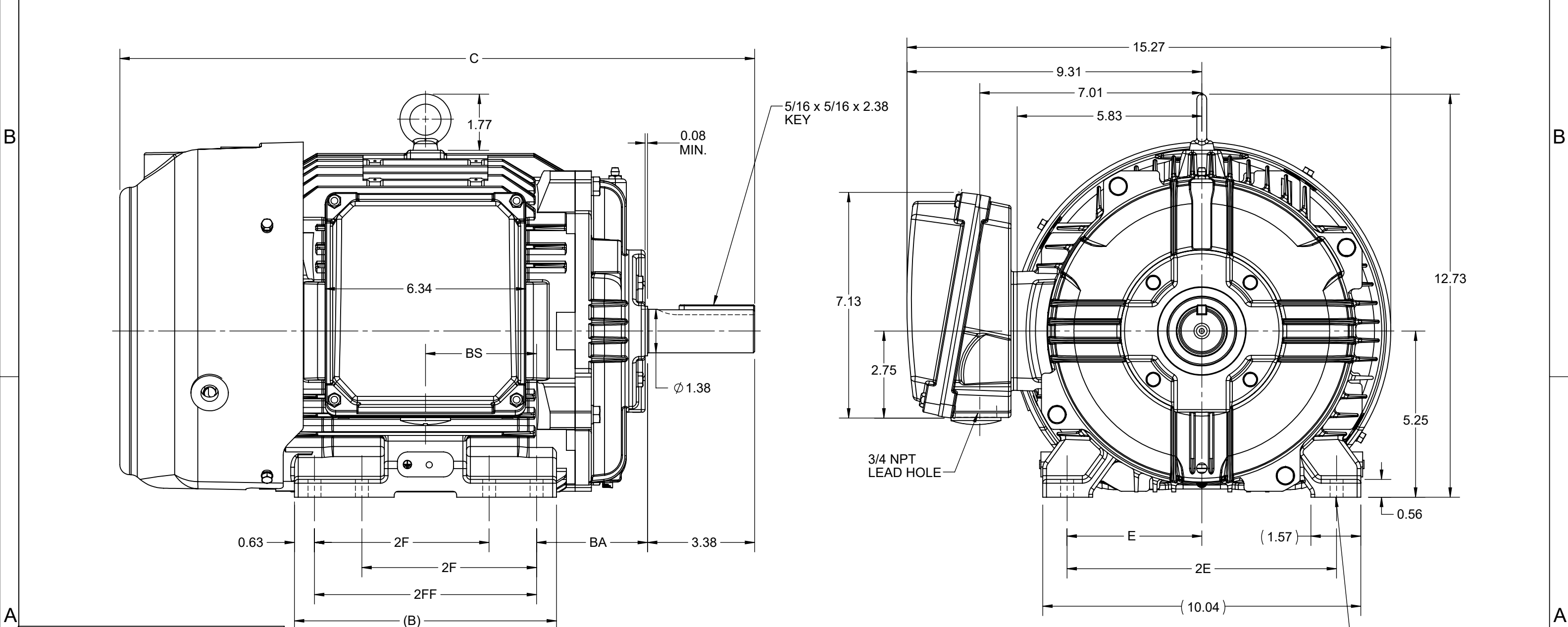
Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	1.155 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 10:1/Variable 10:1

Drawings

Connection Drawing	EE7300	Outline Drawing	SS810116-200
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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		
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DRAWN BY BISWA		marathon™	
DATE 24/12/2018			
APPROVED BY SBD		DESCRIPTION OUTLINE 213/215T FR NEMA- SD & IEEE841	
DATE 24/12/2018			
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)

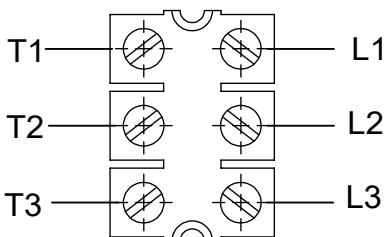
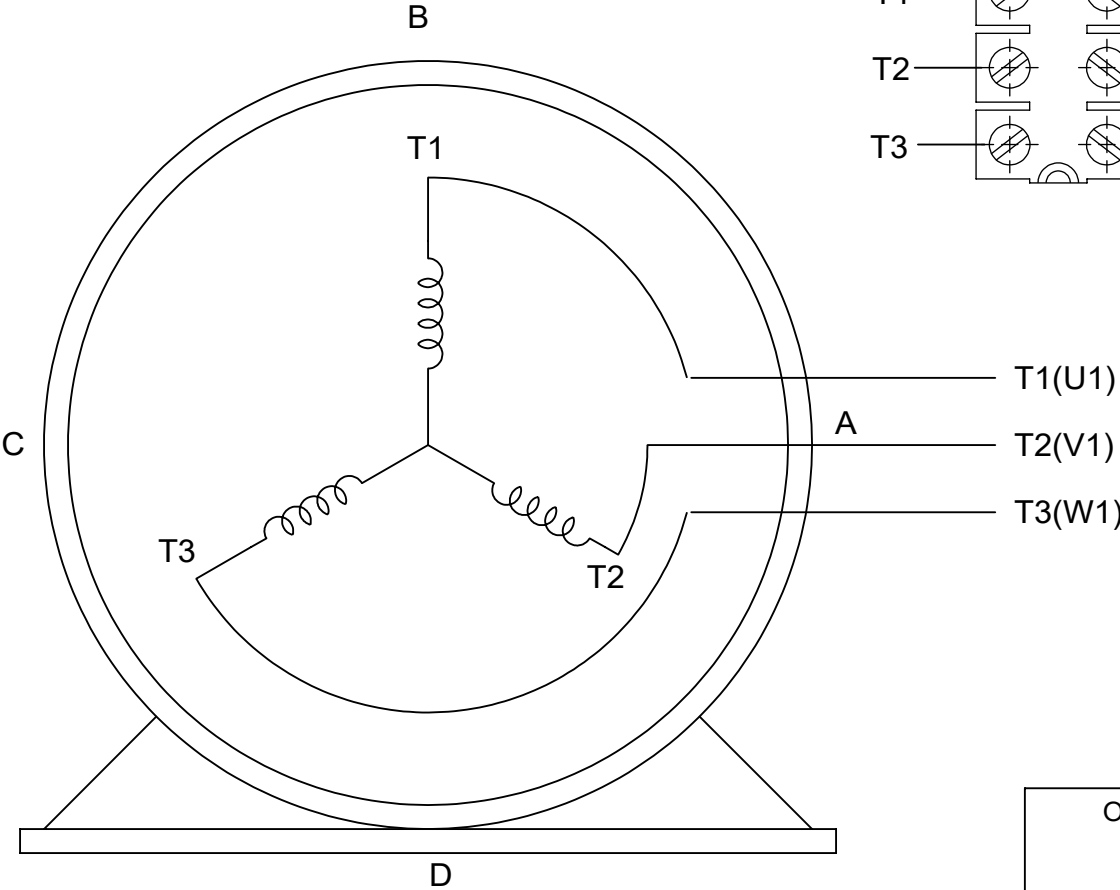
L2

T3(W1)

T3(W1)

L3

A-9806 DECAL



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

215THFCD19033

Submittal

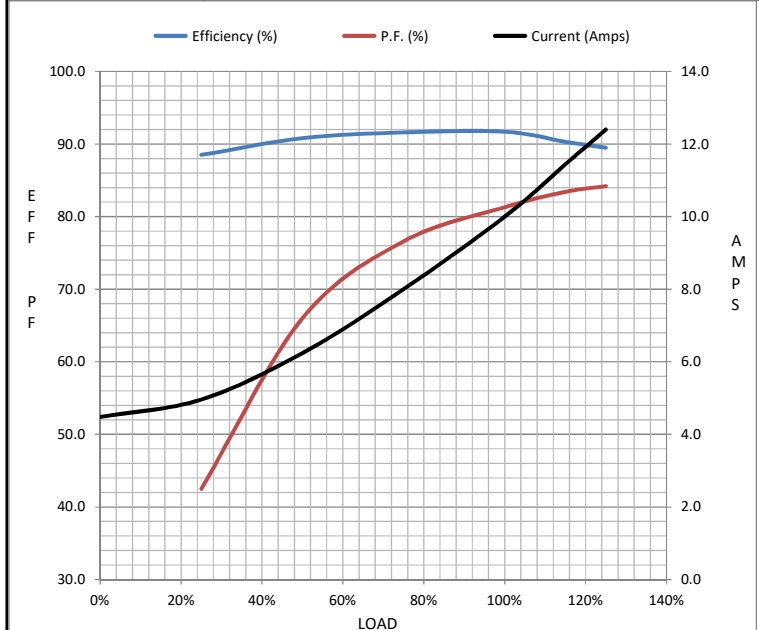
Data @ 575 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	4.5	5.0	6.2	8.0	10.0	11.4	12.4	63.2	
Torque (ft-lb)	0.00	7.3	14.7	22.2	29.8	34.4	37.4	59.0	
RPM	1800	1792	1782	1772	1762	1,756	1752	0	
Efficiency (%)		88.5	90.8	91.6	91.7	90.3	89.5		
P.F. (%)	9.0	42.5	66.0	76.6	81.3	83.4	84.2	44.0	

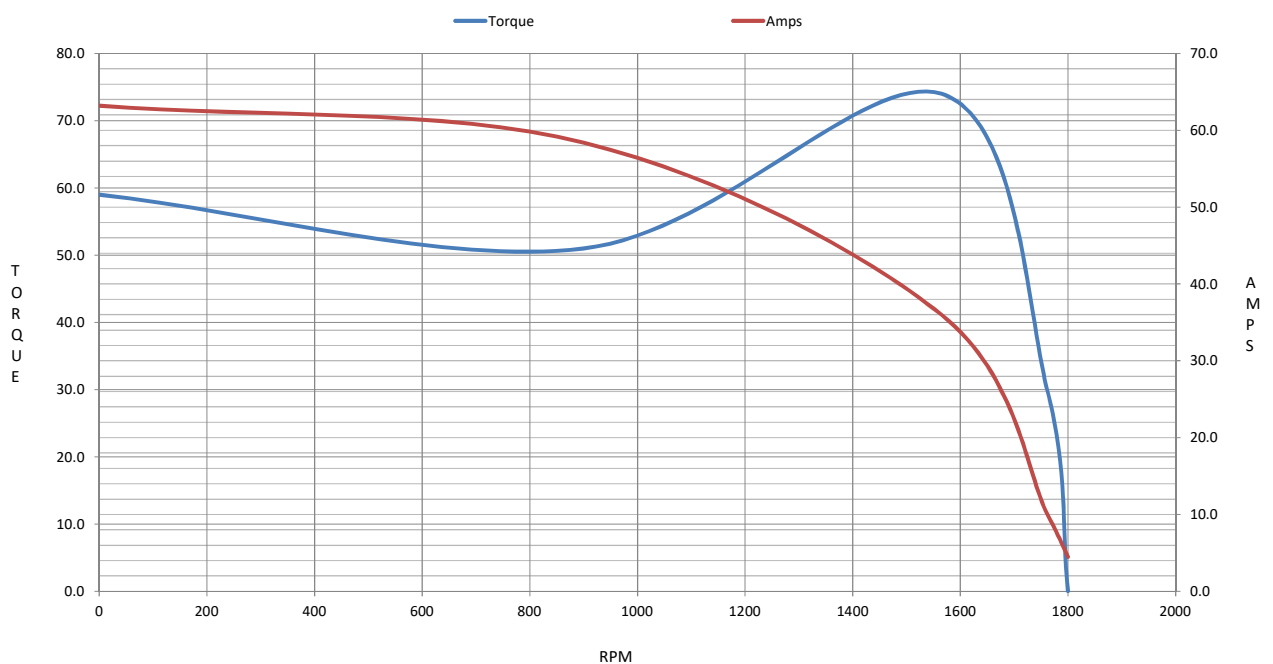
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1565	1762	1800
Current (Amps)	63.2	58.4	36.0	10.0	4.5
Torque (ft-lb)	59.0	51.0	74.0	29.8	0.00



Information Block				
HP	10.0			
Sync. RPM	1800			
Frame	215			
Enclosure	TEFC			
Construction	TFC			
Voltage	575 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	60 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk²	1.10 Lb-Ft²			
Ref Wdg	HA31324013 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 10:1/VARIABLE 10:1			
Outline Dwg	SS810116			
Conn. Diag	EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.1580	0.7280	3.3550	4.0290	73.0860

Speed -Torque Curve





DATA VOLTS: 575

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300
 REFERENCE MODEL #: 215THFCD19033
 OUTLINE: SS810116
 CAT #: W540B
 WINDING: HA31324013 NONE 3
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
10	7.5	1800	1762	215T	TEFC	TFC	H	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	575	10	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	91.7	3/4 LD EFF	91.6	1/2 LD EFF	90.8	GTD EFF	91.0	ELECT. TYPE
F.L. PF	81.3	3/4 LD PF	76.6	1/2 LD PF	66.0	SQ CAGE INV RATED		

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
29.8 LB-FT	63.2	59.0 LB-FT 198%	74.0 LB-FT 248%	60

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
62 dBA	71 dBA	1.10 LB-FT²	85 LB-FT²	25 SEC.	2	216 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
6308 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)
1.809375	1.1375	5.2421875	6.2953125	114.196875	0.080

* N O T E S *	If Inverter equals NONE, contact factory for further information	
	INVERTER TORQUE: CONSTANT 10:1/VARIABLE 10:1	
	INV. HP SPEED RANGE: NONE	
	ENCODER: NONE	
	NONE PPR	

PREPARED BY: _____ DATE: 5/13/2020	BRAKE: NONE NONE FT-LB: NA VOLTAGE: NONE HZ:
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FORM: 3531 REV_4 2/27/06
 ** Subject to change without notice.