marathon®

Severe Duty Motors

Model No: 213TTTCD6502
Catalog No: E475B

Severe Duty Motor, 7.50 HP, 3 Ph, 60 Hz, 230/460 V, 3600 RPM, 213T Frame, TENV

©2026 Marathon, All Rights Reserved.

marathon®

Product Information Packet: Model No: 213TTTCD6502, Catalog No: E475B Severe Duty Motor, 7.50 HP, 3 Ph, 60 Hz, 230/460 V, 3600 RPM, 213T Frame, TENV

Nameplate Specifications

Phase	**3**	Output HP	**7.50 Hp**
Output KW	**5.6 kW**	Voltage	**230/460 V**
Speed	**3525 r/min**	Synchronous RPM	**3600 r/min**
Service Factor	**1.15**	Frame	**213T**
Enclosure	**Totally Enclosed Non Ventilated**	Thermal Protection	**No Protection**
Efficiency	**91 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**17.4/8.7 A**
Power Factor	**86.8**	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	**55**	Number of Speeds	**1**
Hazardous Location	**DIVISION 2 T2B**		

Technical Specifications

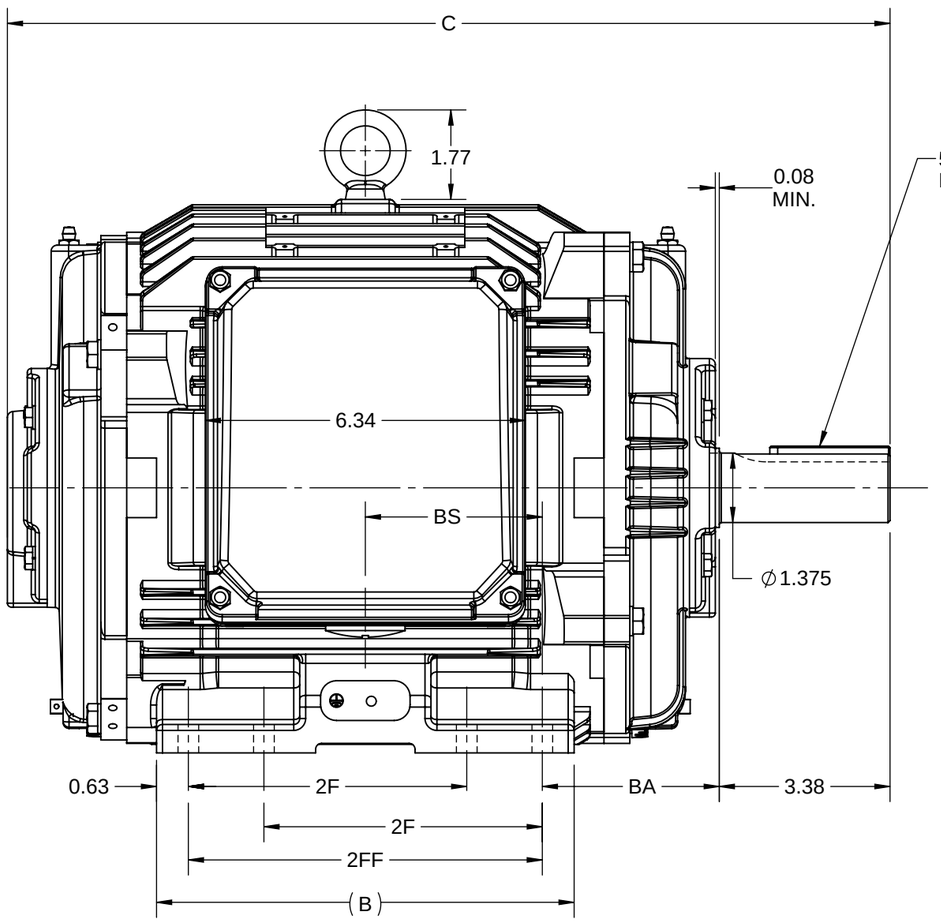
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**2**	Rotation	**Reversible**
Resistance Main	**1.407 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Shaft Diameter	**1.375 in**
Assembly/Box Mounting	**F1/F2 Capable**	Inverter Load	**Constant 2:1/Variable 10:1**

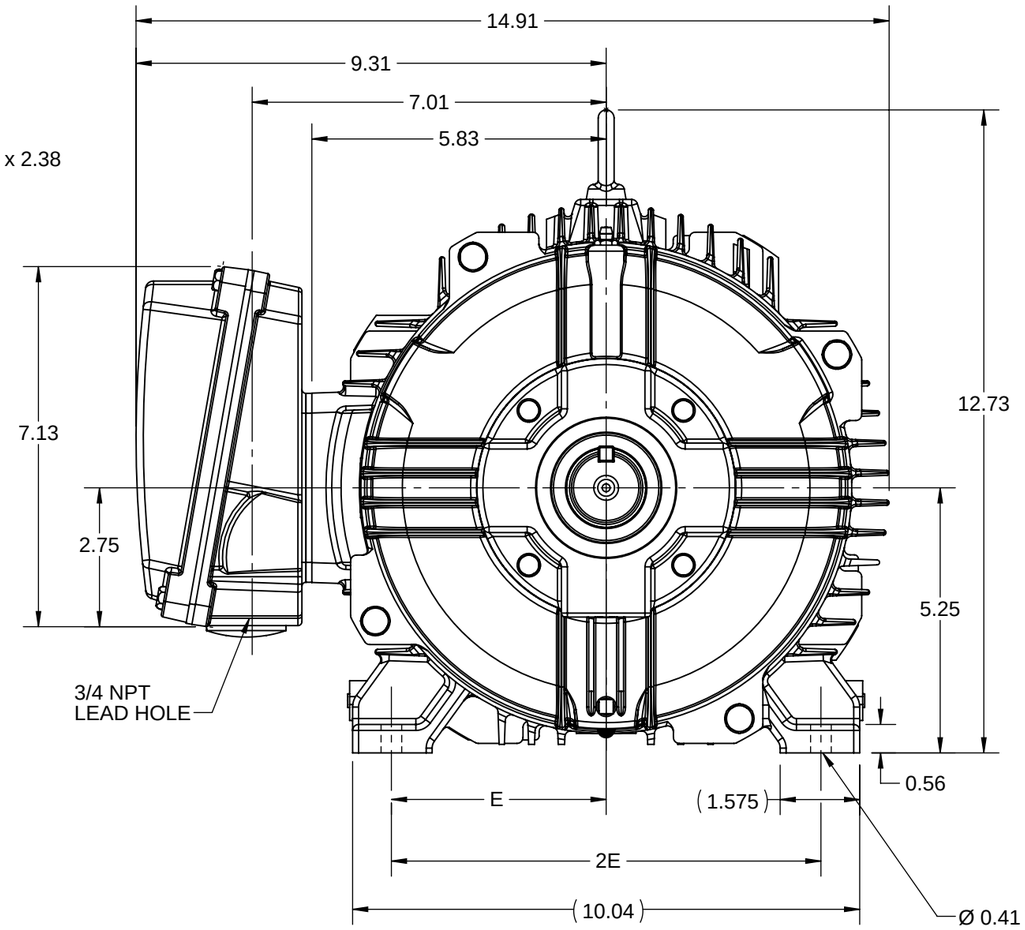
Drawings

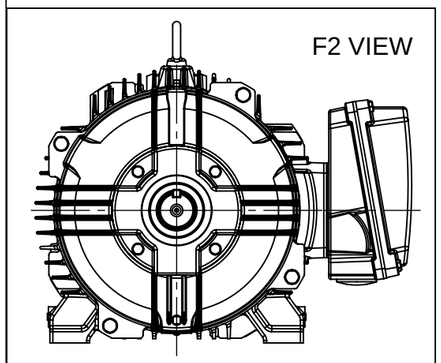
Connection Drawing	**EE7308**	Outline Drawing	**SS810117-100**

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created: 15/10/2026

DASH NO.	B	C	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	6.76	15.97	4.25	8.50	---	5.50	3.50	2.75	F1 OR F2	213T
200	8.26	17.47			5.50	7.00		3.50		213/215T







DRAWING REVISION: C	REVISION BY: SB	REV DATE/© DATE: 12/22/2025	DRAWN BY: SAI	marathon™
REQUEST NUMBER: CR-0024964	APPROVED BY: RMS	DATE: 12/22/2025	DATE: 24/01/2020	
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED			APPROVED BY: SBD	DESCRIPTION: OUTLINE 213/215T FR NEMA-TEAO/TENV
			DATE: 24/01/2020	
			REFERENCE	MATERIAL / PROCESS/FINISH
			THIRD ANGLE PROJECTION	SIZE: B / DRAWING NUMBER: SS810117 / SHEET: 1 OF 1

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

Uncontrolled Copy

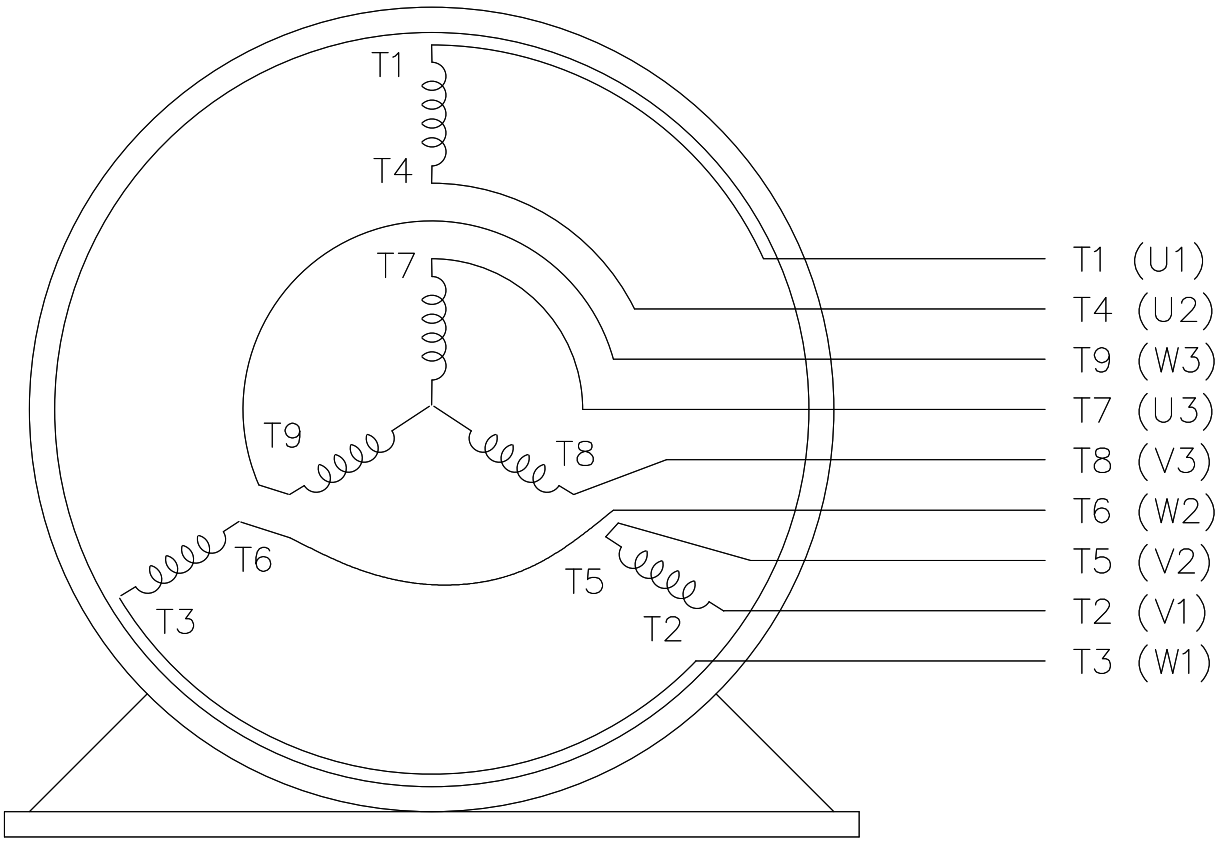
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

(U1) T1 — L1
(V1) T2 — L2
(W1) T3 — L3
(U2) T4
(U3) T7
(V2) T5
(V3) T8
(W2) T6
(W3) T9

LOW VOLTAGE

(U1) T1
(U3) T7 — L1
(V1) T2
(V3) T8 — L2
(W1) T3
(W3) T9 — L3
(U2) T4
(V2) T5
(W2) T6



VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD CONNECTION

L1 — WHITE
L2 — RED
L3 — BLACK

DRAWING REVISION	REVISION BY	REV DATE/ © DATE
J	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	RM
DATE	11/20/1990
APPROVED BY	SAS
DATE	04/24/2003
REFERENCE	
THIRD ANGLE PROJECTION	

marathon™

DESCRIPTION
CONN DIAGRAM-EXTERNAL
3Ø - DUAL VOLTAGE MOTOR

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	4 of 6 EE7308	1 OF 1

Data Sheet

Date: 5/6/2020
Customer:
Attention:
Submitted by:

marathon® Motors

213TTTCD6502

Submittal

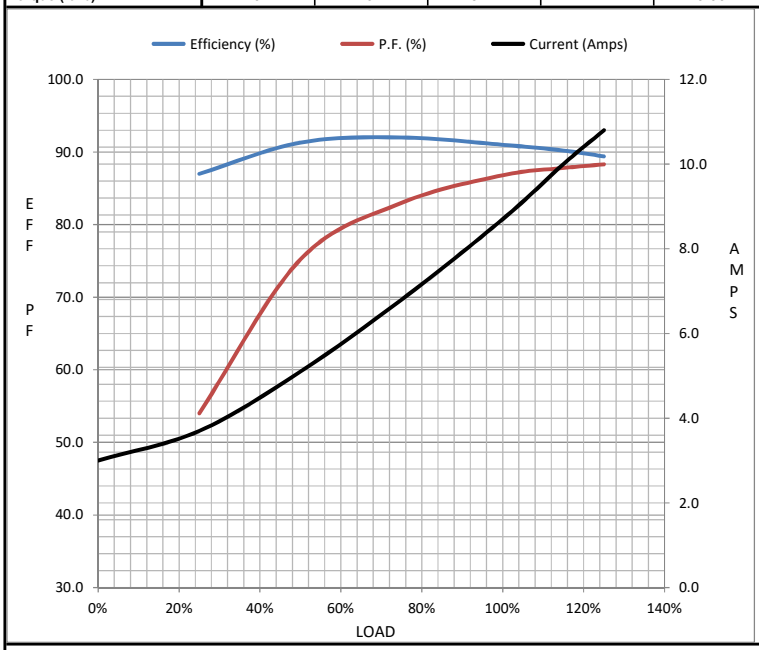
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	3.0	3.7	5.1	6.8	8.7	10.0	10.8	63.0	
Torque (ft-lb)	0.00	2.75	5.5	8.3	11.2	12.9	14.1	20.7	
RPM	3600	3582	3564	3545	3525	3,512	3503	0	
Efficiency (%)		87.0	91.3	92.0	91.0	90.2	89.4		
P.F. (%)	7.8	54.0	75.2	83.0	86.8	87.8	88.3	41.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3060	3525	3600
Current (Amps)	63.0	50.0	38.8	8.7	3.0
Torque (ft-lb)	20.7	19.2	34.7	11.2	0.00



Information Block

HP	7.5	
Sync. RPM	3600	
Frame	213	
Enclosure	TENV	
Construction	TTC	
Voltage	230/460	V
Frequency	60	Hz
Design	B	
LR Code letter	H	
Service Factor	1.15	
Temp Rise @ FL	80	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	0.55	Lb-Ft²
Ref Wdg	HA31322024 NONE	
Sound Pressure @ 1M	72	dBA
VFD Rating	CONSTANT 2:1/VARIABLE 10:1	
Outline Dwg	SS810117	
Conn. Diag	EE7308	

Additional Specifications:

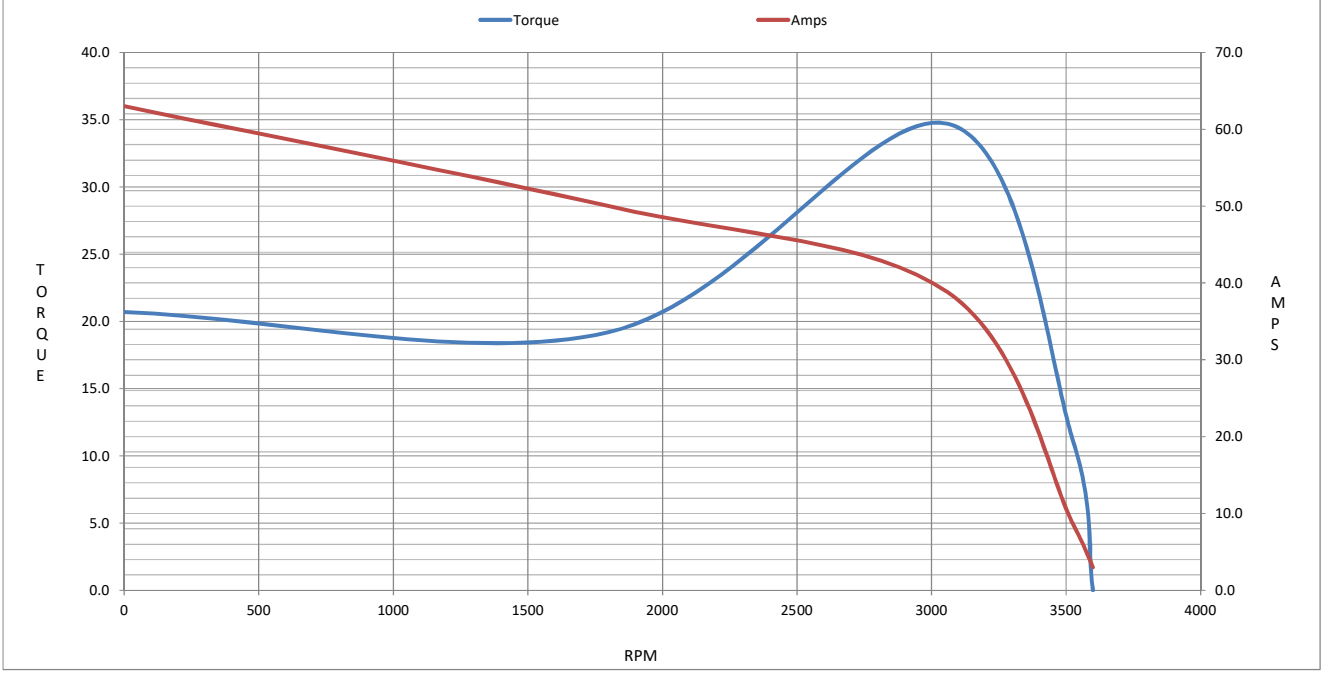
0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.8510	0.6620	2.7080	1.8120	87.6970

Speed -Torque Curve



Uncontrolled Copy

marathon® Motors

DATA VOLTS: 460

CERTIFICATION DATA SHEET

REFERENCE MODEL #: 213TTTCD6502
CONN. DIAGRAM: EE7308 **CAT #:** E475B
OUTLINE: SS810117
WINDING: HA31322024 NONE 2 **MOUNTING:** F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
7.5	5.6	3600	3525	213T	TENV	TTC	H	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	230/460	17.4/8.7	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	91.0	3/4 LD EFF	92.0	1/2 LD EFF	91.3	GTD EFF	ELECT. TYPE
F.L. PF	86.8	3/4 LD PF	83.0	1/2 LD PF	75.2	90.2	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)	
11.2 LB-FT	63.0	20.7 LB-FT 185%	34.7 LB-FT 310%	80	

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
72 dBA	81 dBA	0.55 LB-FT²	12 LB-FT²	2 SEC.	10	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 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
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)	
0.851	0.662	2.708	1.812	87.697	0.080	

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: 5/15/2020

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