marathon®

Vertical Pump Motors

Model No: 254TTDX16054
Catalog No: M814B

Vertical Pump Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 254HPV Frame, DP

©2026 Marathon, All Rights Reserved.

marathon®

Product Information Packet: Model No: 254TTDX16054, Catalog No: M814B Vertical Pump Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 254HPV Frame, DP

Nameplate Specifications

Phase	**3**	Output HP	**15 & 10 Hp**
Output KW	**11.2 & 7.5 kW**	Voltage	**230/460 & 190/380 V**
Speed	**1770 & 1475 r/min**	Synchronous RPM	**1800 & 1500 r/min**
Service Factor	**1.15 & 1.15**	Frame	**254HPV**
Enclosure	**Drip Proof**	Thermal Protection	**No Protection**
Efficiency	**93 & 92.4 %**	Ambient Temperature	**40 °C**
Frequency	**60 & 50 Hz**	Current	**38.5/19.2 & 33/16.5 A**
Power Factor	**78.5**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**A**
KVA Code	**J**	Drive End Bearing Size	**6309**
Opp Drive End Bearing Size	**6208**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**22**	Number of Speeds	**1**

Technical Specifications

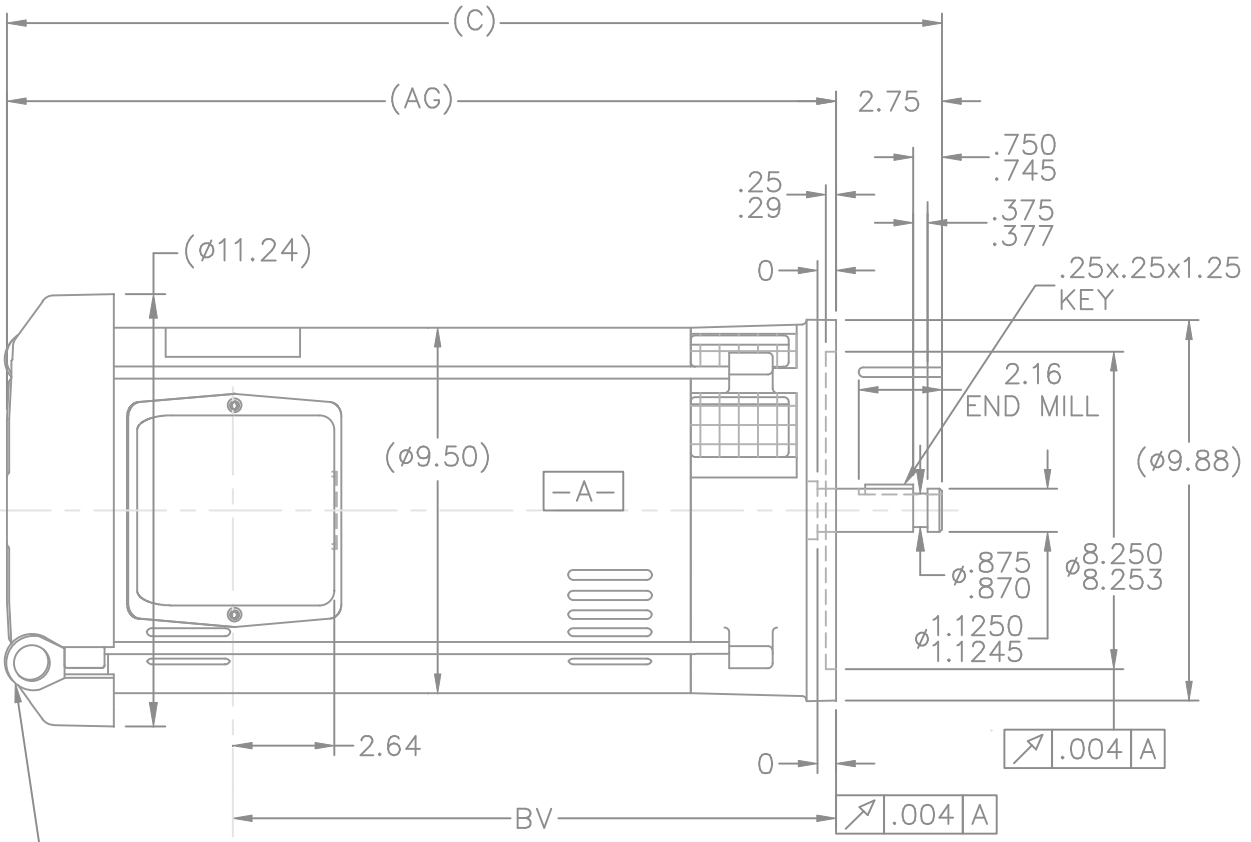
Electrical Type	**Squirrel Cage Induction Run**	Starting Method	**Across The Line**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**.48 O**	Mounting	**Round**
Motor Orientation	**Shaft Down**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Rolled Steel**
Shaft Type	**HP**	Overall Length	**24.3 in**
Frame Length	**15.15 in**	Shaft Diameter	**1 1/8 in**
Shaft Extension	**2.75 in**	Assembly/Box Mounting	**F1/F2 Capable**

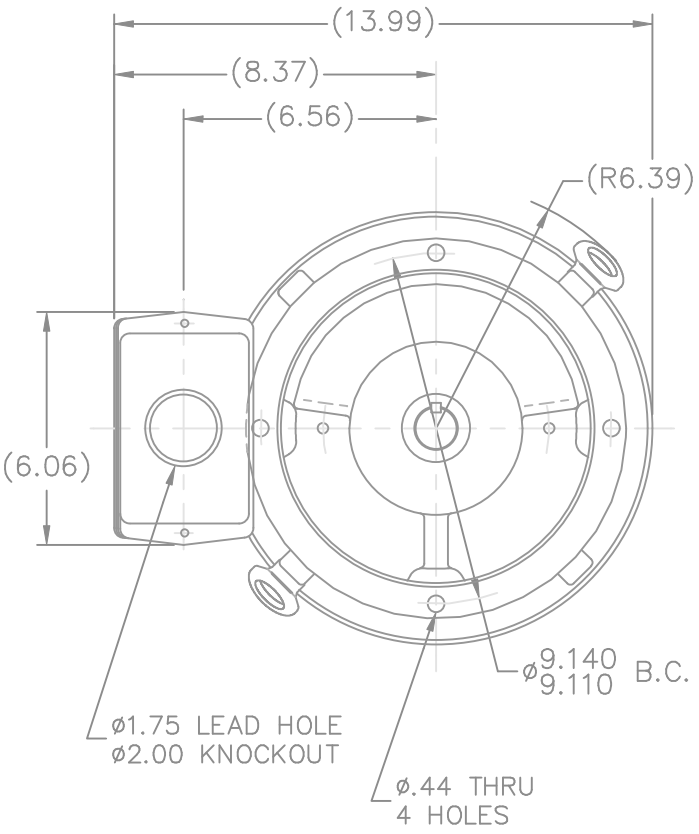
Drawings

Connection Drawing	**EE7308**	Outline Drawing	**SS86538-1515**

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

SS86538





DASH	FR.	C	BV	AG
1340	254HP	22.55	13.93	19.80
1515	254/256HP	24.30	15.68	21.55

NOTES:
1. NAMEPLATE TO BE READ FROM SHAFT EXT. END OF MOTOR.
2. BOX CAN BE MOUNTED IN 90° STEPS.

NO.	REVISION	BY & DATE	CHK
8	UPDATED DRAWING	TJW 04/27/2007	
7	REDRAWN IN AUTOCAD	TAT 07-22-2004	ML
6	CLARIFIED REVISON HISTORY AND BOX ROT. CN28427	CAV 02-17-2000	
5	UPDATED CONDUIT BOX CN 28427	TJB 01-31-2000	
4	–1515 WAS FOR 256HP FR. ONLY CN 18683	KL 10-11-1994	

TOLERANCES UNLESS SPECIFIED	
DEC.	INCHES
.X	±.1
.XX	±.03
.XXX	±.005
.XXXX	±.0005
ANG	±7'30"

MARATHON ELECTRIC

DRAWN	KL 11-24-1993
CHK	ML 11-29-1993
APPD	DRN 11-29-1993
SCALE	1=5
REF	
FMF	
PREV	

TITLE OUTLINE
250HP FR. – BB – TS – 'P' BASE

MAT'L.

FINISH

THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED
THIS IS AN ELECTRONICALLY GENERATED DOCUMENT – DO NOT SCALE THIS PRINT

RFP

DIST LB

CAD FILE ss86538

SIZE	DRAWING NO.	PAGE	OF	REV.
A	SS86538			8

10/2/2008 1:30:02 PM

Uncontrolled Copy

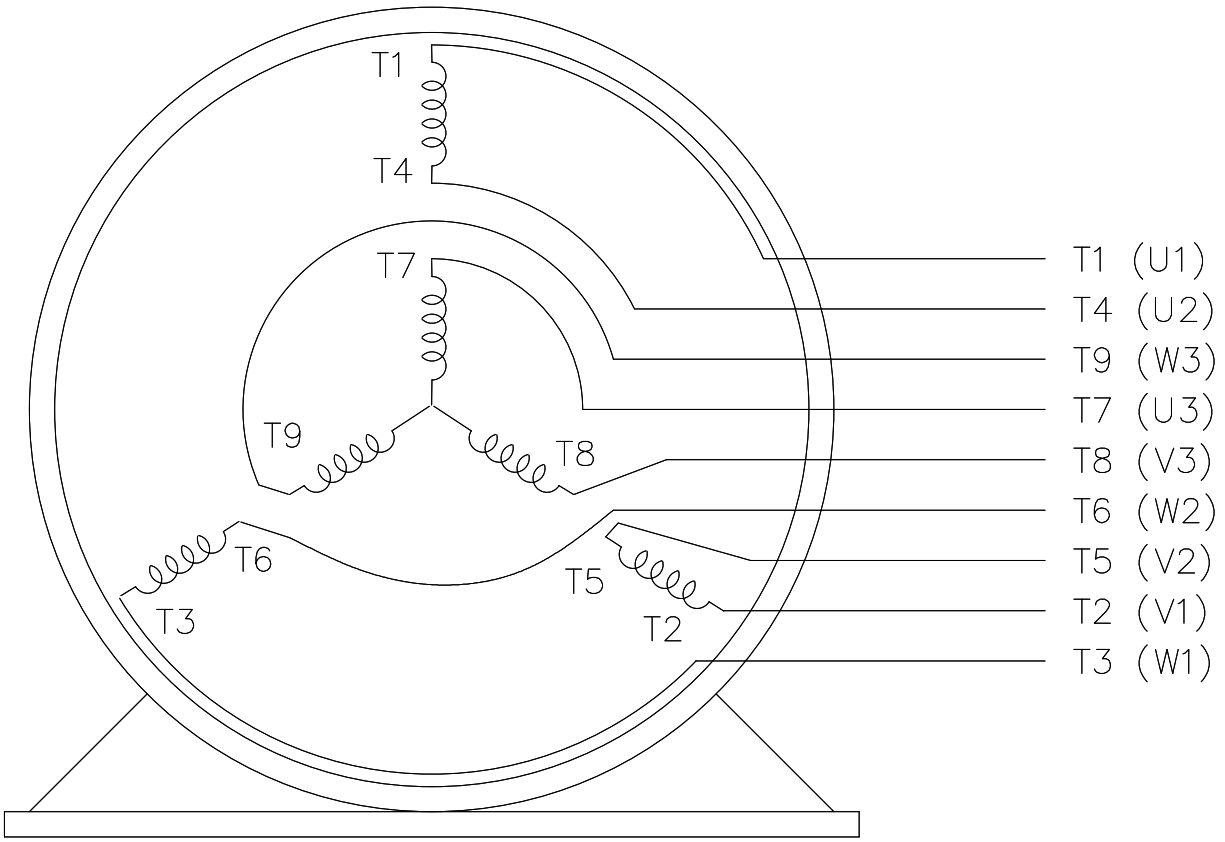
THREE PHASE
DUAL VOLTAGE MOTOR

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

Uncontrolled Copy

Data Sheet

Date: 29-06-2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® electric

254TTDX16054

Submittal

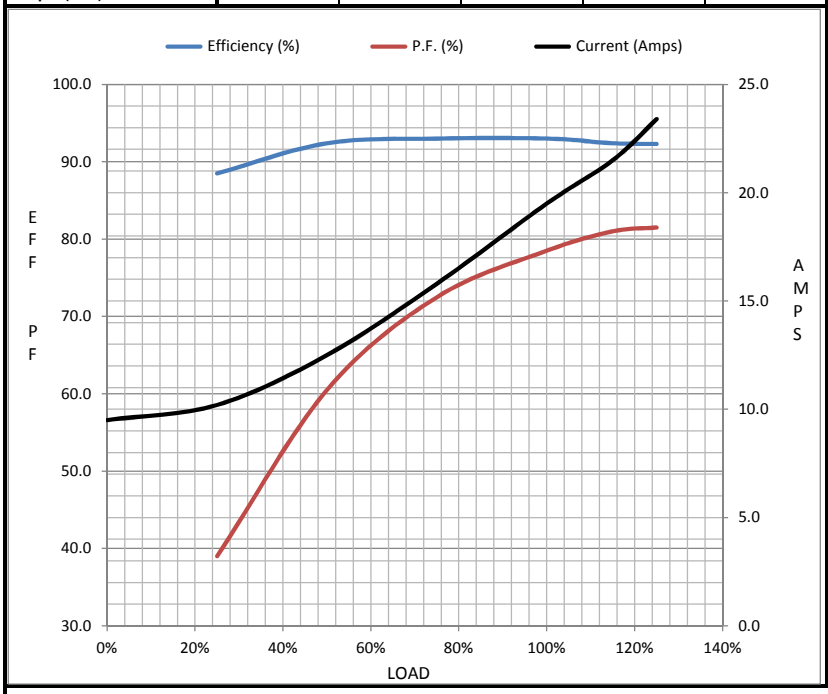
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	9.5	10.2	12.5	15.8	19.5	21.5	23.4	145	
Torque (ft-lb)	0.00	11.0	22.0	33.2	44.5	51.5	56.0	135	
RPM	1800	1791	1785	1777	1765	1,765	1759	0	
Efficiency (%)		88.5	92.4	93.0	93.0	92.4	92.3		
P.F. (%)	5.0	39.0	60.5	72.5	78.5	81.0	81.5	45.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1525	1765	1800
Current (Amps)	145	130	90.0	19.5	9.5
Torque (ft-lb)	135	125	142	44.5	0.00



Information Block

HP	15.0
Sync. RPM	1800
Frame	256
Enclosure	DP
Construction	TDX
Voltage	230/460#190/38(V
Frequency	60 Hz
Design	A
LR Code letter	J
Service Factor	1.15
Temp Rise @ FL	40 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	1.70 Lb-Ft²
Ref Wdg	K2154378 R1
Sound Pressure @ 1M	70 dBA
VFD Rating	NONE
Outline Dwg	SS86538-1515
Conn. Diag	EE7308

Additional Specifications:

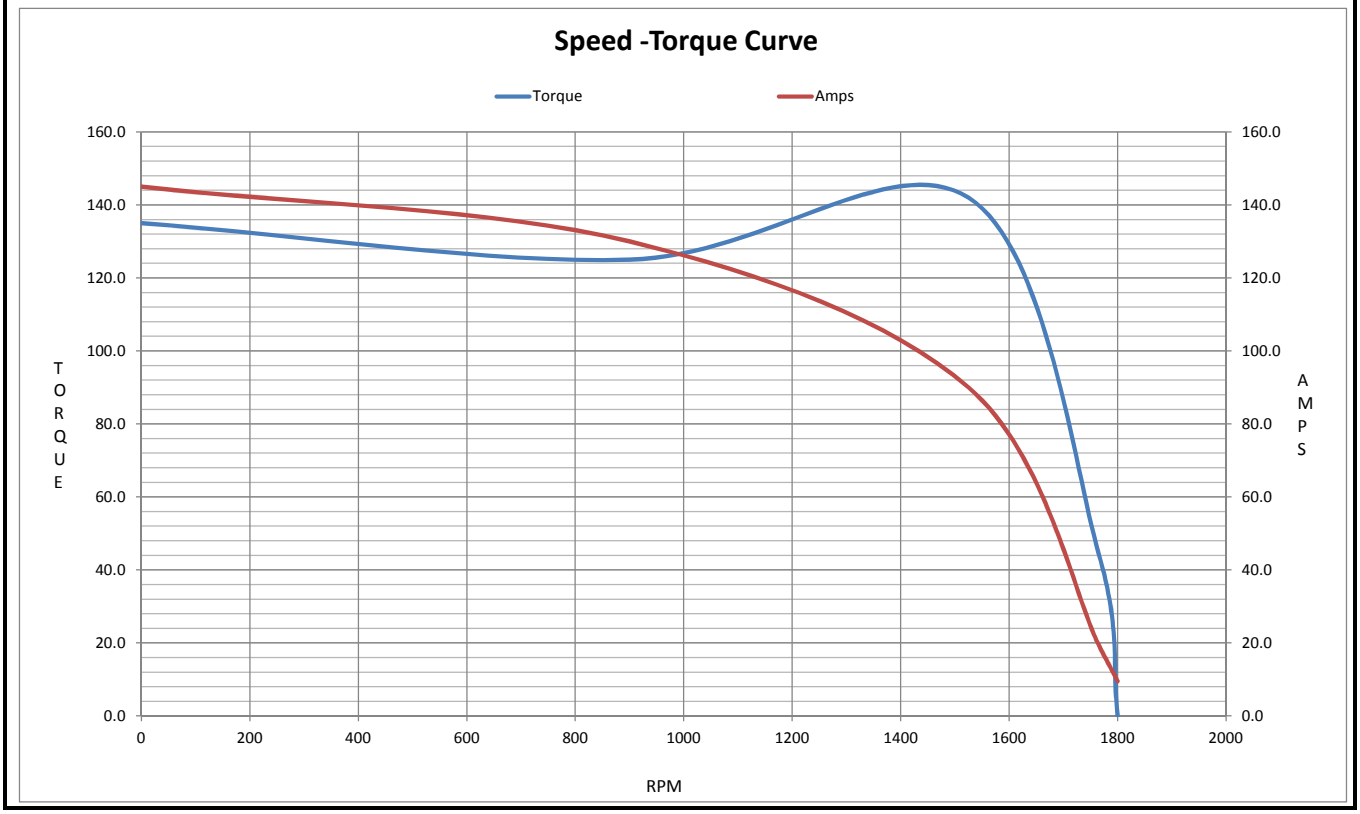
0

365THFS8036

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.3020	0.2650	1.0960	1.6250	24.0980

Speed -Torque Curve



Uncontrolled Copy

CERTIFICATION DATA SHEET

Model#:	254TTDX16054 AA	**WINDING#:**	K2154378 R1 1
CONN. DIAGRAM:	EE7308	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	SS86538-1515		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15&10	11.2&7.5	1800	1770&1475	254HPV	DP	J	A

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/380	38.5/19.2&33/16.5	ACROSS THE LINE	CONTINUOUS	F4	1.15/1.15	40	3300

FULL LOAD EFF: 93&92.4	3/4 LOAD EFF: 93	1/2 LOAD EFF: 92.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 78.5&74	3/4 LOAD PF: 72.5	1/2 LOAD PF: 60.5	91.7	SQ CAGE IND RUN	19 / 9.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
44.5 LB-FT	290 / 145	135 LB-FT 303	142 LB-FT 319	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
70 dBA	80 dBA	1.7 LB-FT^2	90 LB-FT^2	20 SEC.	2	185 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
P-BASE	STANDARD	ROUND	SHAFT DOWN	FALSE	NONE	TRUE	RODENT	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6309	BALL 6208	POLYREX EM	HP	NONE	NONE	AISI 1045 (C-240)	ROLLED STEEL

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE NONE
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz

*
N
O
T
E
S
*

DATE: 06/23/2017 03:29:41 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.