marathon®

Crop Dryer Motors

Model No: 254TTDBD6327
Catalog No: Y315

Crop Dryer Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 254TZ Frame, DP

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Product Information Packet: Model No: 254TTDBD6327, Catalog No: Y315 Crop Dryer Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 254TZ 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	**1774 & 1478 r/min**	Synchronous RPM	**1800 & 1500 r/min**
Service Factor	**1.15 & 1.15**	Frame	**254TZ**
Enclosure	**Drip Proof**	Thermal Protection	**No Protection**
Efficiency	**93 & 92.3 %**	Ambient Temperature	**40 °C**
Frequency	**60 & 50 Hz**	Current	**37.5/18.8 & 32/16 A**
Power Factor	**81**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	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

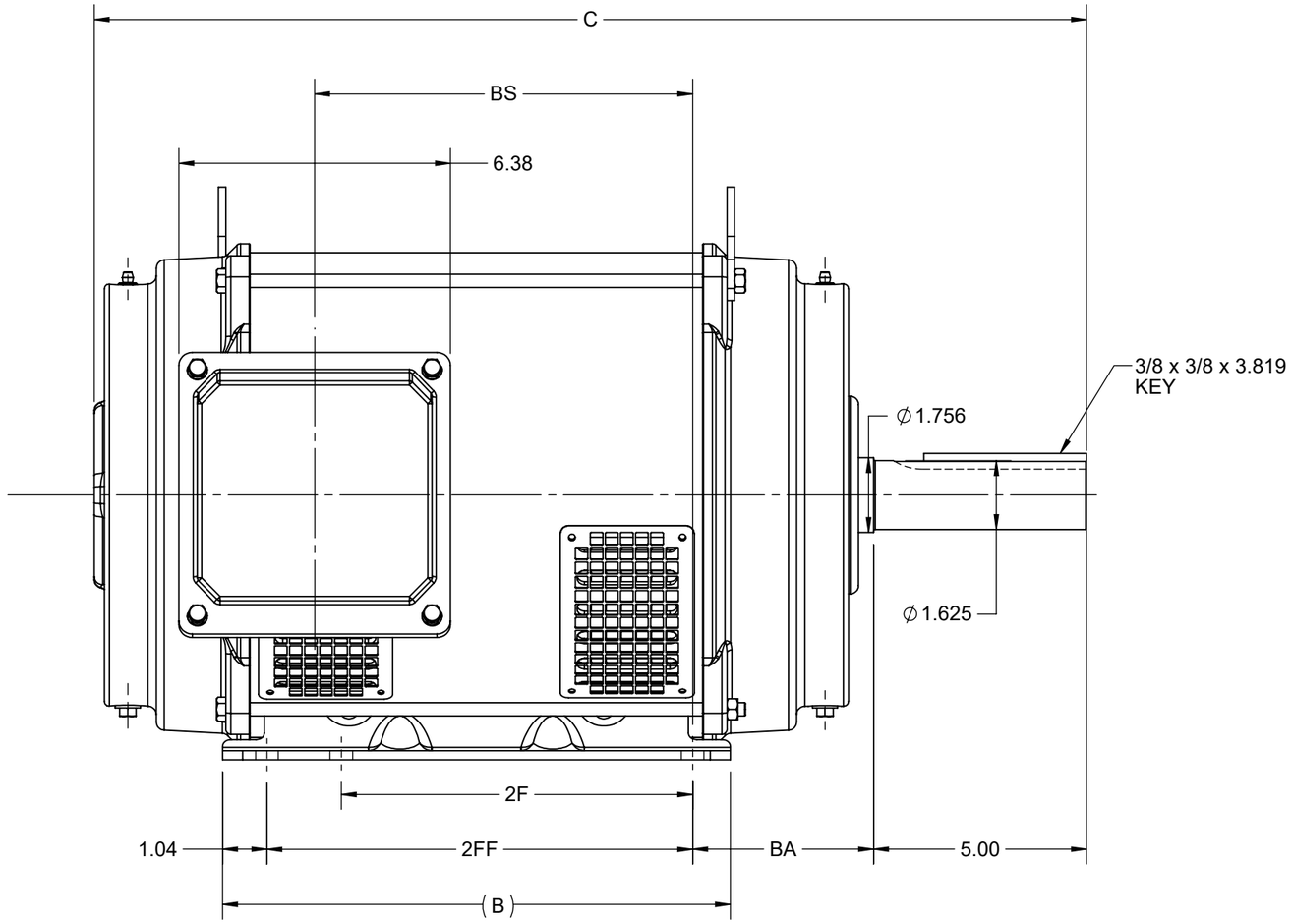
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**.6729 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Rolled Steel**
Shaft Type	**Single Special Extension**	Shaft Diameter	**1.625 in**
Assembly/Box Mounting	**F1/F2 Capable**	Inverter Load	**Constant 2:1/Variable 10:1**

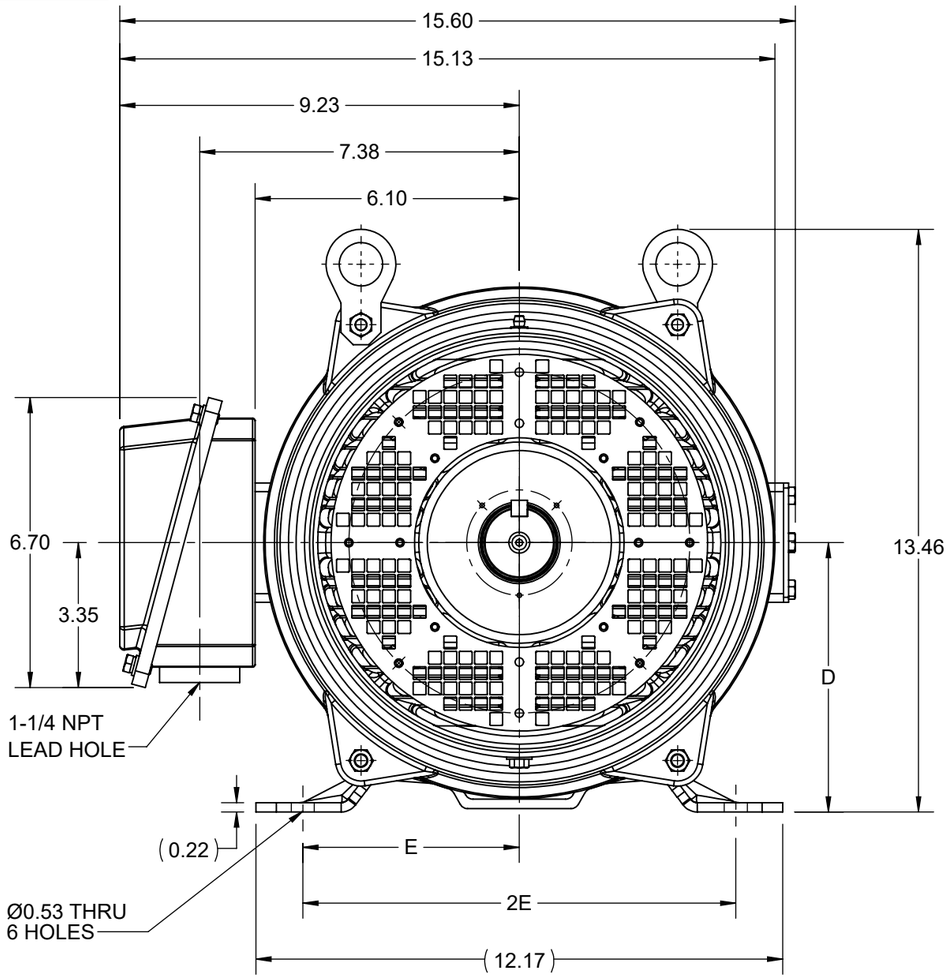
Drawings

Connection Drawing	**EE7308K**	Outline Drawing	**SS621049-100**

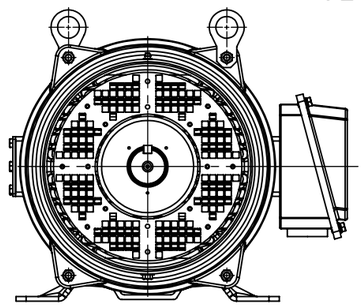
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DASH NO.	B	C	D	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	11.93	23.31	6.25	5.00	10.00	8.25	10.00	4.25	8.82	F1 OR F2	254TZ
200		24.88							10.45		254/256TZ





F2 VIEW



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DRAWING REVISION	REVISION BY	REV DATE/© DATE
E	VS	23RD JULY 25
REQUEST NUMBER	APPROVED BY	DATE
CR-0023491	VS	23RD JULY 25

REQUEST NUMBER DESCRIPTION
ADDED F2 MOUNTING PLATE

TOLERANCES (EXCEPT AS NOTED):

DEC.	INCH	mm	ANGLE
.X	±0.1	[±3]	±7' 30"
.XX	±0.03	[±0.8]	
.XXX	±0.005	[±0.13]	
.XXXX	±0.0005	[±0.013]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45°
CORNER FILLETS: R.02 [.5]
MACHINED SURFACES: 200 INCH / 5.1 mm
mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

DRAWN BY	VS
DATE	05/08/2020
APPROVED BY	MS
DATE	05/08/2020
REFERENCE	
THIRD ANGLE PROJECTION	

marathon™

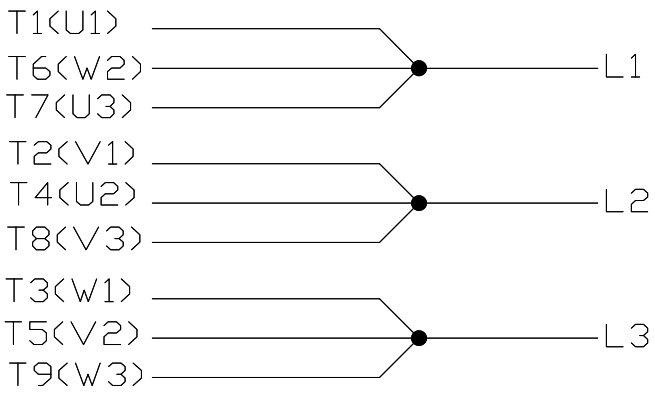
DESCRIPTION
OUTLINE
254/256TZ FR NEMA ODP RS CROP DRYER

MATERIAL | PROCESS/FINISH

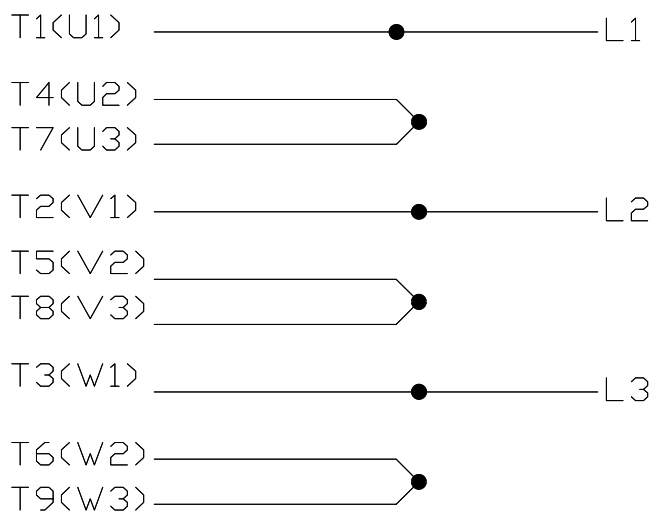
SIZE B | DRAWING NUMBER SS621049 | SHEET 1 OF 1

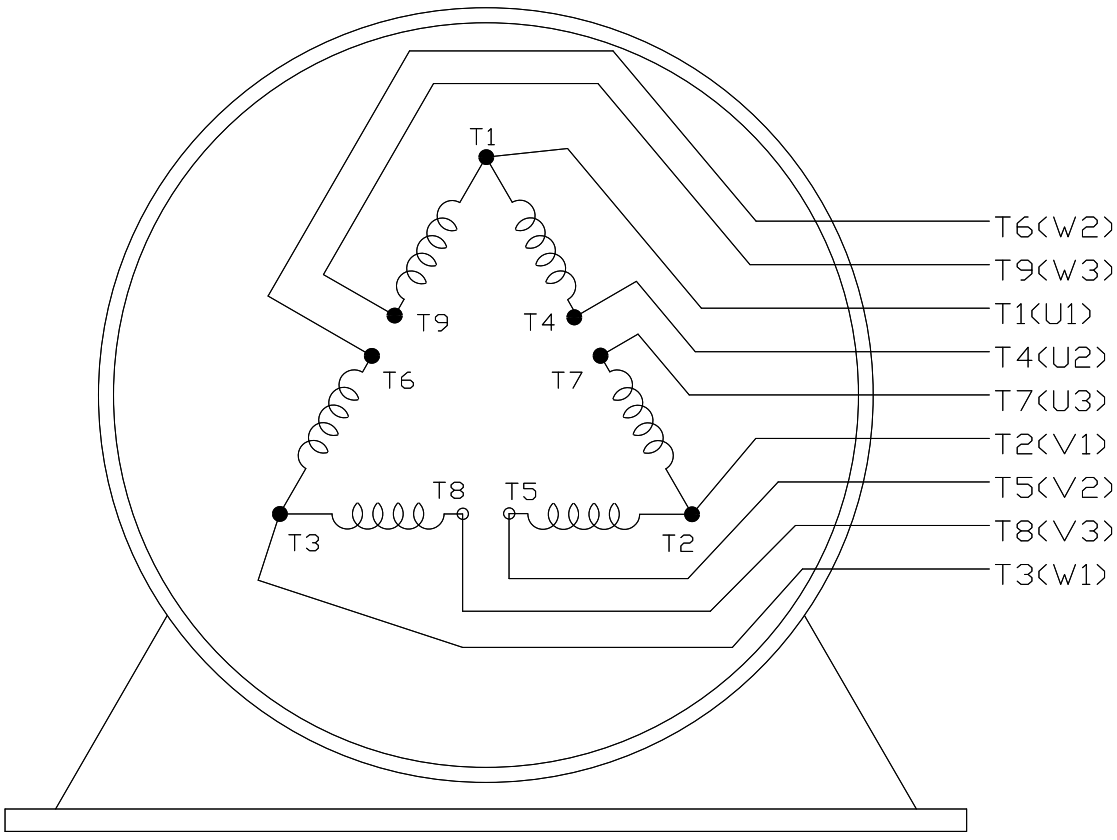
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LOW VOLTAGE



HIGH VOLTAGE





VIEW OF TERMINAL END

DRAWING REVISION: F	REVISION BY: SB	REV DATE/ © DATE: 08/01/2025	DRAWN BY: PGK	marathon™
REQUEST NUMBER: CR-0023654	APPROVED BY: SBD	DATE: 08/01/2025	DATE: 06/04/1997	
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED			APPROVED BY: GK	DESCRIPTION: CONN DIAGRAM-EXTERNAL DELTA CON. - 3ø - 9 LEADS
			DATE: 06/15/1997	
			REFERENCE	MATERIAL / PROCESS/FINISH
			THIRD ANGLE PROJECTION	SIZE: A / DRAWING NUMBER: EE7308K / SHEET: 1 OF 1

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

Data Sheet

Date: 8/25/2021
Customer:
Attention:
Submitted by:

marathon® Motors

254TTDBD6327

Submittal

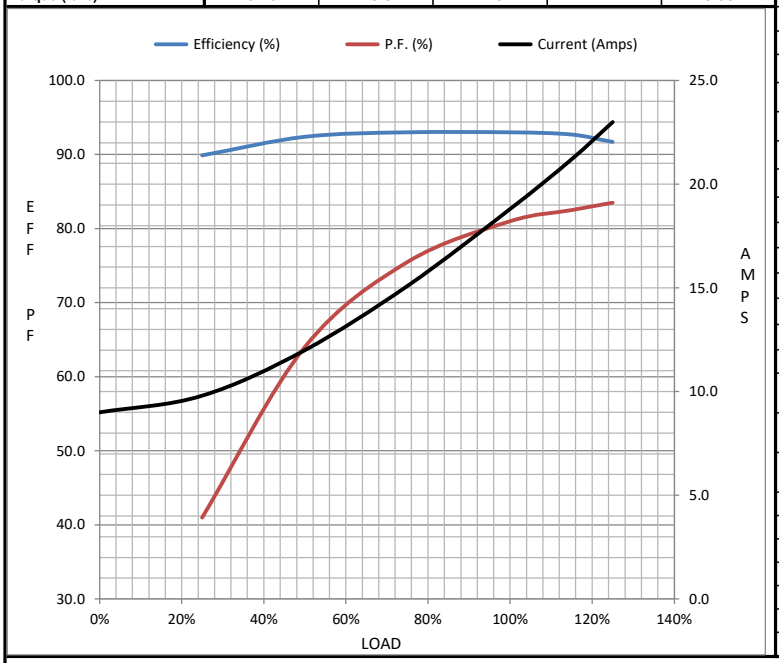
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	9.0	9.8	12.0	15.1	18.8	21.2	23.0	115	
Torque (ft-lb)	0.00	11.0	22.0	33.2	44.4	51.2	55.8	91.0	
RPM	1800	1792	1788	1780	1774	1,768	1765	0	
Efficiency (%)		89.9	92.4	93.0	93.0	92.7	91.7		
P.F. (%)	5.0	41.0	64.0	75.5	81.0	82.5	83.5	42.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1628	1774	1800
Current (Amps)	115	105	73.5	18.8	9.0
Torque (ft-lb)	91.0	78.0	119	44.4	0.00



Information Block

HP	15.0	
Sync. RPM	1800	
Frame	254	
Enclosure	DP	
Construction	TDB	
Voltage	230/460#190/380	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	40	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	2.30	Lb-Ft²
Ref Wdg	HA31604021 NONE	
Sound Pressure @ 1M	74	dBA
VFD Rating	CONSTANT 2:1/VARIABLE 10:1	
Outline Dwg	SS621049-100	
Conn. Diag	EE7308K	

Additional Specifications:

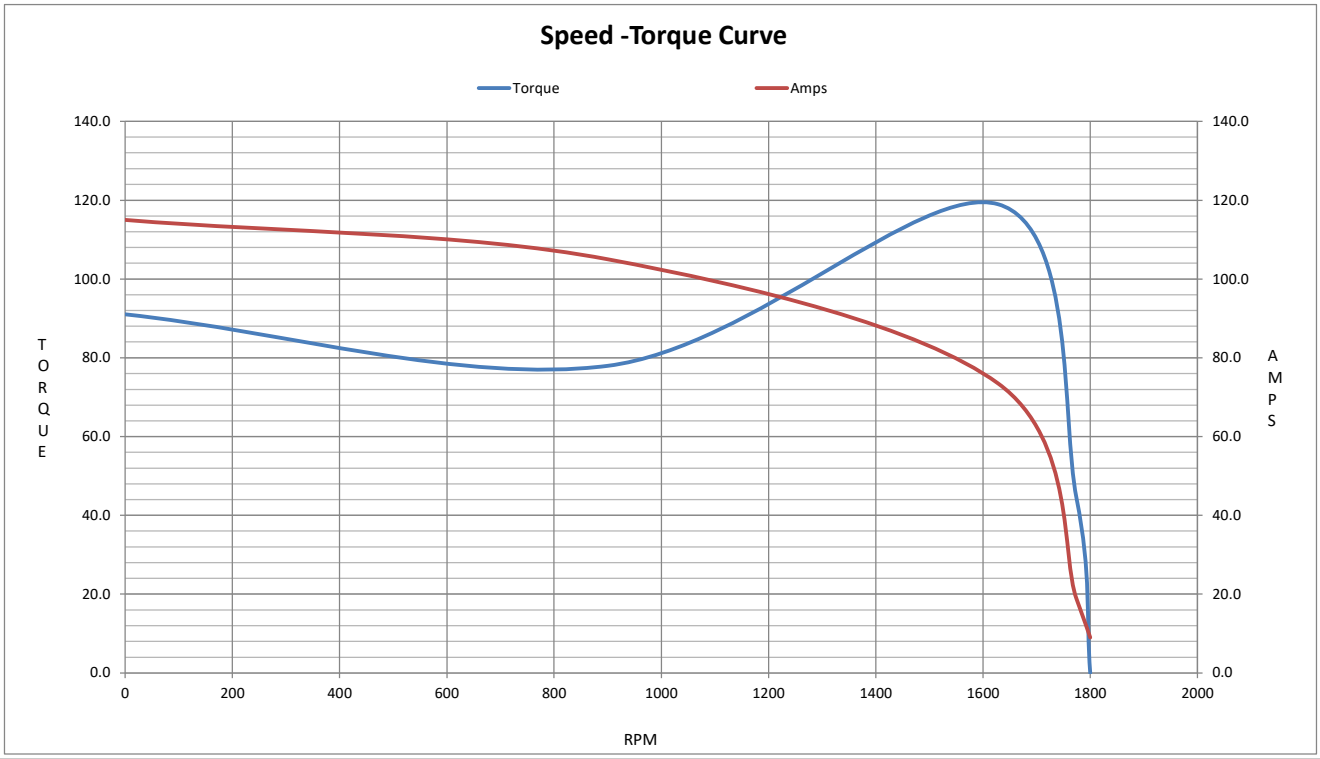
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EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.4120	0.2340	1.3440	1.4530	30.4670

Speed -Torque Curve



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

marathon® Motors

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #:
CONN. DIAGRAM: EE7308K
OUTLINE: SS621049-100
WINDING: HA31604021 NONE 2
SPEED:

CUSTOMER P.O. #:
REFERENCE MODEL #: 254TTDBD6327
CAT #: Y315
CUSTOMER PART #:
MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
15	11.2	1800	1774	254TZ	DP	TDB	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	37.5/18.8&32/16	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	93.0	3/4 LD EFF	93.0	1/2 LD EFF	92.4	GTD EFF	ELECT. TYPE	
F.L. PF	81.0	3/4 LD PF	75.5	1/2 LD PF	64.0	92.4	SQ CAGE INV RATED	

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
44.4 LB-FT	115	91.0 LB-FT 205%	119 LB-FT 268%	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX. MOTOR WGT
74 dBA	83 dBA	2.30 LB-FT²	90 LB-FT²	20 SEC.	2	319.2 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	NO	NONE	YES	RODENT	BLUE (ENAMEL)

BEARINGS DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL	BALL	POLYREX EM	SGL SPL EXT	1.625 x 5.00 IN SEK	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL
6309	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)	FLOAT
0.412	0.234	1.344	1.453	30.467	0.150	ODE

* NOTES *

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: 8/25/2021

FORM: 3531 REV_4 2/27/06

UL: V - LI,ME-INS,CONST UL REC