marathon®

Explosion Proof Motors

Model No: 256TTGCD6528
Catalog No: C501

Explosion Proof Motor, 20 & 15 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 256TC Frame, EPFC

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Product Information Packet: Model No: 256TTGCD6528, Catalog No: C501 Explosion Proof Motor, 20 & 15 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 256TC Frame, EPFC

Nameplate Specifications

Phase	**3**	Output HP	**20 & 15 Hp**
Output KW	**14.9 & 11.2 kW**	Voltage	**230/460 & 190/380 V**
Speed	**1768 & 1472 r/min**	Synchronous RPM	**1800 & 1500 r/min**
Service Factor	**1.00 & 1.00**	Frame	**256TC**
Enclosure	**Explosion Proof Fan cooled**	Thermal Protection	**Thermostat**
Efficiency	**93 & 92.7 %**	Ambient Temperature	**50 °C**
Frequency	**60 & 50 Hz**	Current	**48.5/24.2 & 44.5/22.3 A**
Power Factor	**83.5**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6309**
Opp Drive End Bearing Size	**6210**	UL	**UL Listed And CSA Certified**
CSA	**Y**	CE	**N**
IP Code	**54**	Number of Speeds	**1**
Hazardous Location	**DIV 1 EXP PROOF CL I GR CD CL II GR FG T3C**		

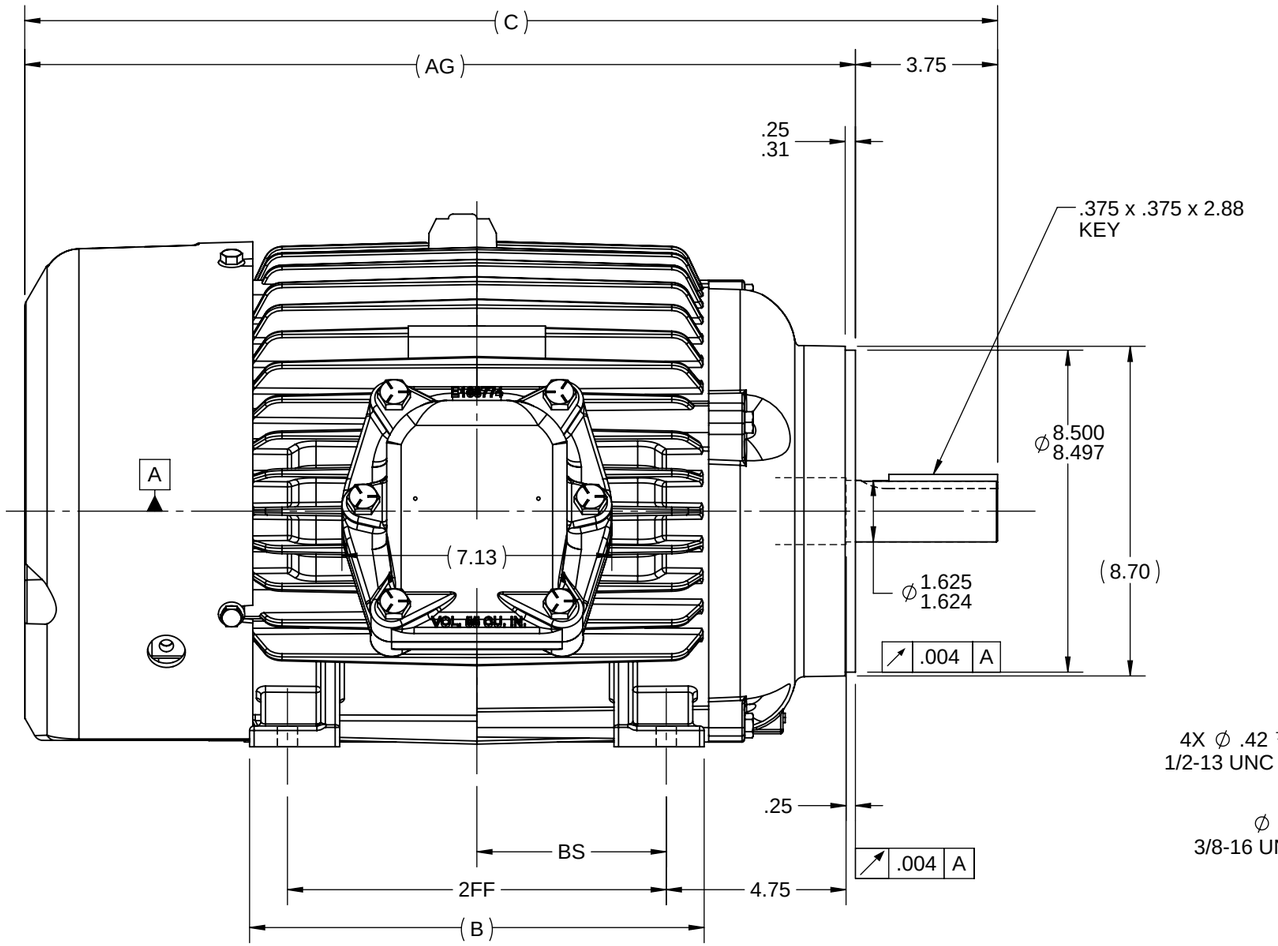
Technical Specifications

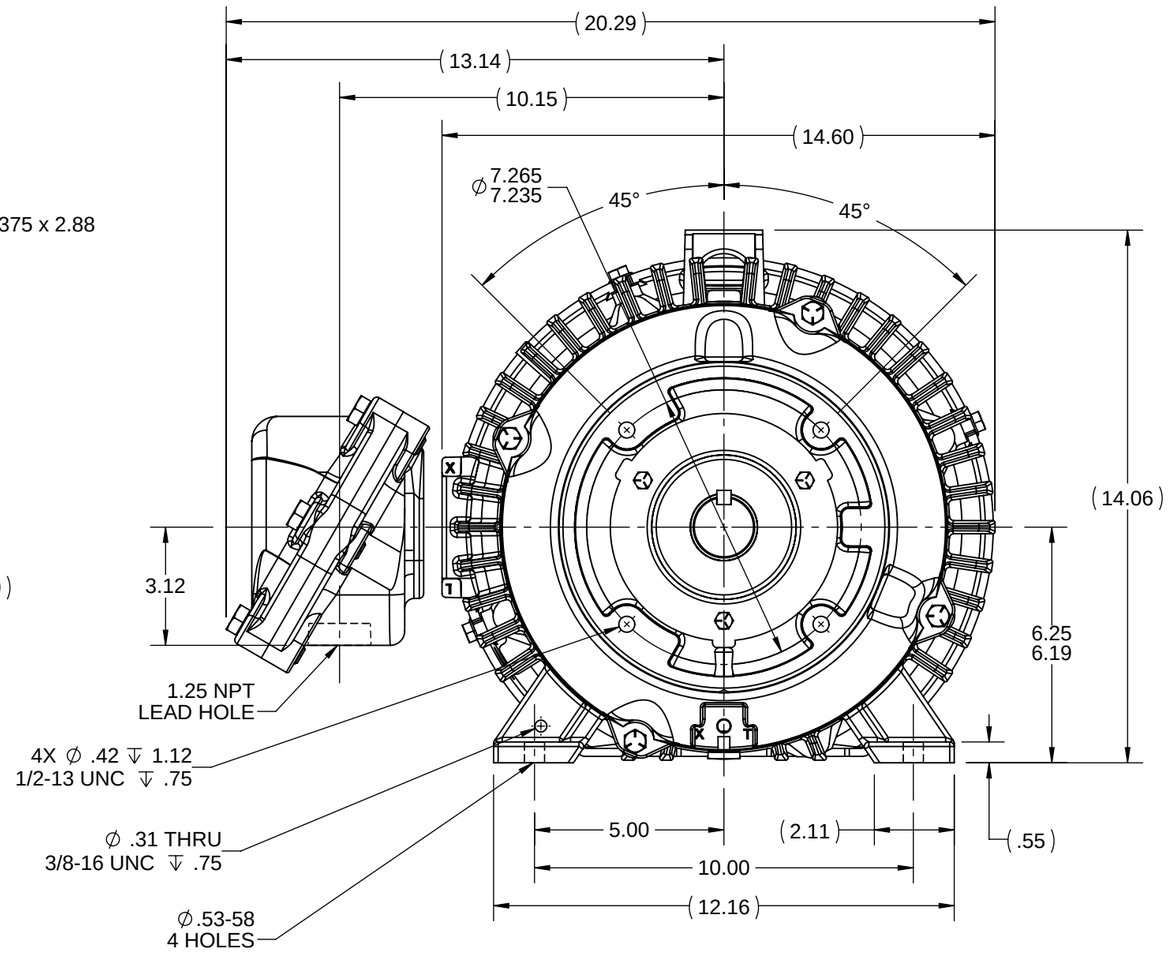
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Part Wdg Start Or Inverter**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**.513 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Shaft Diameter	**1.625 in**
Assembly/Box Mounting	**F1 Only**	Inverter Load	**Constant 10:1**

Drawings

Connection Drawing	**EE7308T**	Outline Drawing	**SS203036-1225**

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NOTES:
1. CONDUIT BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.
2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	2FF	BS	AG
1050	254TC	10.25	23.93	---	8.25	4.12	20.18
1225	256TC	12.00	25.68	---	10.00	5.00	21.93

DRAWING REVISION	REVISION BY	REV DATE/© DATE
B	SB	05/12/2026
REQUEST NUMBER	APPROVED BY	DATE
CR-0026230	RMS	05/12/2026

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

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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	JWO
DATE	01-27-2015
APPROVED BY	TB
DATE	01-27-2015
REFERENCE	
THIRD ANGLE PROJECTION	

marathon™

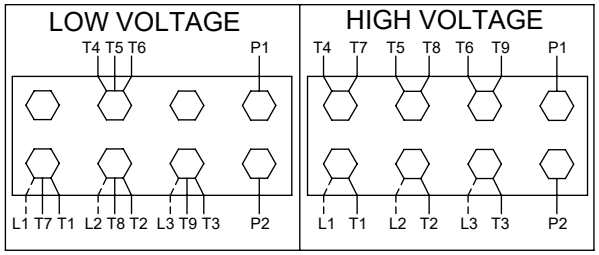
DESCRIPTION
OUTLINE
250T FR. - EXP. PR. - TGN - C'FACE

MATERIAL | PROCESS/FINISH

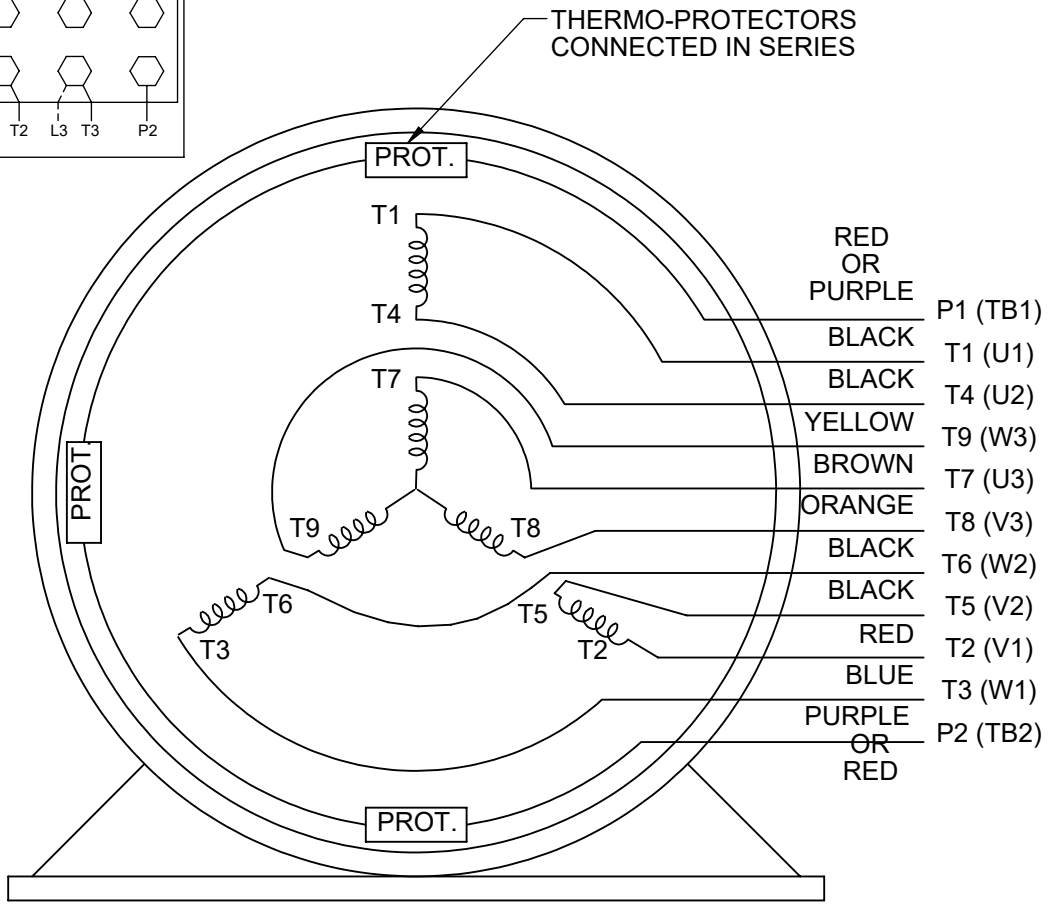
SIZE	DRAWING NUMBER	SHEET
B	SS203036	1 OF 1

HIGH VOLTAGE

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



THREE PHASE
DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE

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

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR IMG PLANT

DRAWING REVISION: U	REVISION BY: SB	REV DATE/© DATE: 08/01/2025	PRIMARY DIMENSIONS ARE INCH mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY	DRAWN BY: SMC	marathon™
REQUEST NUMBER: CR-0023654	APPROVED BY: SBD	DATE: 08/01/2025		DATE: 05-13-1992	
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED				APPROVED BY: TB	DESCRIPTION: CONN DIAGRAM-EXTERNAL
				DATE: 05-13-1992	3 PHASE - DUAL VOLTAGE MOTOR
				REFERENCE: EE7308/EE7300	MATERIAL / PROCESS/FINISH
				THIRD ANGLE PROJECTION	SIZE: A — DRAWING NUMBER: EE7308T — SHEET: 1 OF 1

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Data Sheet

Date: 10/29/2021
Customer:
Attention:
Submitted by:

marathon® Motors

256TTGCD6528

Submittal

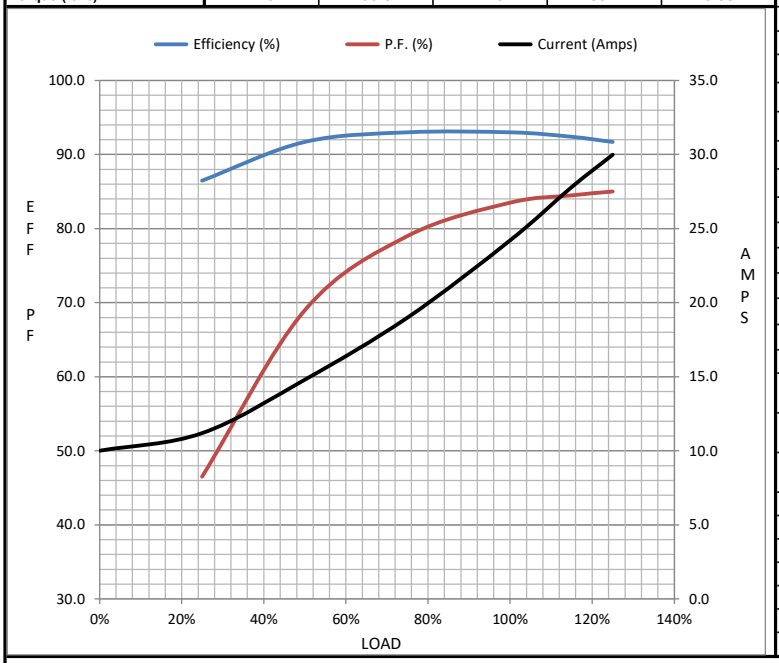
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	10.0	11.2	14.8	19.0	24.2	27.8	30.0	144	
Torque (ft-lb)	0.00	14.6	29.5	44.4	59.4	68.5	74.7	119	
RPM	1800	1792	1785	1778	1768	1,762	1760	0	
Efficiency (%)		86.5	91.7	93.0	93.0	92.4	91.7		
P.F. (%)	5.0	46.5	69.0	79.0	83.5	84.5	85.0	42.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1618	1768	1800
Current (Amps)	144	131	81.0	24.2	10.0
Torque (ft-lb)	119	99.0	146	59.4	0.00

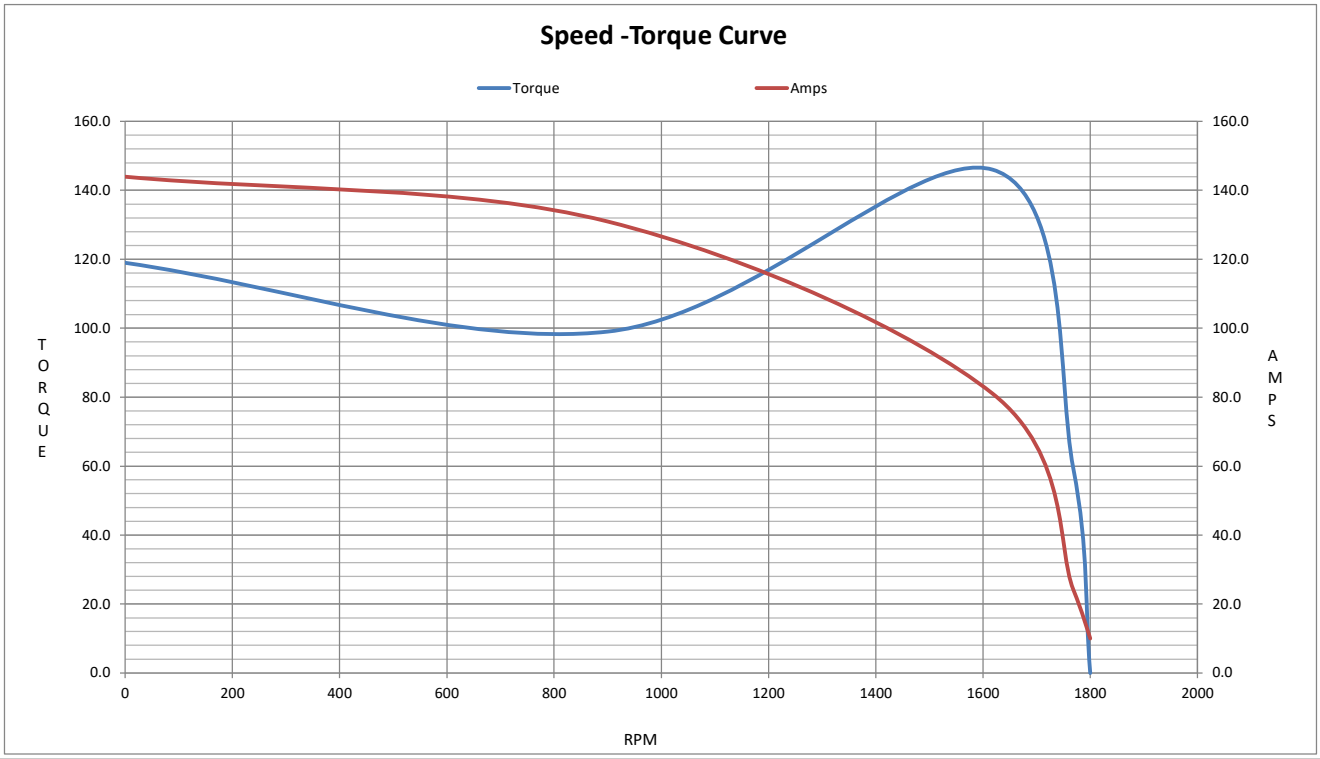


Information Block

HP	20.0	
Sync. RPM	1800	
Frame	256	
Enclosure	EPFC	
Construction	TFC	
Voltage	230/460#190/380	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	60	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	2.70	Lb-Ft²
Ref Wdg	HA31604018 NONE	
Sound Pressure @ 1M	65	dBA
VFD Rating	CONSTANT 10:1/VARIABLE 10:1	
Outline Dwg	SS203036-1225	
Conn. Diag	EE7308T	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.3410	0.2030	1.0370	1.2500	26.9800



marathon® Motors

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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #:
CONN. DIAGRAM: EE7308T
OUTLINE: SS203036-1225
WINDING: HA31604018 NONE 9
SPEED:

CUSTOMER P.O. #:
REFERENCE MODEL #: 256TTGCD6528
CAT #: C501
CUSTOMER PART #:
MOUNTING: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
20	14.9	1800	1768	256TC	EPFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	48.5/24.2&44.5/22.3	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	93.0	3/4 LD EFF	93.0	1/2 LD EFF	91.7	GTD EFF	ELECT. TYPE
F.L. PF	83.5	3/4 LD PF	79.0	1/2 LD PF	69.0	92.4	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)	
59.4 LB-FT	144	119 LB-FT 200%	146 LB-FT 246%	60	

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX. MOTOR WGT
65 dBA	74 dBA	2.70 LB-FT²	125 LB-FT²	20 SEC.	2	455 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	PROOF CL I GR CD CL II	NO	NONE	BLUE - RAL 5003 (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
6309	6210						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (N/C)	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
0.341	0.203	1.037	1.25	26.98	0.080	ODE

* NOTES *

INVERTER TORQUE: CONSTANT 10:1/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: 10/29/2021

FORM: 3531 REV_4 2/27/06

UL: NO LETTER - ALL BRANDS-UL LISTED AND CSA CERTIFIED DIV. 1 XP MOTORS