Explosion Proof Motors

Model No: 182TTGN6541
Catalog No: U989-P

Explosion Proof Motor, 3 & 2 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 182T Frame, EPFC

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Product Information Packet: Model No: 182TTGN6541, Catalog No: U989-P Explosion Proof Motor, 3 & 2 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 182T Frame, EPFC

Nameplate Specifications

Phase	**3**	Output HP	**3 & 2 Hp**
Output KW	**2.2 & 1.5 kW**	Voltage	**230/460 & 190/380 V**
Speed	**1765 & 1470 r/min**	Synchronous RPM	**1800 & 1500 r/min**
Service Factor	**1.15 & 1.15**	Frame	**182T**
Enclosure	**Explosion Proof Fan cooled**	Thermal Protection	**Thermostat**
Efficiency	**90.2 & 88.5 %**	Ambient Temperature	**40 °C**
Frequency	**60 & 50 Hz**	Current	**8/4 & 6.8/3.4 A**
Power Factor	**80**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**K**	Drive End Bearing Size	**6206**
Opp Drive End Bearing Size	**6206**	UL	**UL Listed; also, UL Certified for Canada**
CSA	**N**	CE	**N**
IP Code	**54**	Number of Speeds	**1**
Hazardous Location	**DIV 1 EXP PROOF CL I GR CD CL II GR FG T3B**		

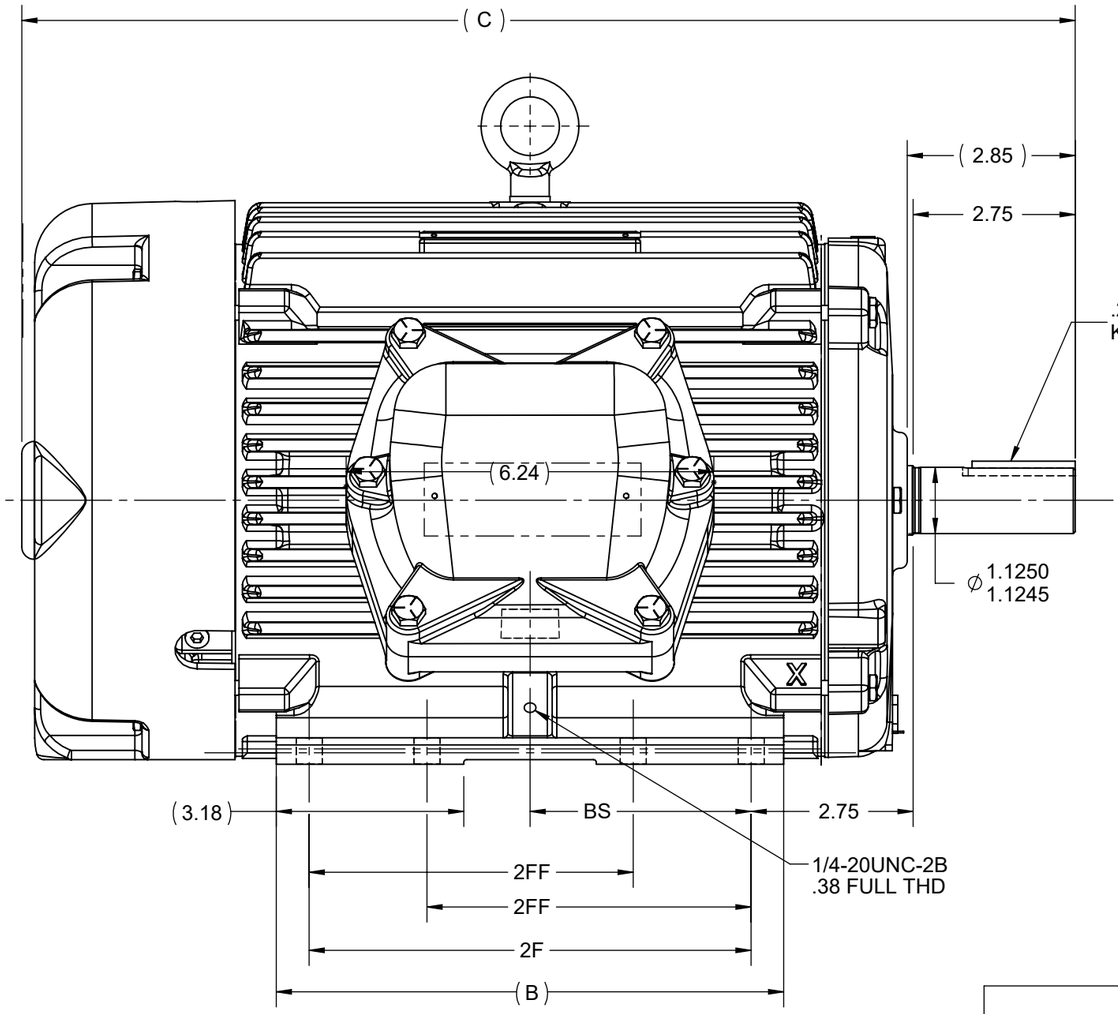
Technical Specifications

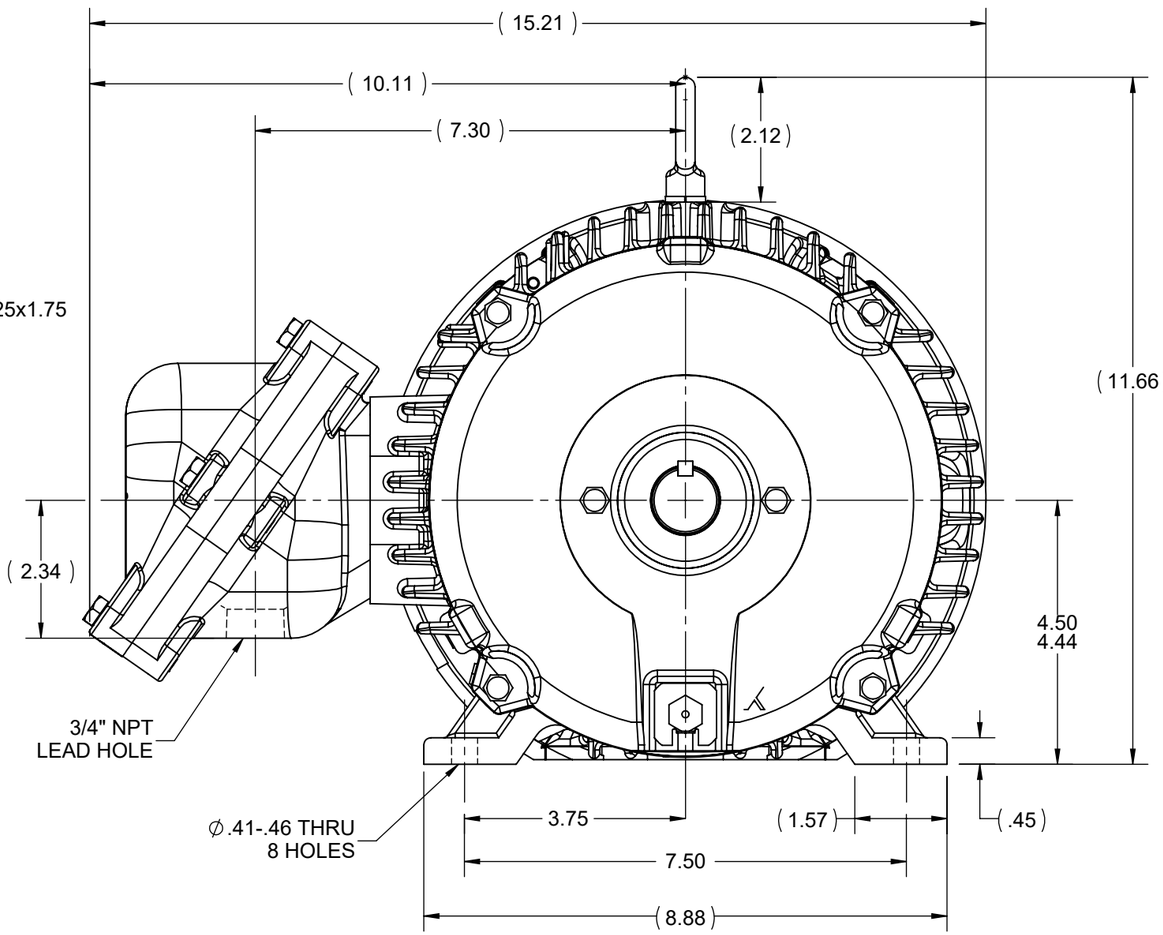
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**3.76 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Overall Length	**15.87 in**
Frame Length	**8.0 in**	Shaft Diameter	**1 1/8 in**
Shaft Extension	**2.85 in**	Assembly/Box Mounting	**F1 Only**
Inverter Load	**Constant 10:1**		

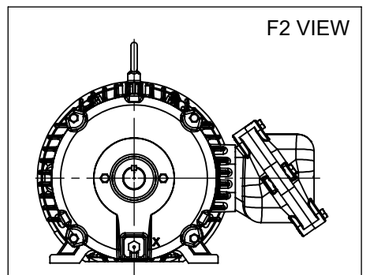
Drawings

Connection Drawing	**A-EE7308T**	Outline Drawing	**035660-800**

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NOTES:
1. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
2. CONDUIT BOX CAN ROTATED IN 90° STEPS.
3. CONDUIT BOX CAN MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. THIS MODIFICATION CAN BE PERFORMED ONLY BY THE ORIGINAL EQUIPMENT MANUFACTURER, OR BY A FACILITY THAT IS COVERED UNDER UNDERWRITERS LABORATORIES INC. CATEGORY PTKQ. TITLED "MOTORS AND GENERATORS REBUILT FOR USE IN HAZARDOUS LOCATIONS."

DASH	FRAME	C	B	2F	2FF	BS
1000	184	17.88	8.61	7.50	5.50	3.75
800	182/184	15.88	6.61	5.50	4.50	2.75

DRAWING REVISION	REVISION BY	REV DATE/© DATE
H	MN	07/09/2025
REQUEST NUMBER	APPROVED BY	DATE
NMR-0237951	MANJUNATH	07/09/2025

REQUEST NUMBER DESCRIPTION
UPDATED BS IN DRAWING

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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	CTO
DATE	07-05-2007
APPROVED BY	SW
DATE	3/26/2008
REFERENCE	

marathon™

DESCRIPTION
OUTLINE
180 FR.

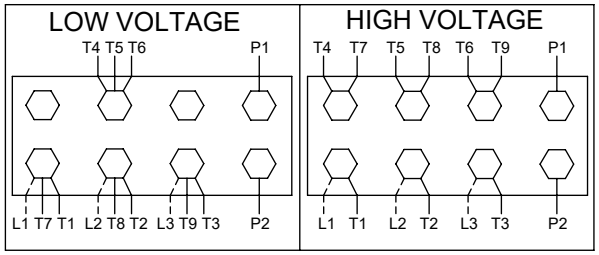
MATERIAL | PROCESS/FINISH

THIRD ANGLE PROJECTION

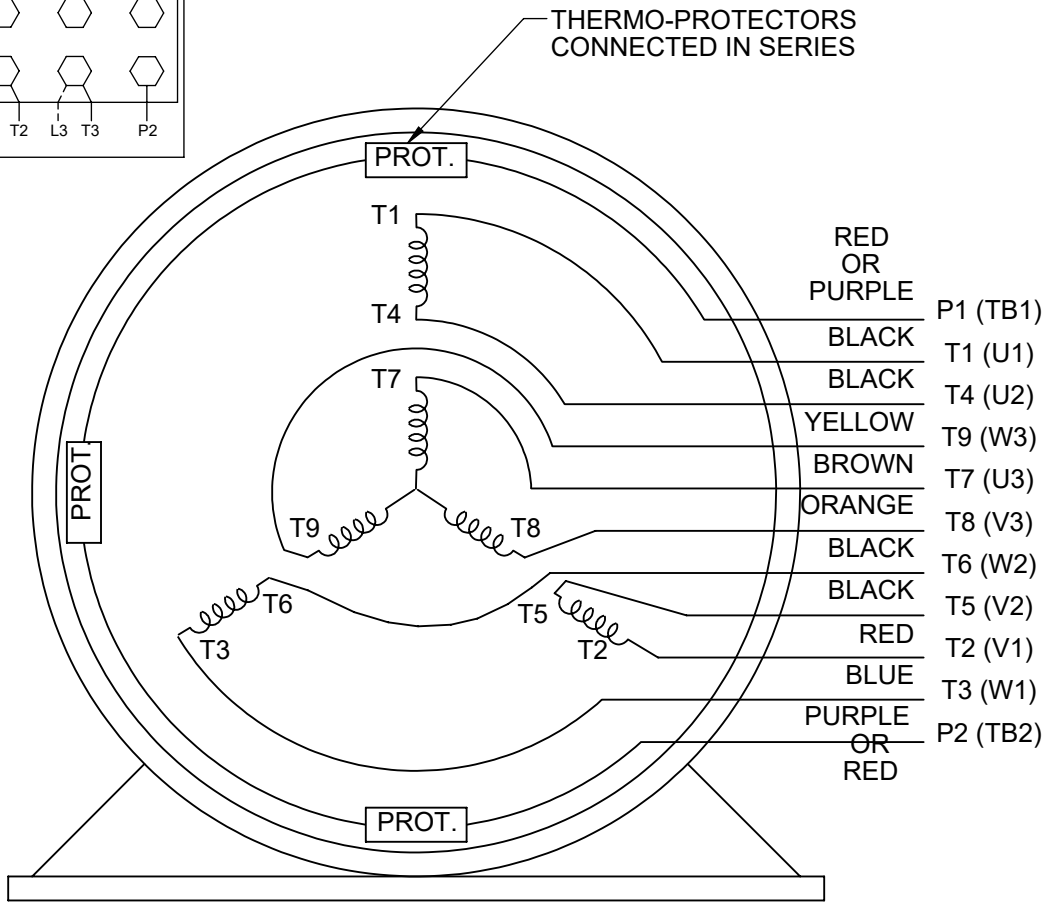
SIZE B | DRAWING NUMBER 035660 | SHEET 1 OF 1

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
(U3) T7 — L1
(V1) T2
(V3) T8 — L2
(W1) T3
(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: 6/19/2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® electric

182TTGN6541

Submittal

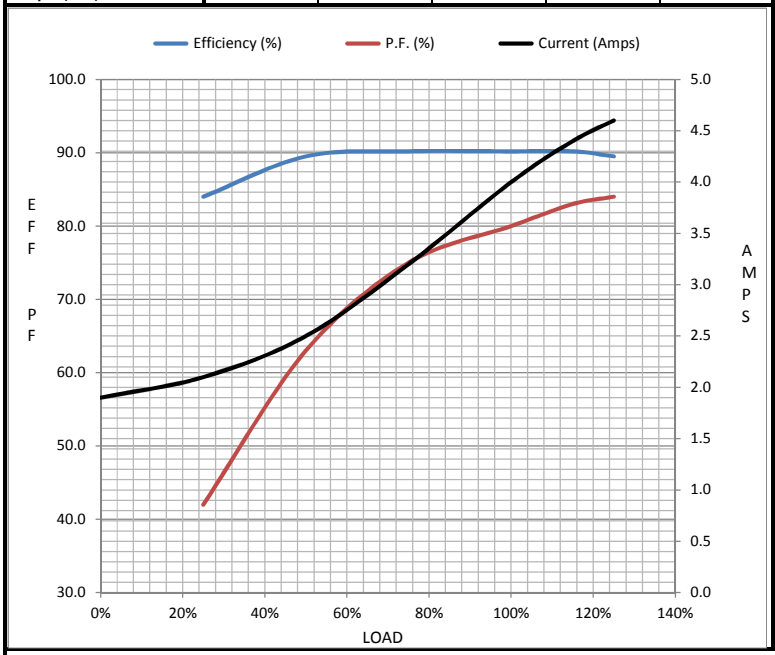
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	1.90	2.10	2.50	3.2	4.0	4.4	4.6	32.0	
Torque (ft-lb)	0.00	2.20	4.4	6.7	9.0	10.4	11.2	22.5	
RPM	1800	1790	1785	1775	1765	1,760	1755	0	
Efficiency (%)		84.0	89.5	90.2	90.2	90.2	89.5		
P.F. (%)	6.5	42.0	63.0	75.0	80.0	83.0	84.0	47.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	750	1500	1765	1800
Current (Amps)	32.0	30.0	23.0	4.0	1.90
Torque (ft-lb)	22.5	20.0	35.0	9.0	0.00

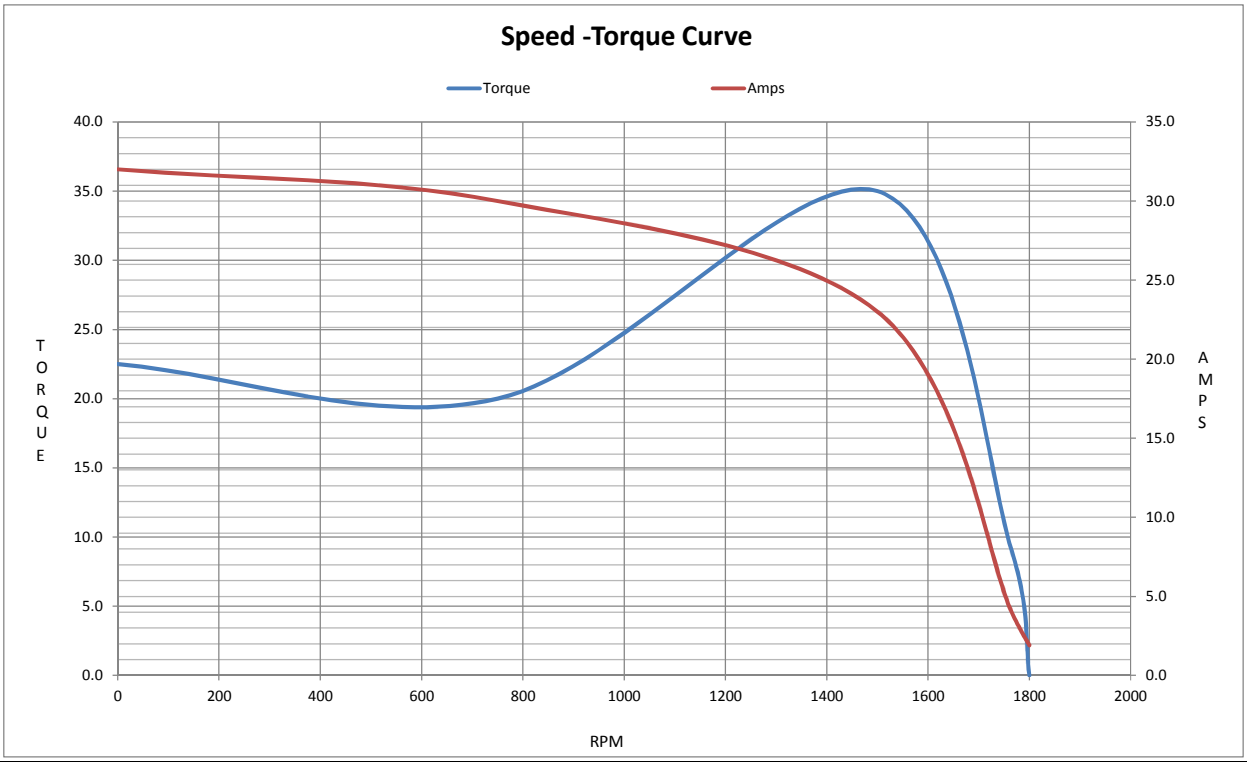


Information Block

HP	3.0
Sync. RPM	1800
Frame	182
Enclosure	TEFC
Construction	TFS
Voltage	230/460#190/380 V
Frequency	60 Hz
Design	B
LR Code letter	K
Service Factor	1.15
Temp Rise @ FL	30 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	0.40 Lb-Ft²
Ref Wdg	K1824116 R1
Sound Pressure @ 1M	62 dBA
VFD Rating	CONSTANT 10:1
Outline Dwg	035660-800
Conn. Diag	A-EE7308T
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
2.3530	1.6160	5.0840	7.9000	130.4100



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CERTIFICATION DATA SHEET

Model#:	182TTGN6541 AB	**WINDING#:**	K1824116 R1 1
CONN. DIAGRAM:	A-EE7308T	**ASSEMBLY:**	F1 ONLY
OUTLINE:	035660-800		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
3&2	2.24&1.49	1800	1765&1470	182T	EPFC	K	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/380	8/4&6.8/3.4	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.15	40	3300

FULL LOAD EFF: 90.2&88.5	3/4 LOAD EFF: 90.2	1/2 LOAD EFF: 89.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 80&76	3/4 LOAD PF: 75	1/2 LOAD PF: 63	89.5	SQ CAGE INV RATED	3.8 / 1.9

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
9 LB-FT	64 / 32	22.5 LB-FT 250	35 LB-FT 389	30

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.4 LB-FT^2	40 LB-FT^2	25 SEC.	2	95 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	TRUE	EXP PROOF CL I GR C&D CL II GR F&G T3B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON
6206	6206						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 10:1
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

*
NOTES
*

DATE: 06/27/2017 03:42:34 AM
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