

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 286TTFNA16328

Catalog No: E208-P

30 HP, General Purpose Motors, 3 phase, 1800 RPM, 230/460 V, 286T Frame, TEFC  
General Purpose Motors



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**RegalRexnord**

### Nameplate Specifications

Output HP	30 Hp	Output KW	22.4 kW
Frequency	60 Hz	Voltage	230/460 V
Current	73.0/36.5 A	Speed	1773 rpm
Service Factor	1.15	Phase	3
Efficiency	94.1 %	Power Factor	82
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	286T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

### Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.205 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	28.16 in
Frame Length	14.25 in	Shaft Diameter	1.875 in
Shaft Extension	4.82 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7308	Outline Drawing	B-SS311111-1425

4

3

Uncontrolled Copy

2

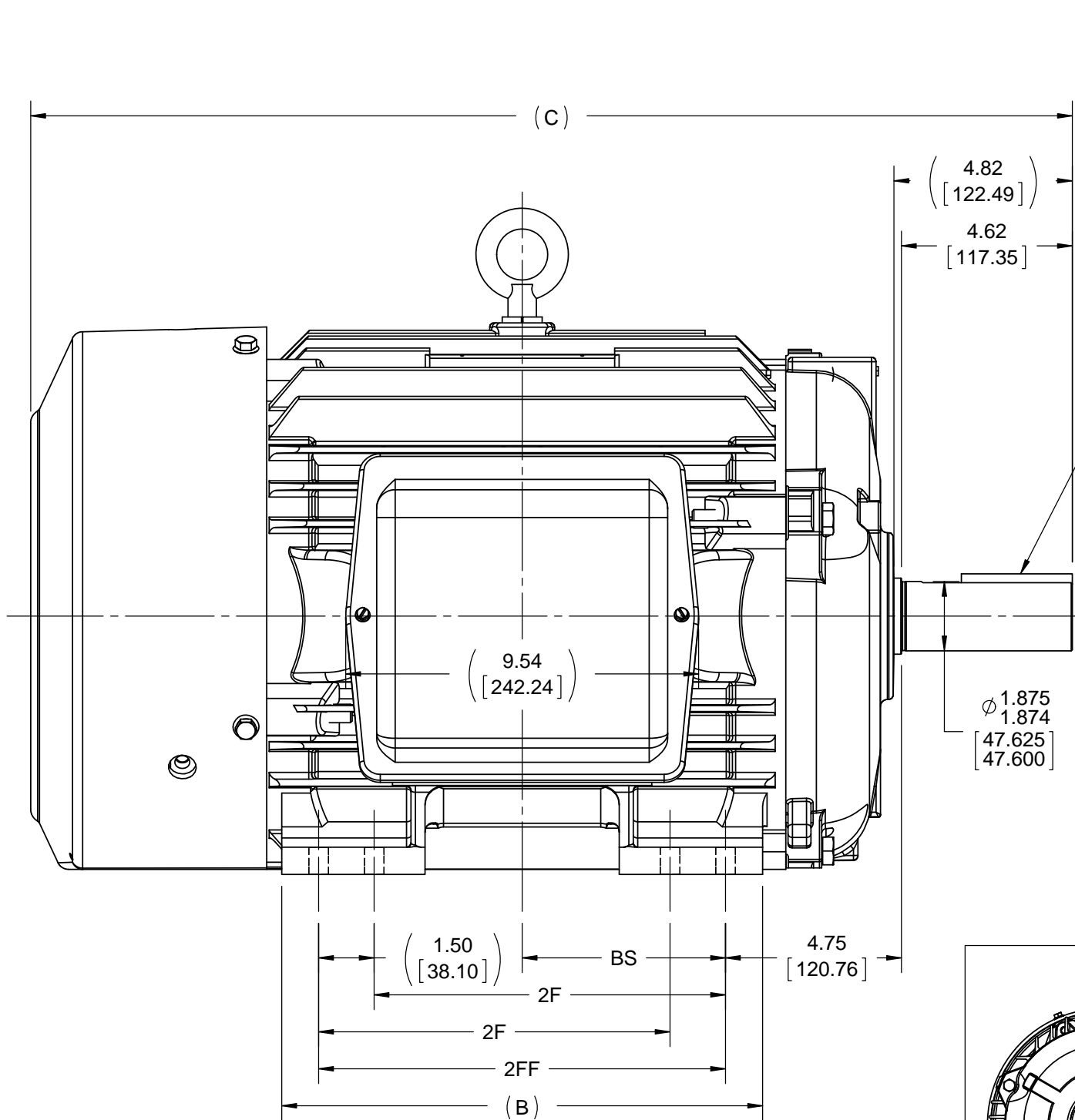
1

B

B

A

A



.500x.500x3.25  
[12.700x12.700x82.55]  
KEY

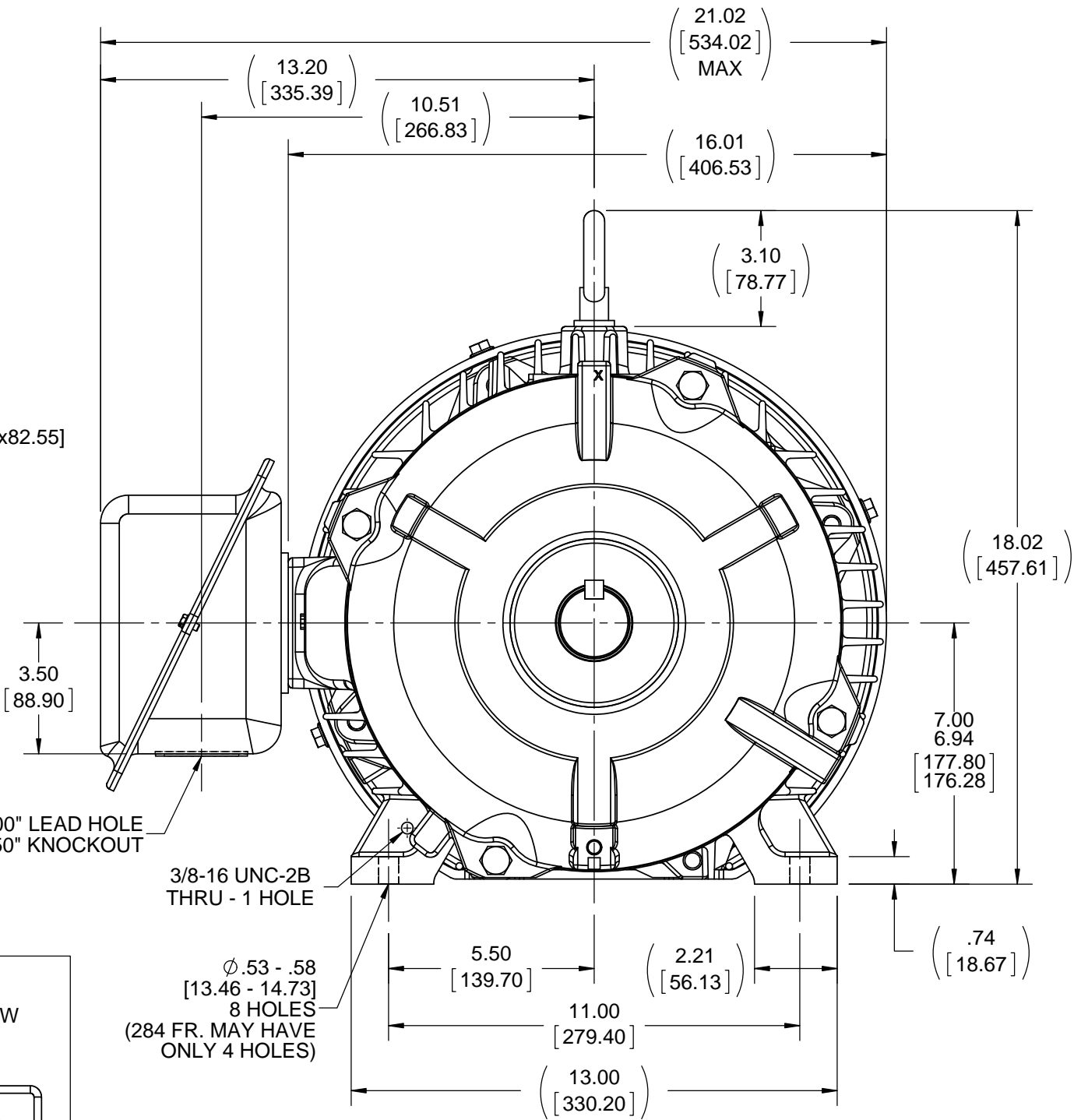
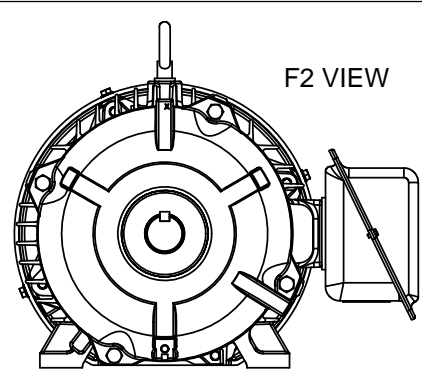
Ø 1.875  
1.874  
[47.625]  
[47.600]

Ø 2.00" LEAD HOLE  
Ø 2.50" KNOCKOUT

3/8-16 UNC-2B  
THRU - 1 HOLE

Ø .53 - .58  
[13.46 - 14.73]  
8 HOLES  
(284 FR. MAY HAVE  
ONLY 4 HOLES)

F2 VIEW



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

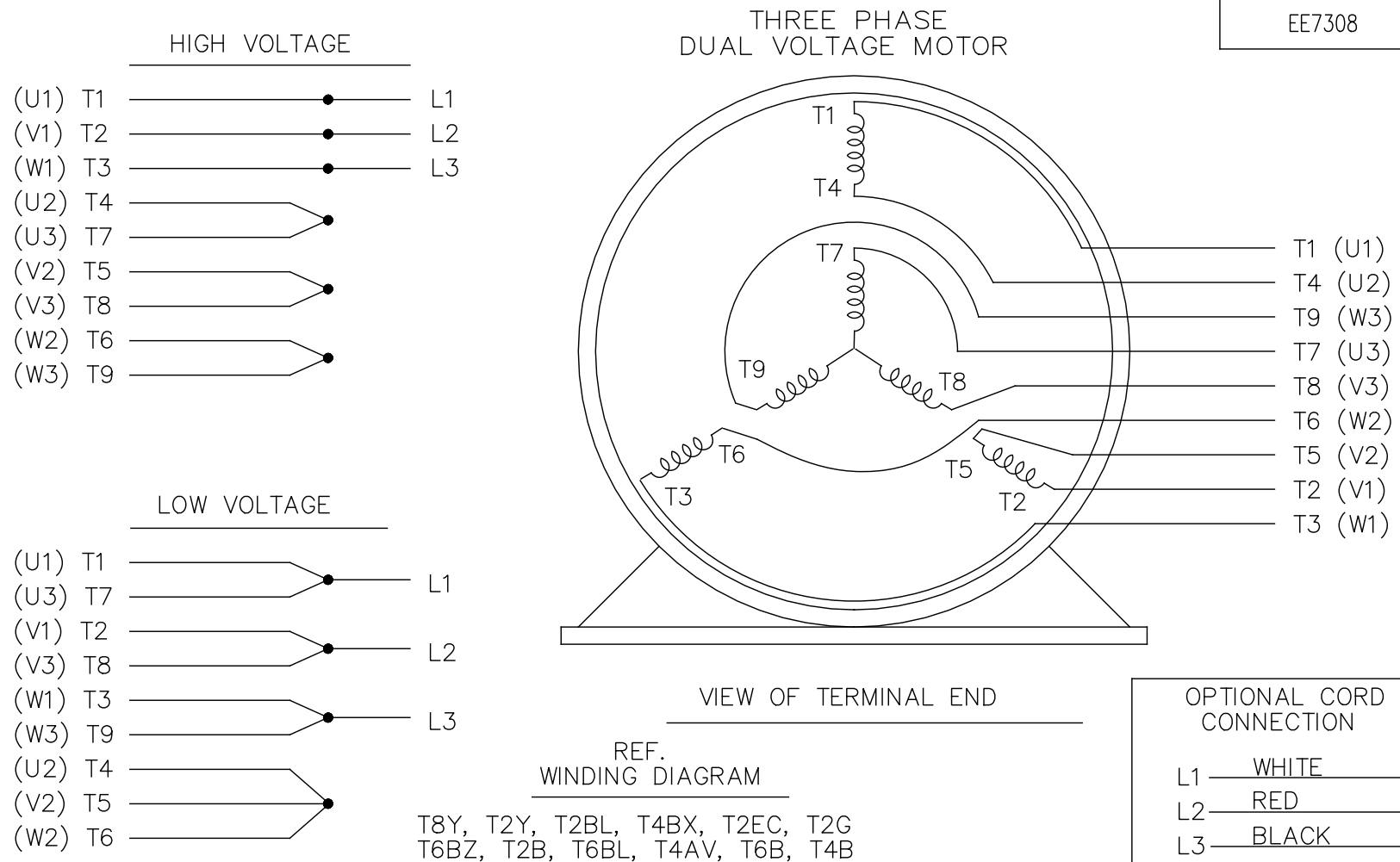
DASH	FRAME	B	C	2F	2FF	BS
1275	284T	12.50 [317.50]	26.66 [677.16]	---	9.50 [241.30]	4.75 [120.65]
1425	284/ 286T	13.00 [330.20]	28.16 [715.26]	9.50 [241.30]	11.00 [279.40]	5.50 [139.70]


DRAWING REVISION D	REVISION BY M GERTSCHEN	DATE 12-05-2016
ECO ECO-0113979	APPROVED BY T VUE	DATE 12-05-2016
ECO DESCRIPTION ADDED F2 VIEW		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] CORNER FILLETS: .02 [0.51] MACHINED SURFACES: 200 INCH 5.1 mm			
mm SHOWN IN [BRACKETS]			

DRAWN BY CAV	DATE 01-31-2001
APPROVED BY DD	DATE 01-31-2001
REFERENCE	
THIRD ANGLE PROJECTION	

REGAL™ Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 280T FR. - TEFC - 12.50 LAM.	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS311111
SHEET 1 OF 1	



				TOLERANCES UNLESS SPECIFIED		 <b>Regal</b> Beloit America, Inc.	DRAWN RM 11/20/1990	
5	CHG TO REGAL LOGO	SL 09/10/2015	AB	DEC.	INCHES		CHK ML 11/21/1990	
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1		APPD SAS 04/24/2003	
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		SCALE 1=1	
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005	TITLE CONNECTION DIAGRAM 3ø — DUAL VOLTAGE MOTOR	REF	
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		FMF	
NO.	REVISION	BY & DATE	CHK	ANG	±7°30"	FINISH	PREV	
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		CAD FILE ee7308	SIZE A	DRAWING NO. EE7308	PAGE OF 5
			DIST WP					

## CERTIFICATION DATA SHEET

**Model#:** 286TTFNA16328 AA  
**CONN. DIAGRAM:** A-EE7308  
**OUTLINE:** B-SS311111-1425

**WINDING#:** K2864159 NONE 6  
**ASSEMBLY:** F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
30	22.4	1800	1773	286T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	73/36.5	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 94.1	3/4 LOAD EFF: 94.1	1/2 LOAD EFF: 93.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 82	3/4 LOAD PF: 77	1/2 LOAD PF: 67.5	93.6	SQ CAGE INV RATED	30 / 15

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
89 LB-FT	434 / 217	165 LB-FT 185	245 LB-FT 275	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	4.6 LB-FT^2	225 LB-FT^2	25 SEC.	2	540 LBS.

## \*\*\* SUPPLEMENTAL INFORMATION \*\*\*

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6311	6210	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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: CONSTANT 20:1			
INV. HP SPEED RANGE: 1.5 X BASE SPEED			
ENCODER: NONE			
NONE NONE			
NONE NONE PPR			
BRAKE: NONE NONE			
NONE P/N NONE			
NONE NONE			
NONE FT-LB	NONE V	NONE Hz	

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\*

DATE: 06/27/2017 03:55:50 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

## Data Sheet

Date: 16-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



286TTFNA16328

Submittal

Data @ 460 V

## Motor Load Data

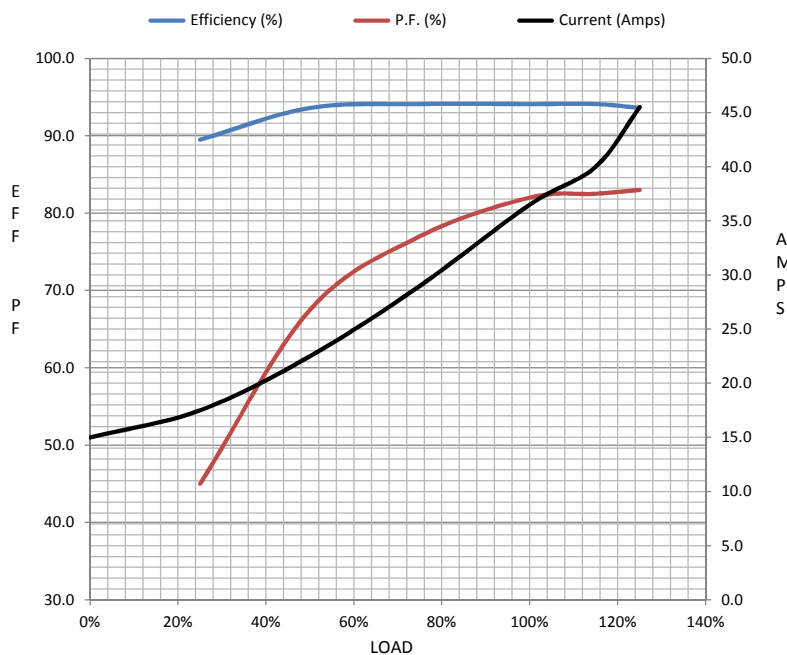
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	15.0	17.5	22.5	29.0	36.5	40.0	45.5	217	
Torque (ft-lb)	0.00	22.0	44.0	66.5	89.0	100	112	165	
RPM	1800	1795	1785	1780	1773	1,770	1765	0	
Efficiency (%)		89.5	93.6	94.1	94.1	94.1	93.6		
P.F. (%)	6.0	45.0	67.5	77.0	82.0	82.5	83.0	34.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1650	1773	1800
Current (Amps)	217	200	130	36.5	15.0
Torque (ft-lb)	165	155	245	89.0	0.00

## Information Block

HP	30.0			
Sync. RPM	1800			
Frame	286			
Enclosure	TEFC			
Construction	TFN			
Voltage	230/460 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	1,000 feet			
Rotor/Shaft wk²	4.6 Lb-Ft²			
Ref Wdg	K2864159 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	B-SS311111-1425			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1250	0.1360	0.7240	0.9370	17.7850



## Speed -Torque Curve

