

# PRODUCT INFORMATION PACKET

Model No: 284THFNA19033

Catalog No: W561

25 HP Severe Duty Motor, 3 phase, 1800 RPM, 575 V, 284T Frame, TEFC  
Severe Duty Motors



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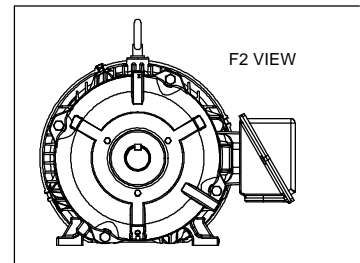
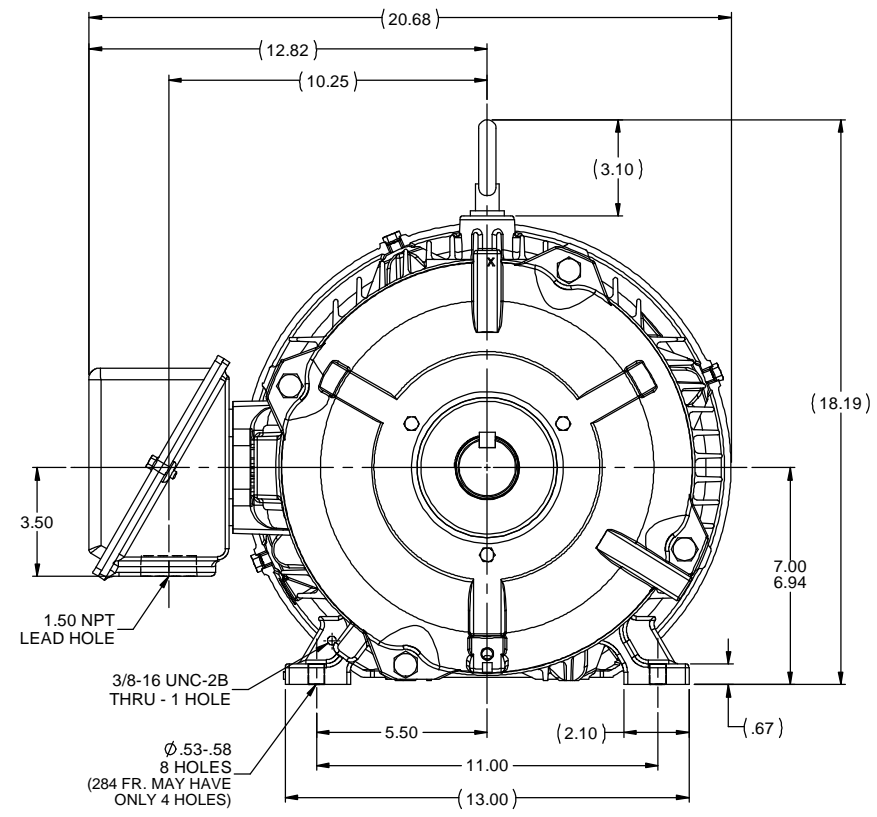
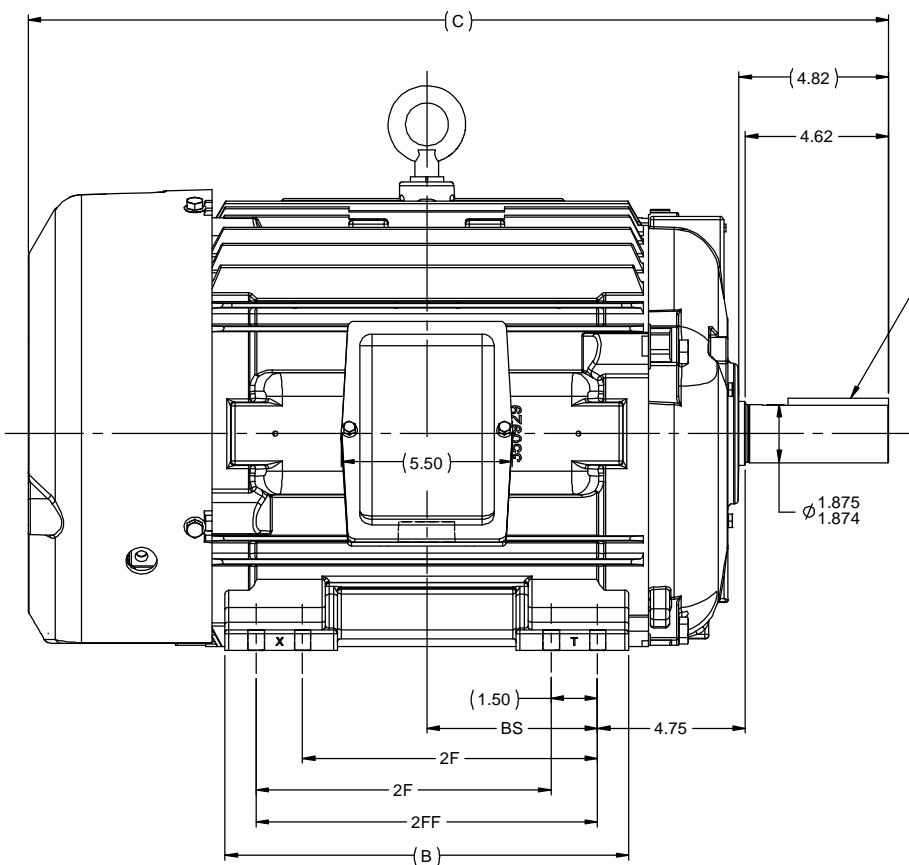
**Nameplate Specifications**

Output HP	<b>25 Hp</b>	Output KW	<b>18.7 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>575 V</b>
Current	<b>24.8 A</b>	Speed	<b>1774 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>93.6 %</b>	Power Factor	<b>81</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>284T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6311</b>	Opp Drive End Bearing Size	<b>6210</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>56</b>
Number of Speeds	<b>1</b>		

**Technical Specifications**

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.251 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>T</b>	Overall Length	<b>26.21 in</b>
Frame Length	<b>12.75 in</b>	Shaft Diameter	<b>1.875 in</b>
Shaft Extension	<b>4.82 in</b>	Assembly/Box Mounting	<b>F1/F2 Capable</b>
Connection Drawing	<b>A-EE7300</b>	Outline Drawing	<b>B-SS311057-1275</b>

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- NOTES:  
 1. CONDUIT BOX CAN BE ROTATED 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.

1275	284T	26.21	12.50	9.50	---	4.75
1425	284/286T	27.71	13.00	9.50	11.00	5.50
<b>DASH</b>	<b>FRAME</b>	<b>C</b>	<b>B</b>	<b>2F</b>	<b>2FF</b>	<b>BS</b>

		TOLERANCES UNLESS SPECIFIED		marathon electric		DRAWN
		DEC	INCHES			CAV 10-18-2000
4	UPDATED TO NEW FRAME DESIGN MU106205	MSG 08-22-2012	MSG x	±.1		CHK ML 10-18-2000
3	REDRAWN IN AUTOCAD - NO CHANGE	TAT 06-29-2004	ML xx	±.03	TITLE OUTLINE - TEFC - TGN	APPR BW 10-18-2000
2	ADDED NOTE 3 MU35810	DAH 02-06-2001	ML xxx	±.005	280T FR. - BB - STD - 12.50 LAM.	SCALE 1:4
1	NEW DRAWING MU34031	MSG 08-23-2012	ML xxxxx	±.0005		REF
NO	REVISION	BY & DATE	CHK LANG	±1/2°	FINISH	FMF MU34031
					PREV	PAGE OF
					NETWORK FILE NAME SS311057	REV
					SIZE <b>B</b>	DRAWING NO <b>SS311057</b>
						REV <b>4</b>

**THREE PHASE - SINGLE VOLTAGE  
MOTOR - CONDUIT BOX @ 'A'**

**TO REVERSE ROTATION:  
INTERCHANGE ANY TWO  
LINE LEAD CONNECTIONS.**

**TERMINAL BLOCK WHEN SPECIFIED**



**VIEW OF TERMINAL END**

**IF MOTOR HAS  
6 LEADS**



A-9806 DECAL

**OPTIONAL CORD  
CONNECTION**

- L1 \_\_\_\_\_ WHITE \_\_\_\_\_
- L2 \_\_\_\_\_ RED \_\_\_\_\_
- L3 \_\_\_\_\_ BLACK \_\_\_\_\_

DRAWING REVISION AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION <b>UPDATED TO CURRENT STANDARDS</b>		
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DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION

Regal Beloit America, Inc.	
MATERIAL	PROCESS/FINISH
SIZE <b>A</b>	DRAWING NUMBER <b>EE7300</b>
SHEET <b>1 OF 1</b>	

**CERTIFICATION DATA SHEET**

**Model#:** 284THFNA19033 AB      **WINDING#:** K2844120 NONE 5  
**CONN. DIAGRAM:** A-EE7300      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** B-SS311057-1275

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25	18.7	1800	1774	284T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	24.8	LINE OR INVERTER	CONTINUOU S	F3	1.15	40	3300

FULL LOAD EFF: 93.6	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 93	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 81	3/4 LOAD PF: 75	1/2 LOAD PF: 65	92.4	SQ CAGE INV RATED	10.8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
74 LB-FT	144.8	140 LB-FT 189	215 LB-FT 291	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	4.2 LB-FT^2	175 LB-FT^2	25 SEC.	2	475 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	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	1045 HOT ROLLED (C-204)	CAST IRON
6311	6210						

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

\*  
N  
O  
T  
E  
S  
\*

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

DATE: 06/23/2017 07:30:59 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

Data Sheet

Date: 6/19/2017

284THFNA19033

Customer: \_\_\_\_\_



Attention: \_\_\_\_\_

Submittal

Submitted by: FAREEDA DUDEKULA

Data @ 575 V

Motor Load Data

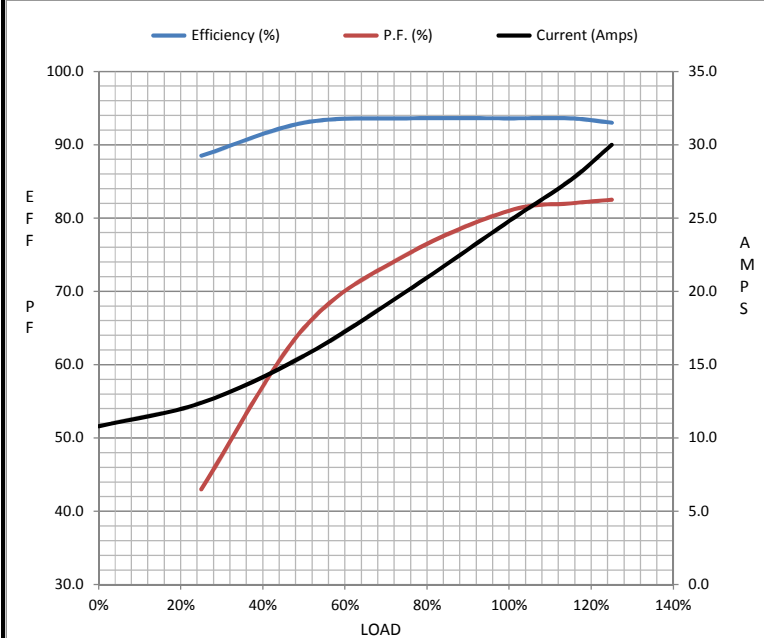
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	10.8	12.4	15.6	20.0	24.8	27.6	30.0	145
Torque (ft-lb)	0.00	18.5	37.0	55.5	74.0	85.5	93.0	140
RPM	1800	1795	1785	1780	1774	1,765	1760	0
Efficiency (%)		88.5	93.0	93.6	93.6	93.6	93.0	
P.F. (%)	5.5	43.0	65.0	75.0	81.0	82.0	82.5	33.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1675	1774	1800
Current (Amps)	145	132	100	24.8	10.8
Torque (ft-lb)	140	130	215	74.0	0.00

Information Block

HP	25.0
Sync. RPM	1800
Frame	284
Enclosure	TEFC
Construction	TFN
Voltage	575 V
Frequency	60 Hz
Design	B
LR Code letter	G
Service Factor	1.15
Temp Rise @ FL	55 °C
Duty	CONT
Ambient	40 °C
Elevation	1,000 feet
Rotor/Shaft wk <sup>2</sup>	4.2 Lb-Ft <sup>2</sup>
Ref Wdg	K2844120 NONE
Sound Pressure @ 1M	65 dBA
VFD Rating	CONSTANT 10:1
Outline Dwg	B-SS311057-1275
Conn. Diag	A-EE7300



Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.2350	0.2400	1.3310	1.6650	31.3500

Speed -Torque Curve

