

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 284THFNA19048

Catalog No: W560-P

XRI®-841 Severe Duty Motor, 25 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 284T Frame, TEFC



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**RegalRexnord**

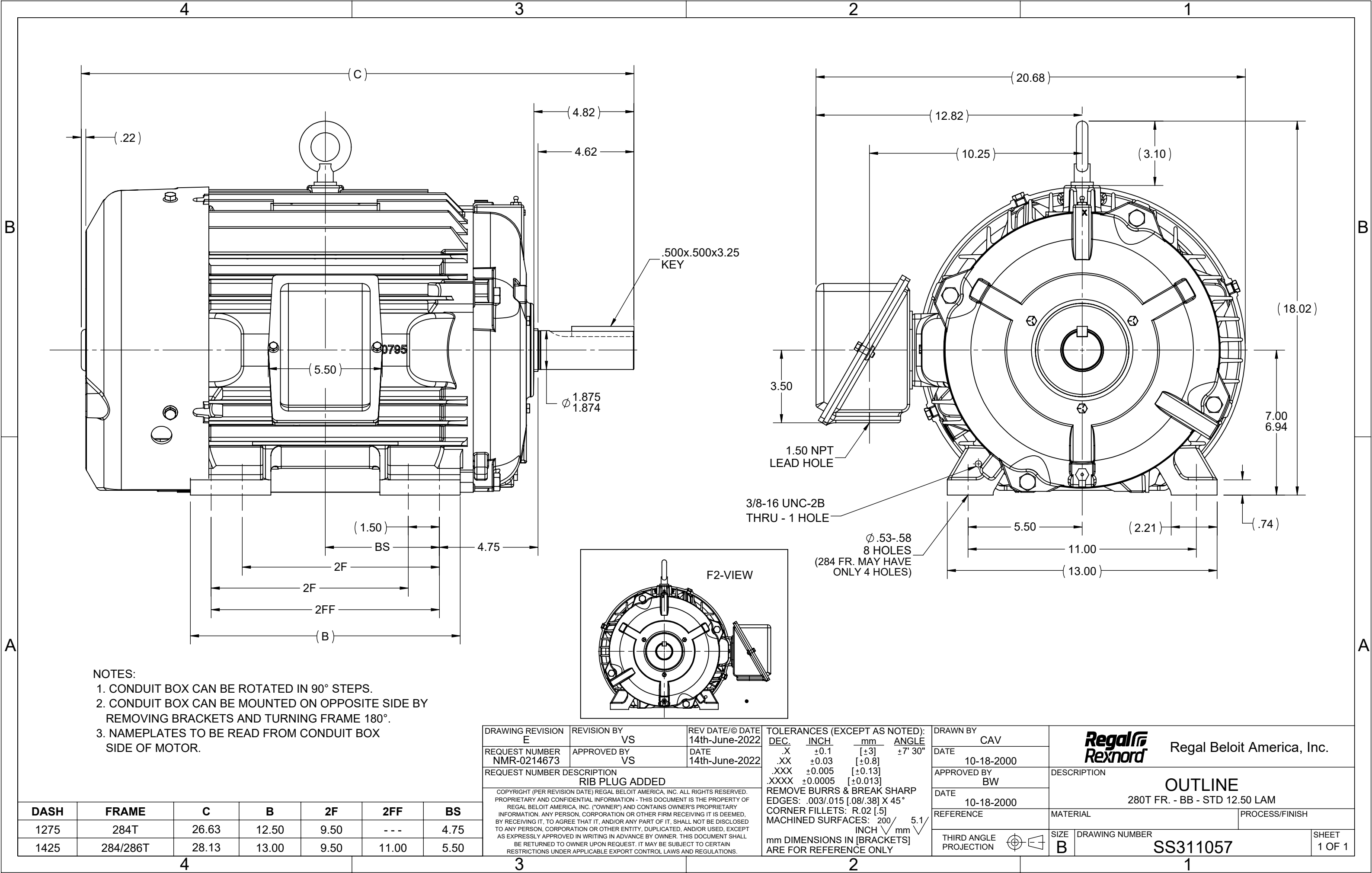
## Nameplate Specifications

Output HP	25 Hp	Output KW	18.7 kW
Frequency	60 Hz	Voltage	460 V
Current	31.0 A	Speed	1772 rpm
Service Factor	1.15	Phase	3
Efficiency	93.6 %	Power Factor	81
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	284T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	56
Number of Speeds	1		

## Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.271 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	26.21 in
Frame Length	12.75 in	Shaft Diameter	1.875 in
Shaft Extension	4.82 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 20:1		
Outline Drawing	B-SS311057-1275	Connection Drawing	A-EE7300





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

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO LINE  
LEAD CONNECTIONS

TERMINAL BLOCK WHEN SPECIFIED

IF MOTOR HAS 9 LEADS

T1(U1) T1(U1) T1(U1) → L1

T2(V1) T2(V1) T2(V1) → L2

T3(W1) T3(W1) T3(W1) → L3

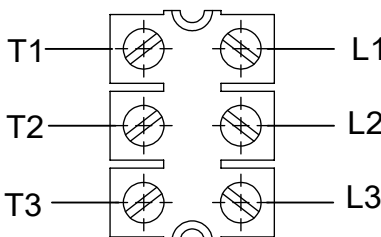
IF MOTOR HAS 6 LEADS

T1(U1) T1(U1) → L1

T2(V1) T2(V1) → L2

T3(W1) T3(W1) → L3

A-9806 DECAL



OPTIONAL CORD CONNECTION	
L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION AC	REVISION BY BS	REV DATE/© DATE 26/07/2022
REQUEST NUMBER CR-0010402	APPROVED BY SN	DATE 26/07/2022
REQUEST NUMBER DESCRIPTION DRAWING UPDATED		
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PRIMARY DIMENSIONS ARE INCH  
mm DIMENSIONS IN [BRACKETS]  
ARE FOR REFERENCE ONLY

DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION

Regal Beloit America, Inc.	
DESCRIPTION CONNECTION DIAGRAM EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR	
MATERIAL	PROCESS/FINISH
SIZE A	DRAWING NUMBER EE7300
SHEET 1 OF 1	

## CERTIFICATION DATA SHEET

Model#: 284THFNA19048 AA  
 CONN. DIAGRAM: A-EE7300  
 OUTLINE: B-SS311057-1275

WINDING#: K2844161 NONE 1  
 ASSEMBLY: F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25	18.7	1800	1772	284T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	31	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 93.6	3/4 LOAD EFF: 94.1	1/2 LOAD EFF: 93.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 81	3/4 LOAD PF: 76	1/2 LOAD PF: 65.5	93	SQ CAGE INV RATED	13

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
74 LB-FT	182	138 LB-FT 186	185 LB-FT 250	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	50 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	NONE	FALSE	NONE	BLUE (EPOXY)

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: NONE

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: 06/21/2017 09:49:07 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

## Data Sheet

Date: 15-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



284THFNA19048

Submittal

Data @ 460 V

## Motor Load Data

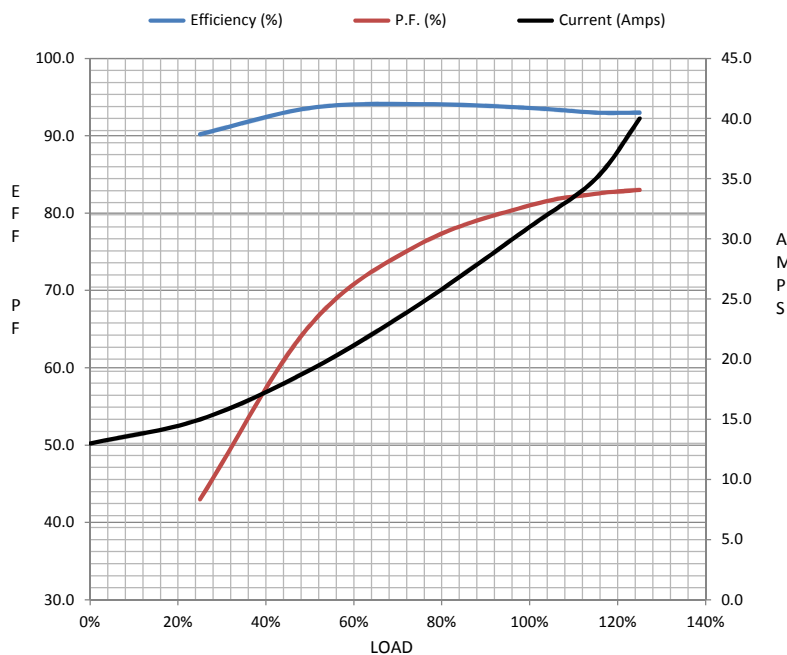
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	13.0	15.0	19.1	24.6	31.0	35.0	40.0	182	
Torque (ft-lb)	0.00	18.3	37.0	55.5	74.0	85.5	93.0	138	
RPM	1800	1793	1787	1780	1772	1,767	1763	0	
Efficiency (%)		90.2	93.6	94.1	93.6	93.0	93.0		
P.F. (%)	3.0	43.0	65.5	76.0	81.0	82.5	83.0	33.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1662	1772	1800
Current (Amps)	182	169	108	31.0	13.0
Torque (ft-lb)	138	117	185	74.0	0.00

## Information Block

HP	25.0			
Sync. RPM	1800			
Frame	284			
Enclosure	TEFC			
Construction	TFN			
Voltage	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 wk <sup>2</sup>	4.2 Lb-Ft <sup>2</sup>			
Ref Wdg	K2844161 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	B-SS311057-1275			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1810	0.1570	0.8480	1.0850	19.7750



## Speed -Torque Curve

