

# PRODUCT INFORMATION PACKET

Model No: 284TSHFCD9001  
Catalog No: W558A  
25 HP, Severe Duty Motors, 3 phase, 3600 RPM, 460 V, 284TS Frame, TEFC  
IEEE 841 Motors



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**REGAL**



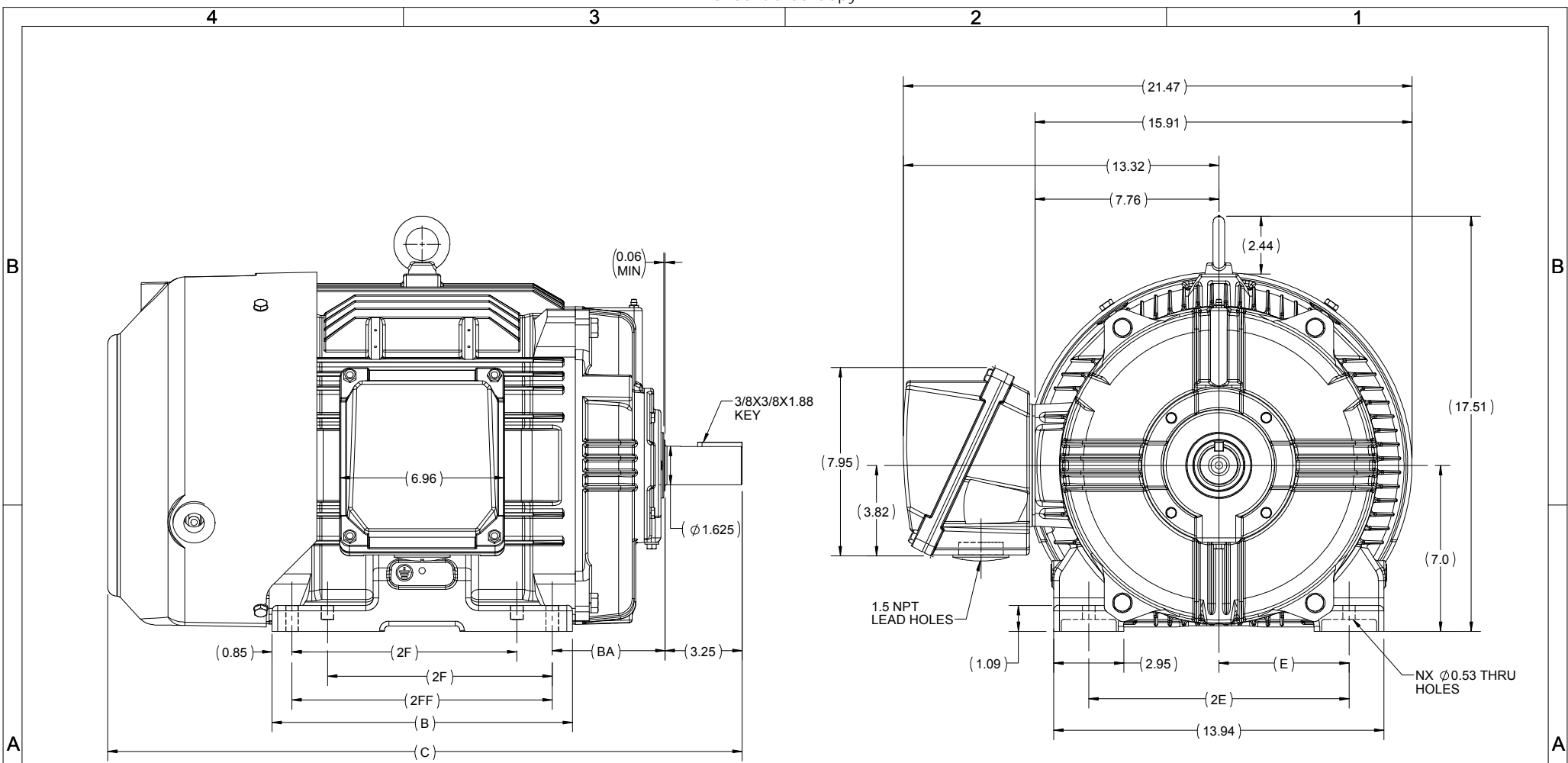
### Nameplate Specifications

Output HP	<b>25 Hp</b>	Output KW	<b>18.7 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>30.0 A</b>	Speed	<b>3555 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>91.7 %</b>	Power Factor	<b>86</b>
Duty	<b>Continuous</b>	Insulation Class	<b>H</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>284TS</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>6211</b>
UL	<b>Listed</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>56</b>
Hazardous Location	<b>DIVISION 2 T2B</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>2</b>	Rotation	<b>Selective Clockwise</b>
Resistance Main	<b>.395 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>TS</b>	Shaft Diameter	<b>1.625 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>		
Outline Drawing	<b>SS312943-284TS</b>	Connection Drawing	<b>EE7300U</b>

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284/286TS	12.67	26.77	11.00	9.50				8	F1 OR F2
284 TS	11.82	25.28	9.50	-	4.75	5.50	11.00	4	F1 OR F2
FRAME	B	C	2FF	2F	BA	E	2E	N	MOUNTING

DRAWING REVISION C	REVISION BY BISWA	DATE 29/03/2019
ECO ECO-0163961	APPROVED BY SBD	DATE 29/03/2019
ECO DESCRIPTION DRAWING UPDATED		
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DRAWN BY BISWA	
DATE 24/12/2018	
APPROVED BY SBD	
DATE 24/12/2018	
REFERENCE	

Regal Beloit America, Inc.	
DESCRIPTION <b>OUTLINE</b> 284/286 TS FR-NEMA-SD & IEEE841	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS312943
	SHEET 1 OF 1

**IF MOTOR HAS 9 LEADS**

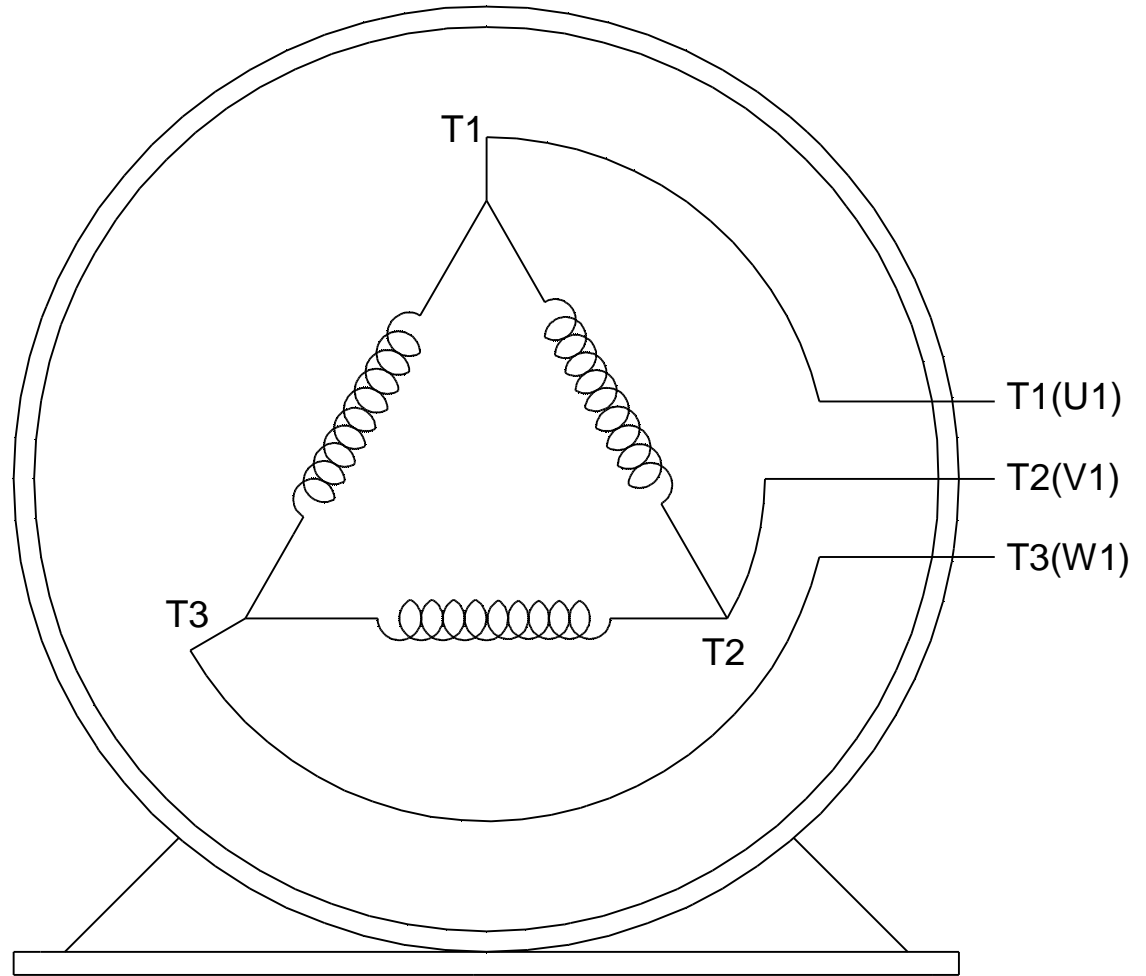


**IF MOTOR HAS 6 LEADS**



A-9806 DECAL IF CALLED FOR

**IF MOTOR HAS 12 LEADS**



**VIEW OF TERMINAL END**

DRAWING REVISION <b>L</b>	REVISION BY <b>AJW</b>	DATE <b>05-04-2015</b>	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY <b>DRS</b>	<b>Regal Beloit America, Inc.</b>																					
ECO <b>ECO-0077067</b>	APPROVED BY <b>EWH</b>	DATE <b>05-05-2015</b>	<table style="font-size: small; border-collapse: collapse;"> <tr> <td><u>DEC.</u></td> <td><u>INCH</u></td> <td><u>mm</u></td> <td><u>ANGLE</u></td> </tr> <tr> <td>.X</td> <td>±0.1</td> <td>[±2.5]</td> <td>±7' 30"</td> </tr> <tr> <td>.XX</td> <td>±0.02</td> <td>[±0.51]</td> <td></td> </tr> <tr> <td>.XXX</td> <td>±0.005</td> <td>[±0.127]</td> <td></td> </tr> <tr> <td>.XXXX</td> <td>±0.0005</td> <td>[±0.0127]</td> <td></td> </tr> </table>	<u>DEC.</u>			<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>	.X	±0.1	[±2.5]	±7' 30"	.XX	±0.02	[±0.51]		.XXX	±0.005	[±0.127]		.XXXX	±0.0005	[±0.0127]		DATE <b>09-27-1996</b>
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ECO DESCRIPTION <b>UPDATED TO SOLIDWORKS</b> <small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>			APPROVED BY <b>GK</b>	MATERIAL	PROCESS/FINISH																					
			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 $\sqrt{\text{INCH}}$ 5.1 $\sqrt{\text{mm}}$ mm SHOWN IN [BRACKETS]			DATE <b>09-30-1996</b>	<b>EE7300U</b>																			
REFERENCE	THIRD ANGLE PROJECTION	SIZE <b>A</b>				DRAWING NUMBER			SHEET <b>1 OF 1</b>																	



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300U  
 OUTLINE: SS312943  
 WINDING: HE31802004 NONE 1

MODEL #: 284TSHFCD9001  
 CAT #: W558A  
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
25	18.7	3600	3555	284TS	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (* C)	ELEV. (F)
3	60	460	30	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	3/4 LD EFF	1/2 LD EFF	GTD EFF	ELECT. TYPE
91.7	91.7	91.0	91.0	SO CAGE INV RATED
F.L. PF	3/4 LD PF	1/2 LD PF		
86.0	82.0	73.5		

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (* C)
37.0 LB-FT	181	65.0 LB-FT	94.0 LB-FT 254%	55

SOUND PRESSURE	SOUND	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	APROX. MOTOR
75 dBA	84 dBA	2.90 LB-FT <sup>2</sup>	30 LB-FT <sup>2</sup>	20 SEC.	2	445 LB.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	NO	NONE	BLUE (EPOXY)

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

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (In/Sec)
0.261	0.113	0.826	0.864	24.381	0.080

* N O T E S *	If Inverter equals NONE, contact factory for further information	
	INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1	
	INV. HP SPEED RANGE: NONE	
	ENCODER: NONE	
	NONE PPR	

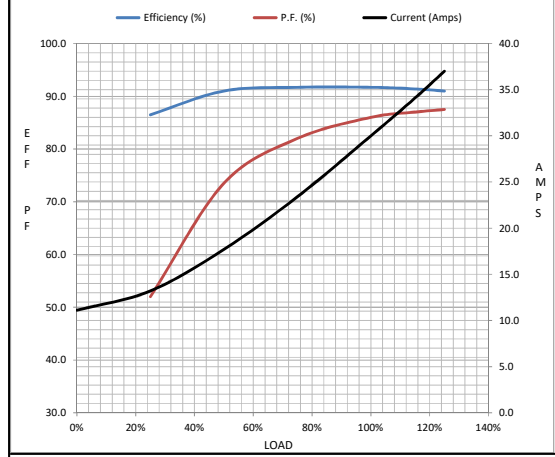
PREPARED BY: ANUSHA M	BRAKE: NONE
DATE: 3/31/2020	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:

FORM: 3531 REV. 4 2/27/06  
 \*\* Subject to change without notice.

<b>Data Sheet</b>		284TSHFCD9001
Date: 5/6/2020	<b>marathon</b> Motors	Submittal
Customer: _____		Data @ 460 V
Attention: _____		
Submitted by: _____		

Motor Load Data									
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	11.1	13.2	17.7	23.4	30.0	34.1	37.0	181	
Torque (ft-lb)	0.00	9.2	18.5	27.5	37.0	42.5	46.3	65.0	
RPM	3600	3588	3578	3565	3555	3546	3540	0	
Efficiency (%)		86.5	91.0	91.7	91.4	91.0	91.0		
P.F. (%)		8.0	52.0	73.5	82.0	86.0	87.5	35.0	

Motor Speed Data						Information Block	
	LR	Pull-Up	BD	Rated	Idle		
Speed (RPM)	0	1800	3330	3555	3600	HP	25.0
Current (Amps)	181	166	105	30.0	11.1	Sync. RPM	3600
Torque (ft-lb)	65.0	56.0	94.0	37.0	0.00	Frame	284



HP		25.0		
Sync. RPM		3600		
Frame		284		
Enclosure		TEFC		
Construction		TFC		
Voltage		460 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		3,300 feet		
Rotor/Shaft wk*		2.90 Lb-Ft*		
Ref Wdg		HE31802004 NONE		
Sound Pressure @ 1M		75 dBA		
VFD Rating		CONSTANT 2:1/VARIABLE 10:1		
Outline Dwg		SS312943		
Conn. Diag		EE7300U		
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.2610	0.1130	0.8260	0.8640	24.3810

