

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 284TTFCD6527

Catalog No: E675A

XRI®-SD Severe Duty Motor, 25 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 284T Frame, TEFC



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2024 Regal Rexnord Corporation, All Rights Reserved. MC017097E

RegalRexnord

Nameplate Specifications

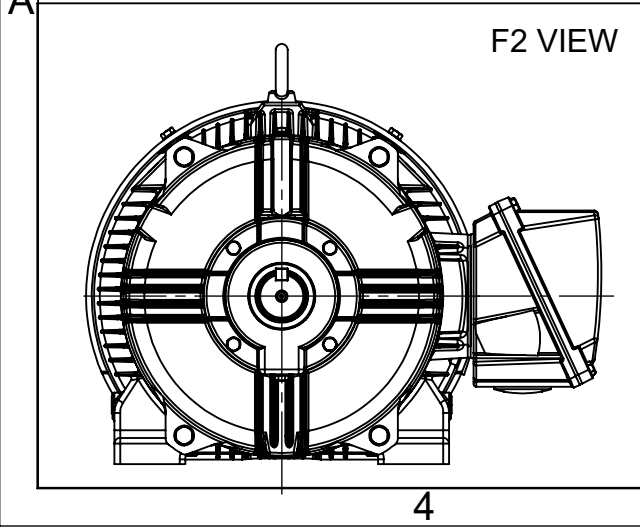
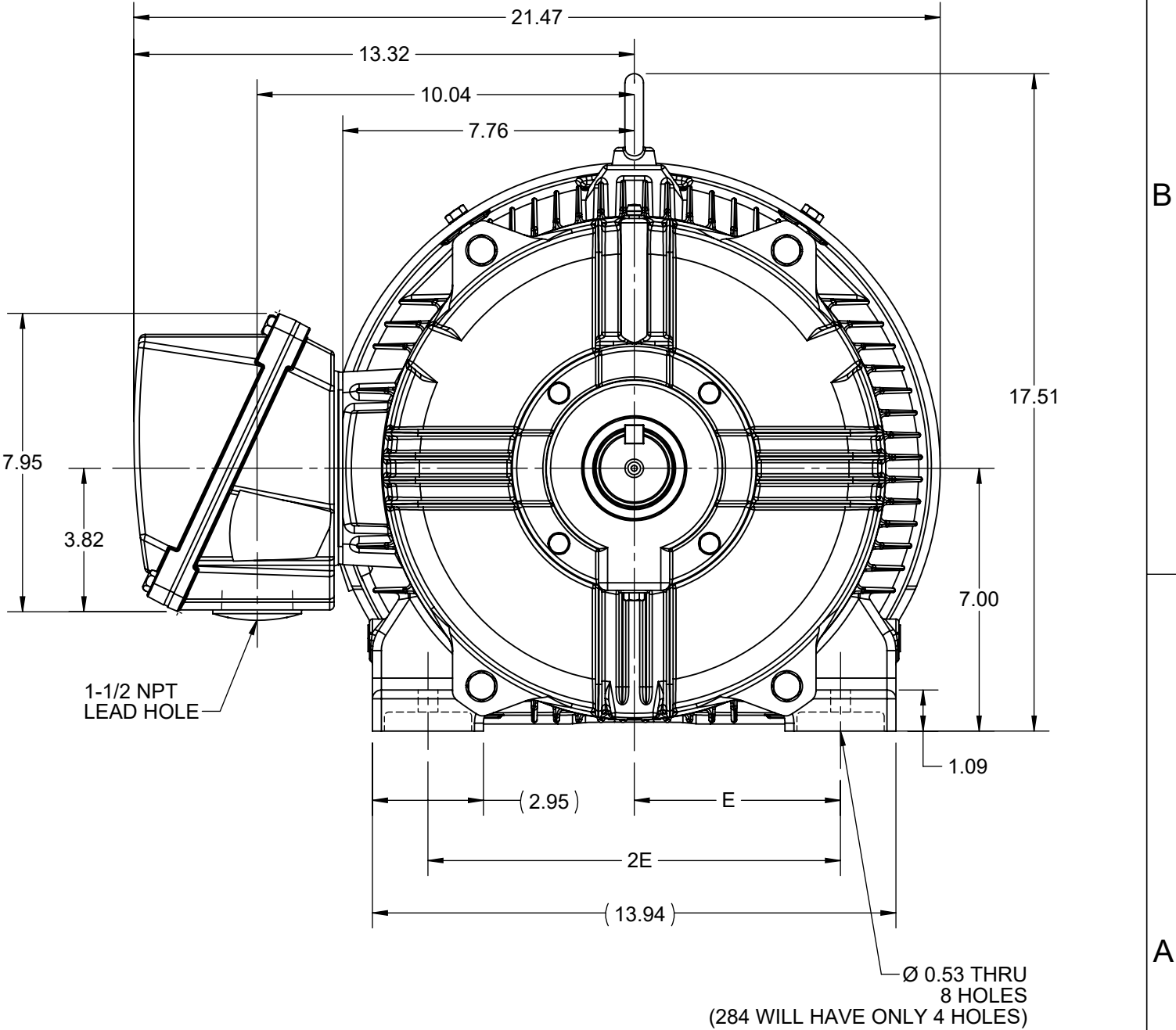
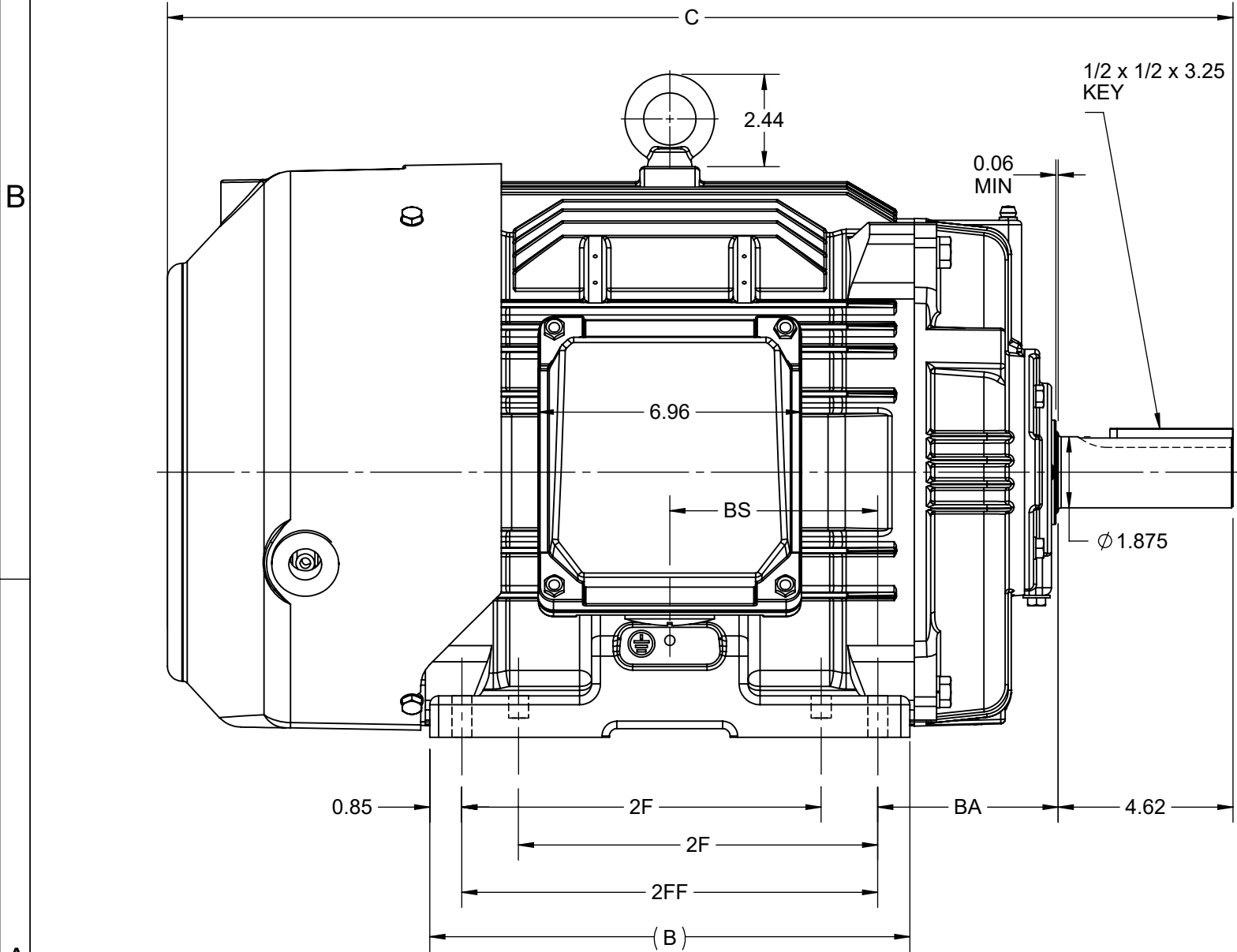
Phase	3	Output HP	25 Hp
Output KW	18.7 kW	Voltage	575 V
Speed	1772 rpm	Service Factor	1.15
Frame	284T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	93.6 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	24.0 A	Power Factor	83
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6211
UL	Listed	CSA	Y
CE	Y	IP Code	55
Number of Speeds	1	Hazardous Location	DIVISION 2 T2B

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.2988 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Shaft Diameter	1.875 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 20:1/VARIABLE 20:1
Outline Drawing	SS312942-100	Connection Drawing	EE7300



This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:10/18/2024

4					3					2		1	
DASH NO.	B	C	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME			
100	10.83	26.64	5.50	11.00	---	9.50	4.75	4.75	F1 OR F2	284T			
200	12.68	28.14			9.50	11.00		5.50		284/286T			



DRAWING REVISION D	REVISION BY VS	REV DATE/© DATE 27-10-2020
ECO CR-0000272	APPROVED BY GNK	DATE 27-10-2020
ECO DESCRIPTION		
DRAWING UPDATED		
COPYRIGHT (PER REVISION DATE) 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.		

PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY BISWA		<div> Regal Beloit America, Inc.</div>		
DATE 24/12/2018				
APPROVED BY SBD		DESCRIPTION OUTLINE 284/286T FR-NEMA-SD & IEEE841		
DATE 24/12/2018				
REFERENCE		MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION 		SIZE B	DRAWING NUMBER SS312942	SHEET 1 OF 1

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



VIEW OF TERMINAL END

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		
COPYRIGHT (PER REVISION DATE) 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.		

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	



DATA VOLTS: 575

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300
 REFERENCE MODEL #: 284TTFC6527
 OUTLINE: SS312942-284T
 CAT #: E675A
 WINDING: HE31804007 NONE 4
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
25	18.7	1800	1775	284T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	575	24.3	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	93.6	3/4 LD EFF	93.6	1/2 LD EFF	93.0	GTD EFF	ELECT. TYPE
F.L. PF	83.0	3/4 LD PF	77.5	1/2 LD PF	66.5	93.0	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
74.0 LB-FT	146	144 LB-FT 195%	192 LB-FT 259%	55

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
75 dBA	84 dBA	5.2 LB-FT²	175 LB-FT²	20 SEC.	2	494 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 ODE							
BALL BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)		CAST IRON
6311 6211							

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)	FLOAT
0.4890625	0.30625	1.8125	2.371875	47.4515625	0.080	ODE

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

PREPARED BY:	BRAKE: NONE
DATE: 5/13/2020	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:

FORM: 3531 REV_4 2/27/06
 ** Subject to change without notice.

Data Sheet

Date: 5/6/2020

284TTFC6527

Customer: _____

Attention: _____

Submitted by: _____



Submittal

Data @ 575 V

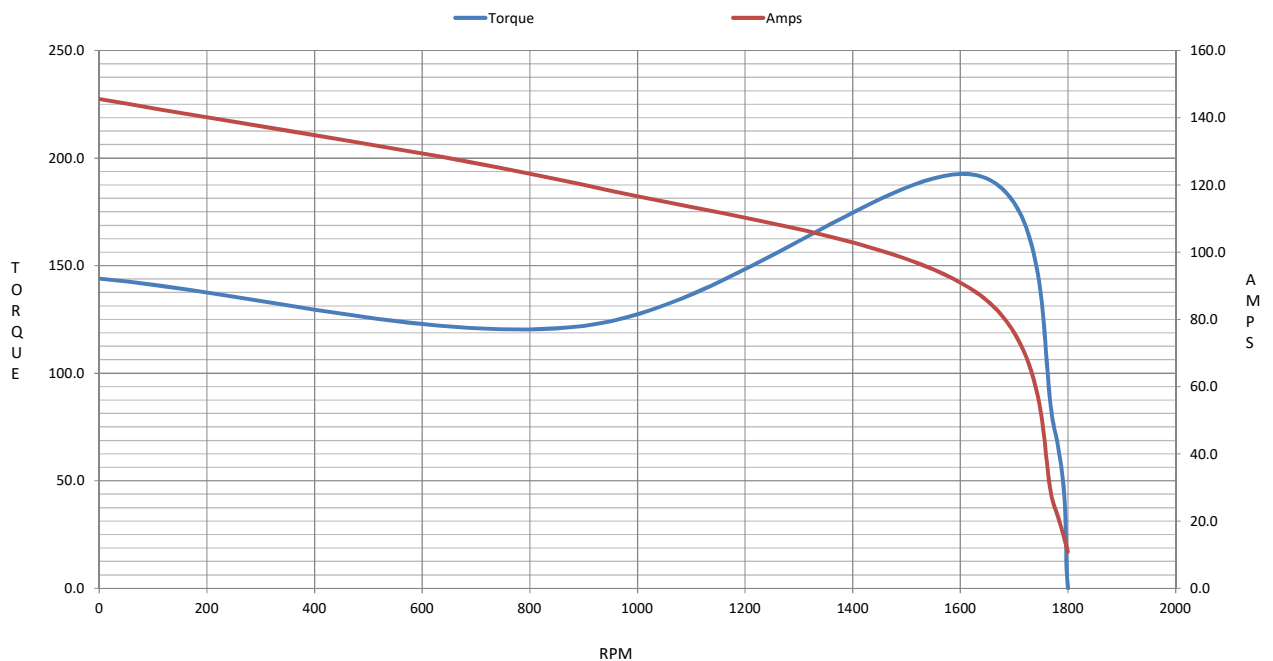
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	10.9	12.2	15.3	19.4	24.3	27.4	29.7	146	
Torque (ft-lb)	0.00	18.3	36.7	55.2	74.0	85.2	93.0	144	
RPM	1800	1795	1788	1782	1775	1,772	1770	0	
Efficiency (%)		90.2	93.0	93.6	93.6	93.3	92.4		
P.F. (%)	5.0	43.5	66.5	77.5	83.0	84.5	85.0	36.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																																																																																																																																							
Speed (RPM)	0	900	1630	1775	1800																																																																																																																																							
Current (Amps)	146	120	88.0	24.3	10.9																																																																																																																																							
Torque (ft-lb)	144	122	192	74.0	0.00																																																																																																																																							
<div><div><div></div><div></div><div></div></div><div>Efficiency (%)P.F. (%)Current (Amps)</div><div>EFF P F</div><div>AMP S</div><div>LOAD</div></div> <table><tr><td colspan="2">HP</td><td colspan="3">25.0</td></tr><tr><td colspan="2">Sync. RPM</td><td colspan="3">1800</td></tr><tr><td colspan="2">Frame</td><td colspan="3">284</td></tr><tr><td colspan="2">Enclosure</td><td colspan="3">TEFC</td></tr><tr><td colspan="2">Construction</td><td colspan="3">TFC</td></tr><tr><td colspan="2">Voltage</td><td>575</td><td colspan="2">V</td></tr><tr><td colspan="2">Frequency</td><td>60</td><td colspan="2">Hz</td></tr><tr><td colspan="2">Design</td><td colspan="3">B</td></tr><tr><td colspan="2">LR Code letter</td><td colspan="3">G</td></tr><tr><td colspan="2">Service Factor</td><td colspan="3">1.15</td></tr><tr><td colspan="2">Temp Rise @ FL</td><td>55</td><td colspan="2">° C</td></tr><tr><td colspan="2">Duty</td><td colspan="3">CONT</td></tr><tr><td colspan="2">Ambient</td><td>40</td><td colspan="2">° C</td></tr><tr><td colspan="2">Elevation</td><td>3,300</td><td colspan="2">feet</td></tr><tr><td colspan="2">Rotor/Shaft wk²</td><td>5.2</td><td colspan="2">Lb-Ft²</td></tr><tr><td colspan="2">Ref Wdg</td><td>HE31804007</td><td colspan="2">NONE</td></tr><tr><td colspan="2">Sound Pressure @ 1M</td><td>75</td><td colspan="2">dBA</td></tr><tr><td colspan="2">VFD Rating</td><td colspan="3">CONSTANT 10:1/VARIABLE 10:1</td></tr><tr><td colspan="2">Outline Dwg</td><td colspan="3">SS312942-284T</td></tr><tr><td colspan="2">Conn. Diag</td><td colspan="3">EE7300</td></tr><tr><td colspan="5">Additional Specifications:</td></tr><tr><td colspan="5">0</td></tr><tr><td colspan="5">0</td></tr><tr><td colspan="5">EQUIV CKT (OHMS / PHASE)</td></tr><tr><td>R1</td><td>R2</td><td>X1</td><td>X2</td><td>Xm</td></tr><tr><td>0.3130</td><td>0.1960</td><td>1.1600</td><td>1.5180</td><td>30.3690</td></tr></table>						HP		25.0			Sync. RPM		1800			Frame		284			Enclosure		TEFC			Construction		TFC			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		3,300	feet		Rotor/Shaft wk²		5.2	Lb-Ft²		Ref Wdg		HE31804007	NONE		Sound Pressure @ 1M		75	dBA		VFD Rating		CONSTANT 10:1/VARIABLE 10:1			Outline Dwg		SS312942-284T			Conn. Diag		EE7300			Additional Specifications:					0					0					EQUIV CKT (OHMS / PHASE)					R1	R2	X1	X2	Xm	0.3130	0.1960	1.1600	1.5180	30.3690	Information Block				
						HP		25.0																																																																																																																																				
						Sync. RPM		1800																																																																																																																																				
						Frame		284																																																																																																																																				
						Enclosure		TEFC																																																																																																																																				
						Construction		TFC																																																																																																																																				
						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		3,300	feet																																																																																																																																			
						Rotor/Shaft wk²		5.2	Lb-Ft²																																																																																																																																			
						Ref Wdg		HE31804007	NONE																																																																																																																																			
Sound Pressure @ 1M		75	dBA																																																																																																																																									
VFD Rating		CONSTANT 10:1/VARIABLE 10:1																																																																																																																																										
Outline Dwg		SS312942-284T																																																																																																																																										
Conn. Diag		EE7300																																																																																																																																										
Additional Specifications:																																																																																																																																												
0																																																																																																																																												
0																																																																																																																																												
EQUIV CKT (OHMS / PHASE)																																																																																																																																												
R1	R2	X1	X2	Xm																																																																																																																																								
0.3130	0.1960	1.1600	1.5180	30.3690																																																																																																																																								
HP		25.0																																																																																																																																										
Sync. RPM		1800																																																																																																																																										
Frame		284																																																																																																																																										
Enclosure		TEFC																																																																																																																																										
Construction		TFC																																																																																																																																										
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		3,300	feet																																																																																																																																									
Rotor/Shaft wk²		5.2	Lb-Ft²																																																																																																																																									
Ref Wdg		HE31804007	NONE																																																																																																																																									
Sound Pressure @ 1M		75	dBA																																																																																																																																									
VFD Rating		CONSTANT 10:1/VARIABLE 10:1																																																																																																																																										
Outline Dwg		SS312942-284T																																																																																																																																										
Conn. Diag		EE7300																																																																																																																																										
Additional Specifications:																																																																																																																																												
0																																																																																																																																												
0																																																																																																																																												
EQUIV CKT (OHMS / PHASE)																																																																																																																																												
R1	R2	X1	X2	Xm																																																																																																																																								
0.3130	0.1960	1.1600	1.5180	30.3690																																																																																																																																								

Speed -Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 284TTFCD6527

(Model No. may contain prefix and/or suffix characters)

Catalog No : E675A

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:



Julian Clark
Marketing Engineer

Created on 09/01/2022

CE 22