

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 286THFCD19066

Catalog No: W567A-P

XRI®-841 Severe Duty Motor, 30 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 286T Frame, TEFC



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RegalRexnord

Nameplate Specifications

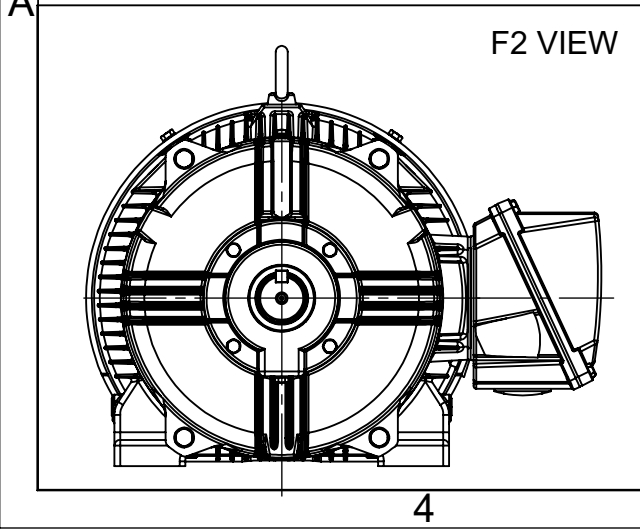
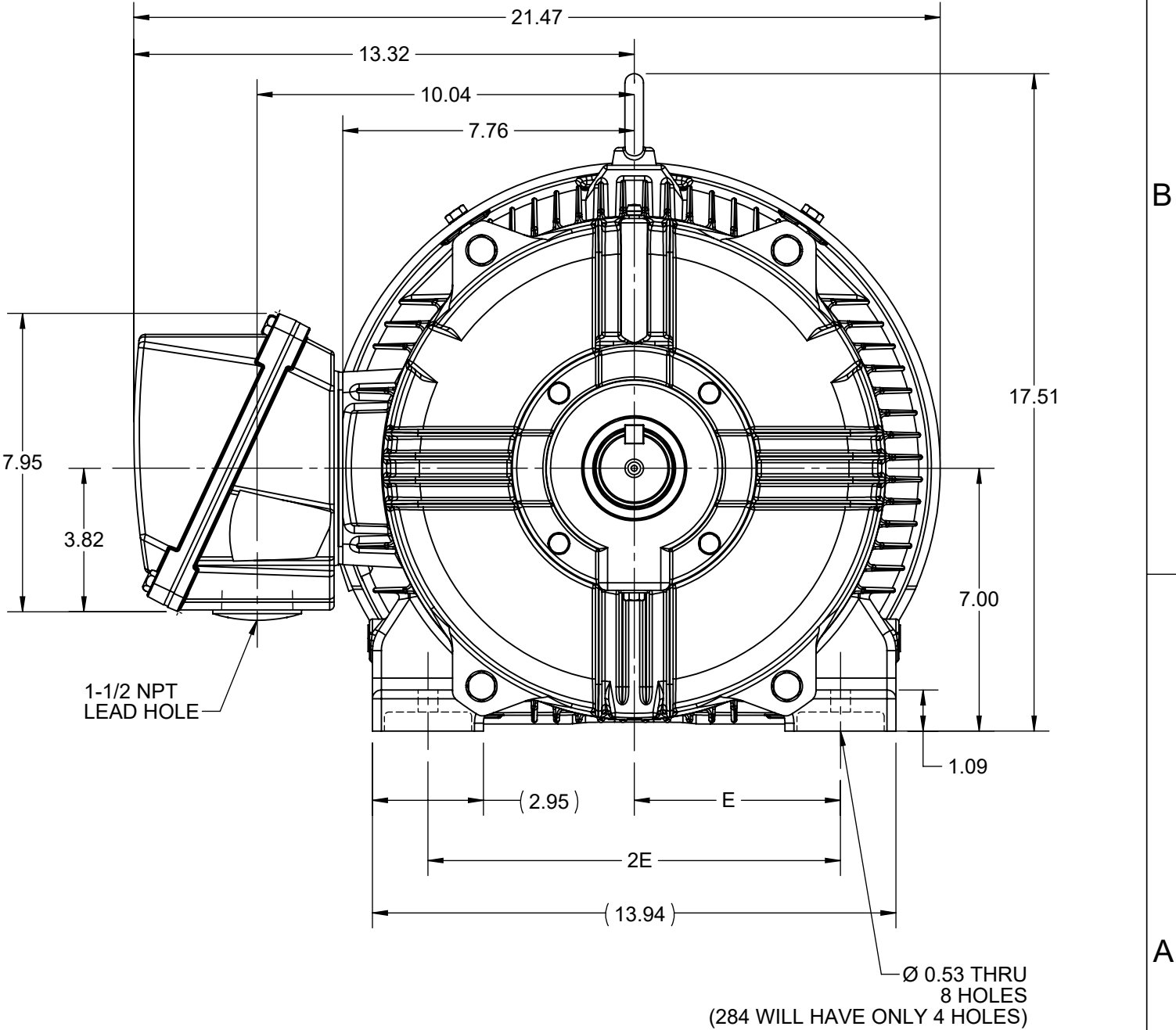
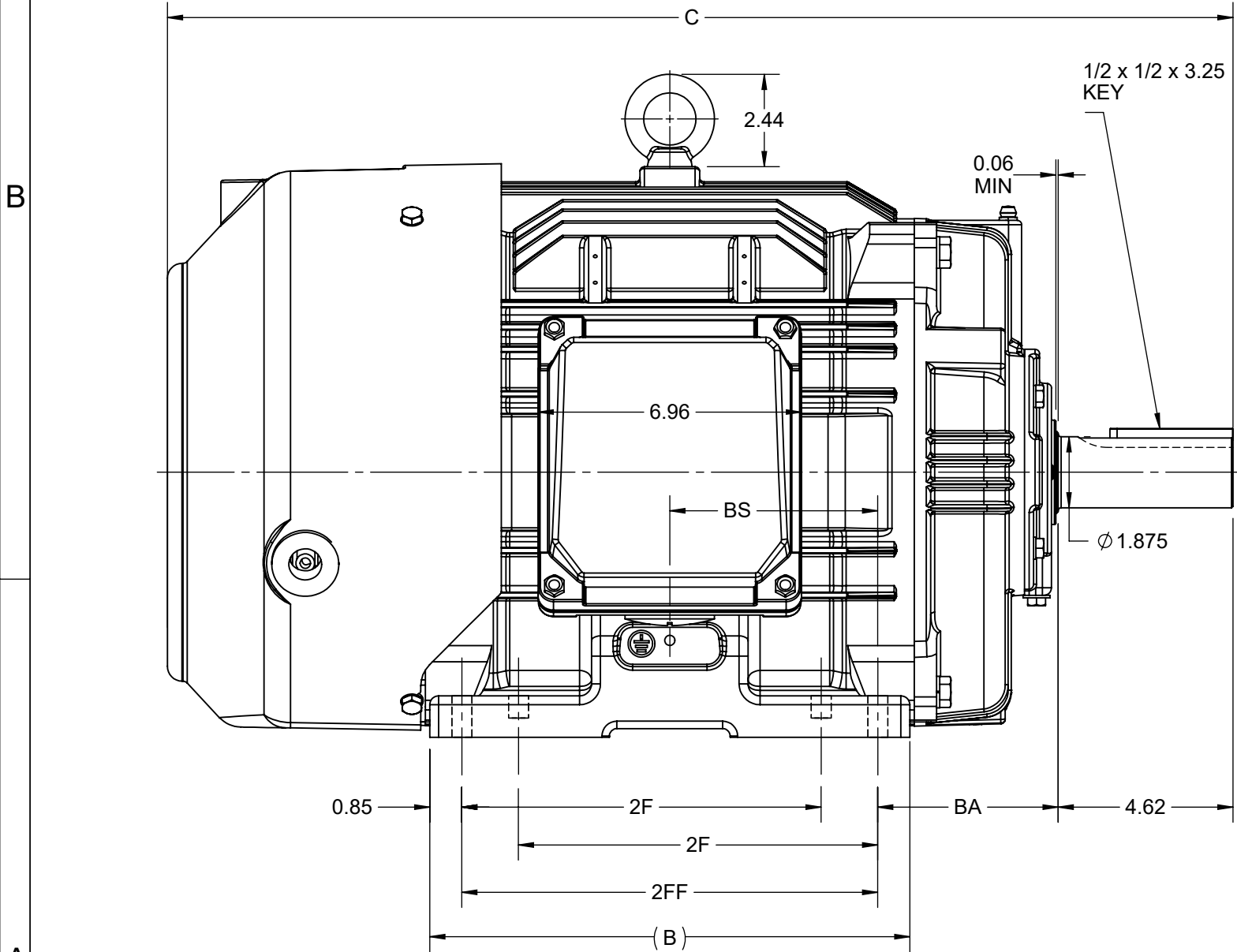
Phase	3	Output HP	30 Hp
Output KW	22.4 kW	Voltage	460 V
Speed	1770 rpm	Service Factor	1.15
Frame	286T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	93.6 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	35.5 A	Power Factor	84
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6211
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	.27 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 10:1/VARIABLE 10:1
Connection Drawing	EE7300	Outline Drawing	SS312942-200


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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		
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PRIMARY DIMENSIONS ARE INCH
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ARE FOR REFERENCE ONLY

DRAWN BY BISWA	 Regal Beloit America, Inc.		
DATE 24/12/2018			
APPROVED BY SBD	DESCRIPTION		
DATE 24/12/2018	OUTLINE		
REFERENCE	284/286T FR-NEMA-SD & IEEE841		
	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

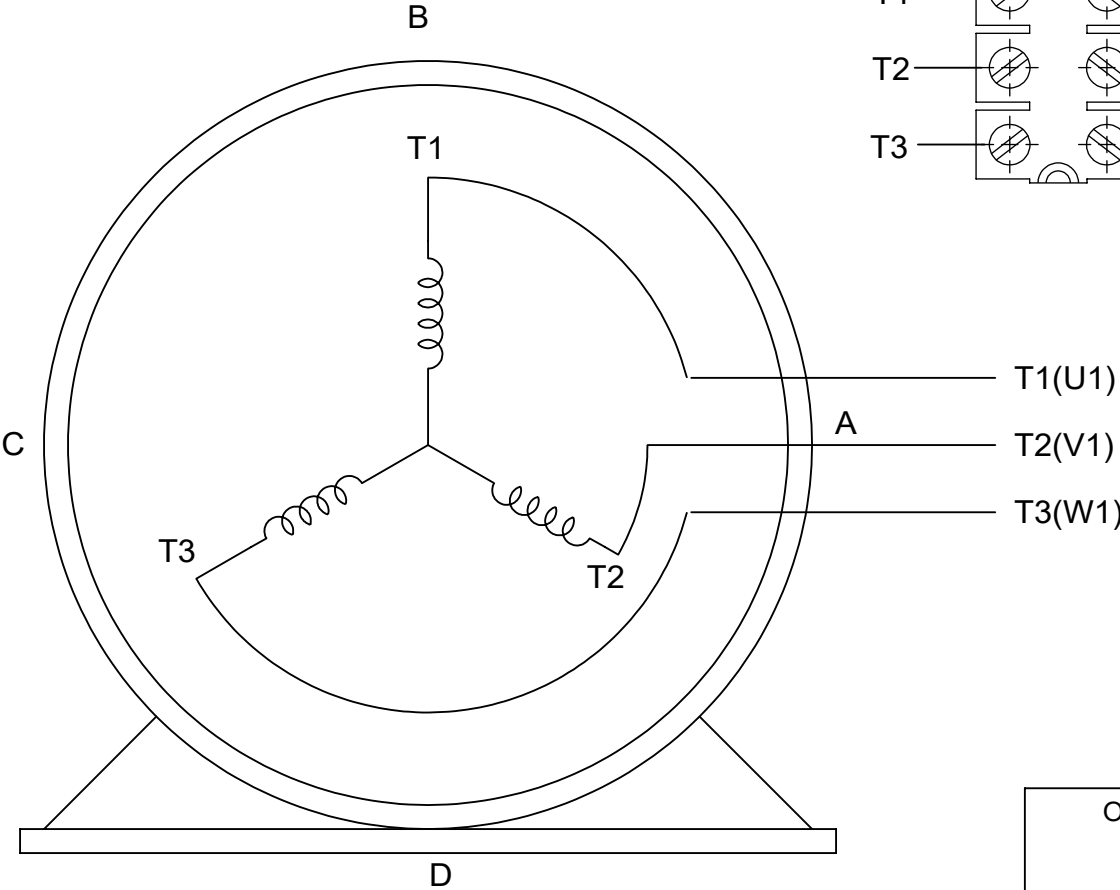
IF MOTOR HAS 6 LEADS

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	PRIMARY DIMENSIONS ARE INCH mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY	DRAWN BY DA	<div> Regal Beloit America, Inc.</div>		
REQUEST NUMBER CR-0010402	APPROVED BY SN	DATE 26/07/2022		DATE 03-26-1993			
REQUEST NUMBER DESCRIPTION DRAWING UPDATED				APPROVED BY TB	DESCRIPTION CONNECTION DIAGRAM EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR		
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				REFERENCE	MATERIAL		PROCESS/FINISH
				THIRD ANGLE PROJECTION 	SIZE A	DRAWING NUMBER EE7300	SHEET 1 OF 1



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300
 OUTLINE: SS312942
 WINDING: HA31804006 NONE 8

REFERENCE MODEL #: 286THFCD19066
 CAT #: W567A-P

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
30	22.4	1800	1775	286T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	460	36.5	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	78.0	1/2 LD PF	67.5	93.0	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
89.0 LB-FT	217	178 LB-FT 200%	227 LB-FT 255%	60

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
75 dBA	84 dBA	5.7 LB-FT²	225 LB-FT²	20 SEC.	2	531 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	NONE	NO	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
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)
0.168	0.111	0.617	0.851	16.727	0.080

* 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	
BRAKE: NONE		
NONE		
FT-LB: NA		
VOLTAGE: NONE HZ:		

PREPARED BY:	
DATE:	5/13/2020

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

Data Sheet

Date: 5/6/2020

286THFCD19066

Customer: _____

Attention: _____

Submitted by: _____



Submittal

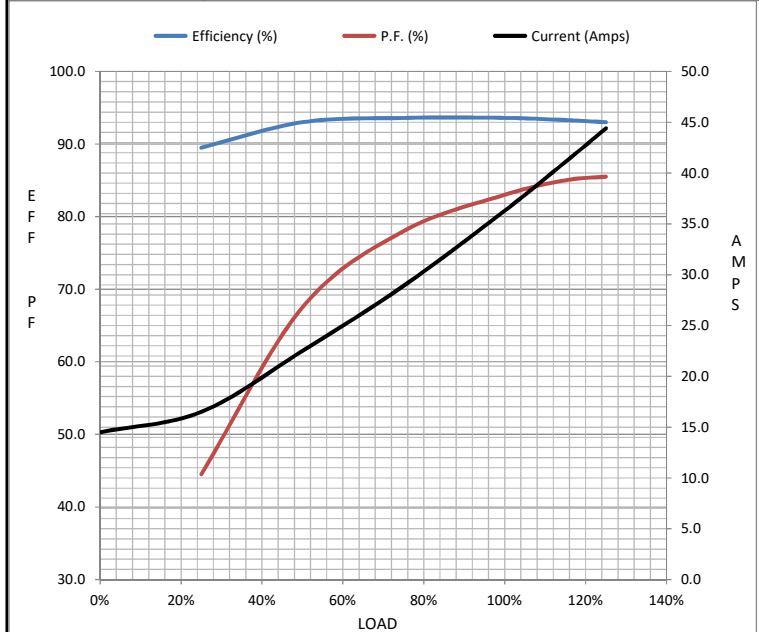
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	14.5	16.5	22.5	28.9	36.3	41.1	44.4	217	
Torque (ft-lb)	0.00	22.0	44.0	66.5	89.0	102	111	178	
RPM	1800	1795	1788	1782	1775	1,770	1768	0	
Efficiency (%)		89.5	93.0	93.6	93.6	93.3	93.0		
P.F. (%)	5.0	44.5	67.5	78.0	83.0	85.0	85.5	36.0	

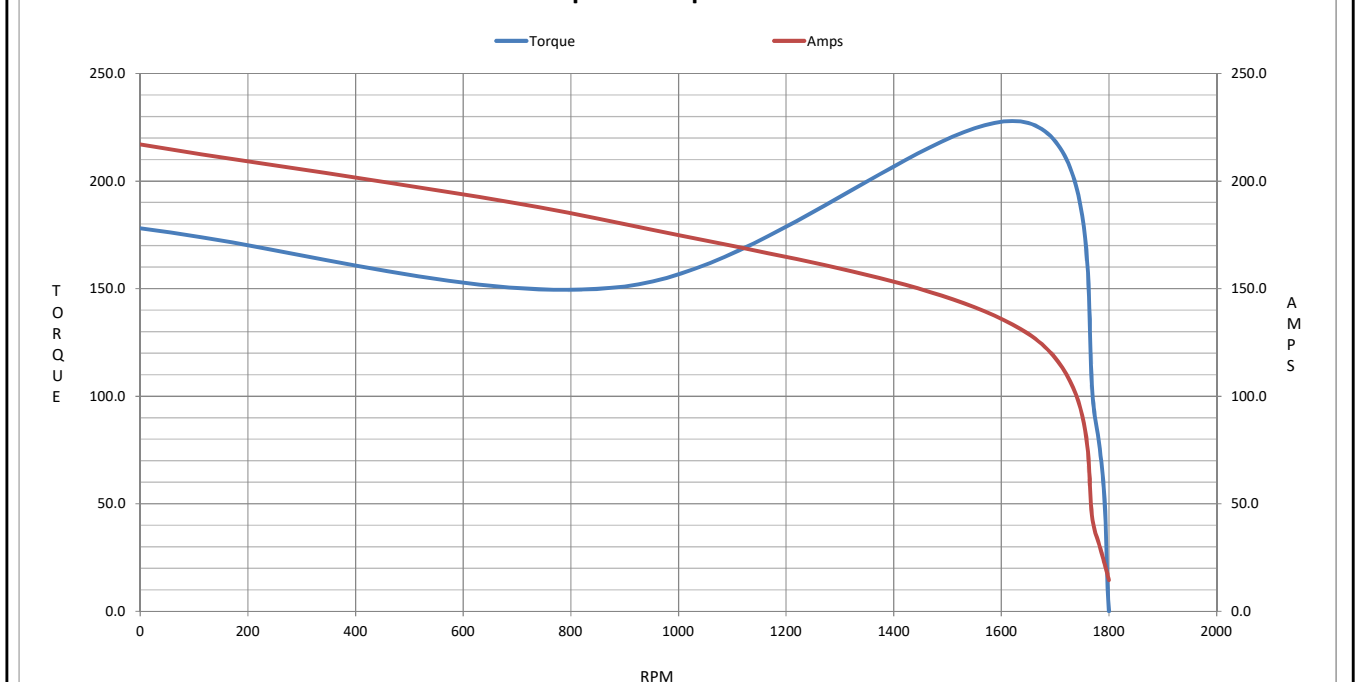
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1650	1775	1800
Current (Amps)	217	180	129	36.3	14.5
Torque (ft-lb)	178	151	227	89.0	0.00



Information Block				
HP		30.0		
Sync. RPM		1800		
Frame		286		
Enclosure		TEFC		
Construction		TFC		
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		3,300 feet		
Rotor/Shaft wk²		5.7 Lb-Ft²		
Ref Wdg		HA31804006 NONE		
Sound Pressure @ 1M		75 dBA		
VFD Rating		CONSTANT 10:1/VARIABLE 10:1		
Outline Dwg		SS312942		
Conn. Diag		EE7300		
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1680	0.1110	0.6170	0.8510	16.7270

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 : 286THFCD19066

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

Catalog No : W567A-P

Rework No : N/A

Directives :

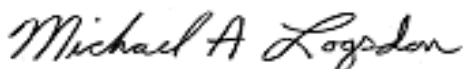
Low Voltage Directive 2014/35/EU

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