

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 284THFCD19102

Catalog No: W543A

XRI®-841 Severe Duty Motor, 10 HP, 3 Ph, 60 Hz, 460 V, 900 RPM, 284T Frame, TEFC



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RegalRexnord



Nameplate Specifications

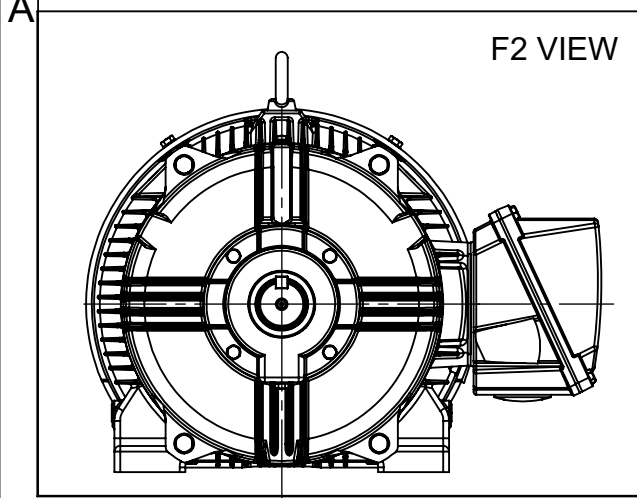
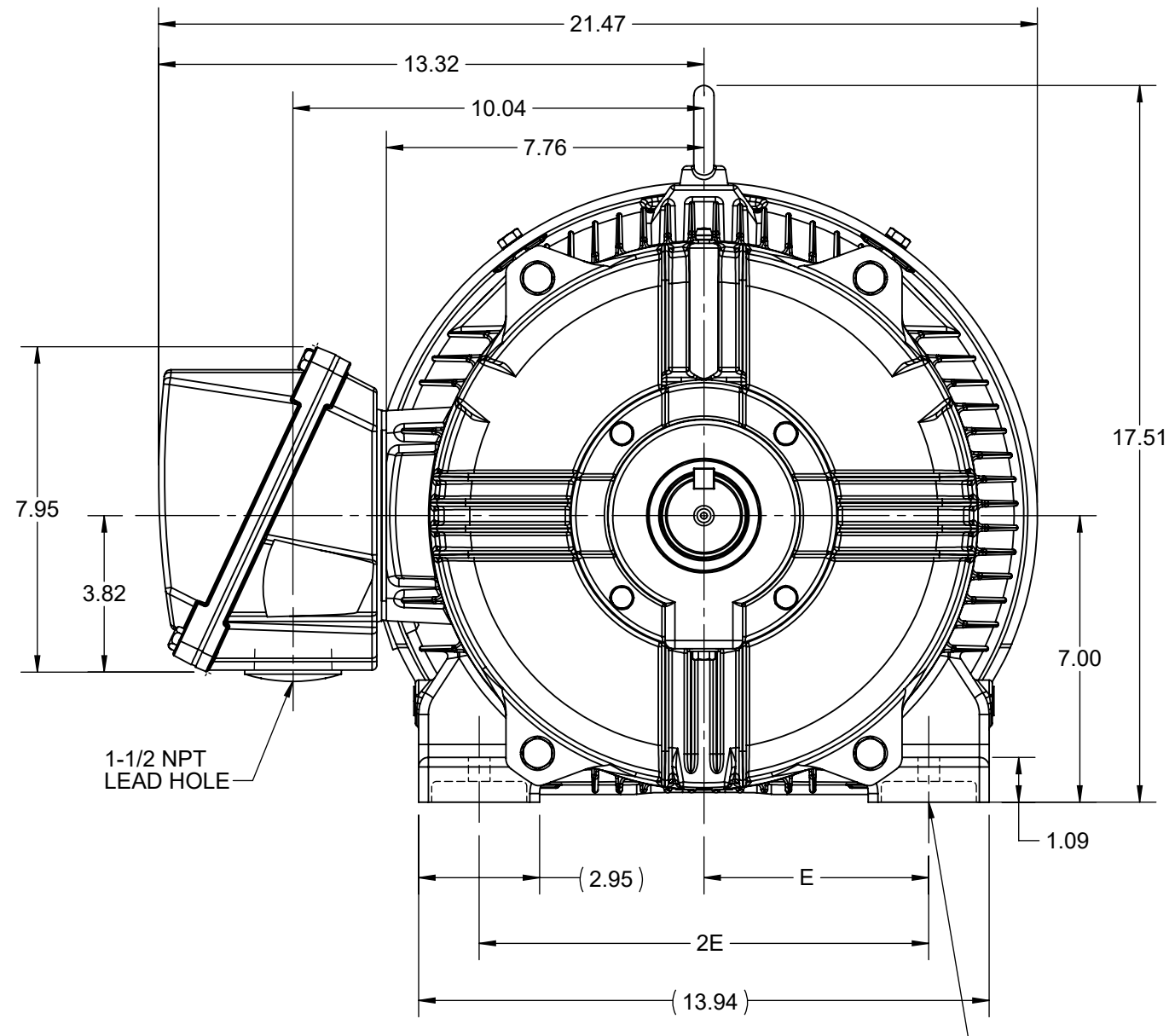
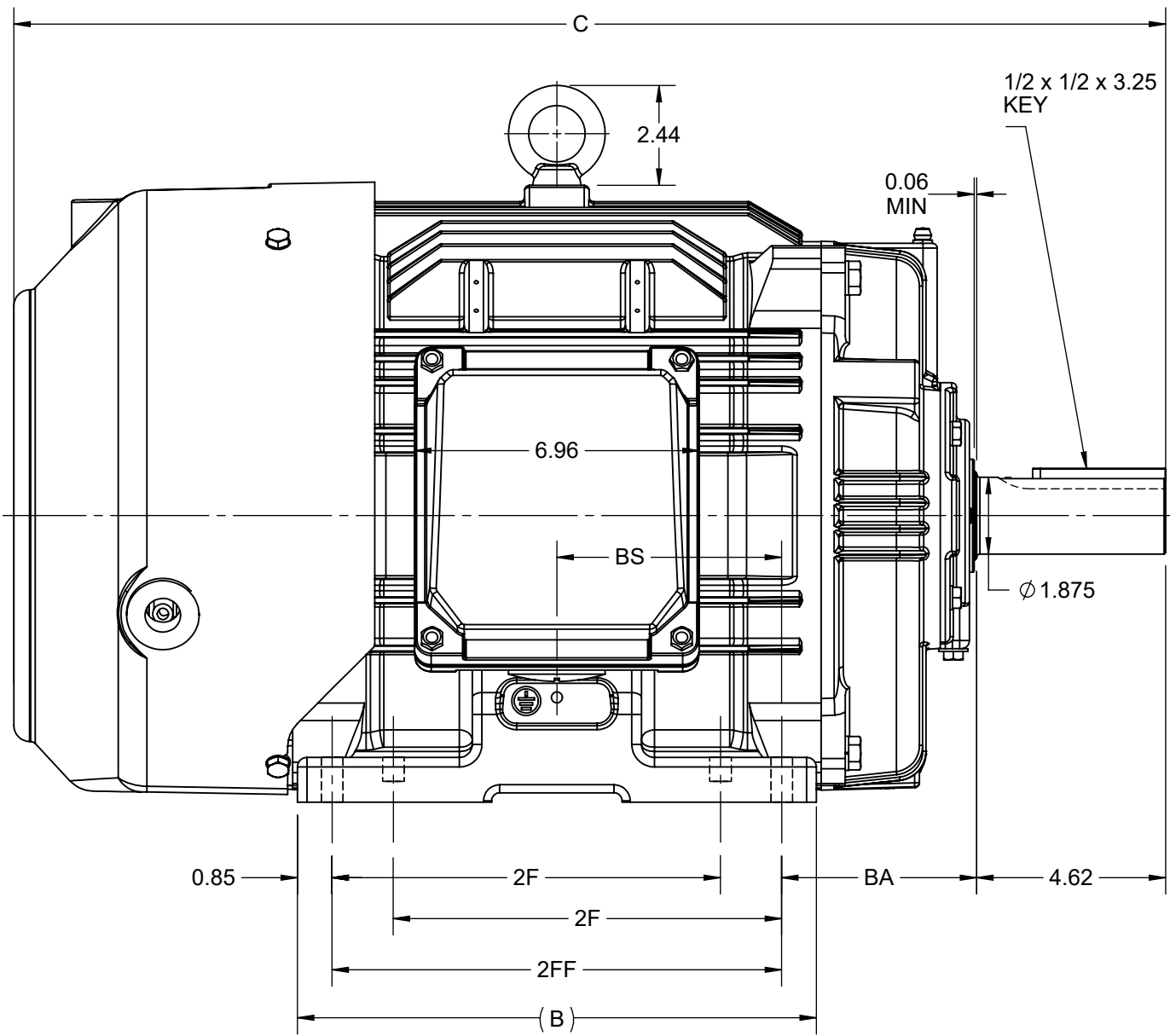
Phase	3	Output HP	10 Hp
Output KW	7.5 kW	Voltage	460 V
Speed	880 rpm	Service Factor	1.15
Frame	284T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	89.5 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	13.8 A	Power Factor	75
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	H
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6211
UL	Listed	CSA	Y
CE	Y	IP Code	56
Number of Speeds	1	Hazardous Location	DIVISION 2 T2B

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	8	Rotation	Reversible
Resistance Main	.8717 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
Outline Drawing	SS312942-100	Connection Drawing	EE7300

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DASH NO.	4		3				2		1	
	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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DRAWN BY BISWA	REGAL ® Regal Beloit America, Inc.
DATE 24/12/2018	
APPROVED BY SBD	DESCRIPTION OUTLINE 284/286T FR-NEMA-SD & IEEE841
DATE 24/12/2018	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER SS312942
	SHEET 1 OF 1

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

TERMINAL BLOCK WHEN SPECIFIED

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS



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



P.O. BOX 8003
 WAUSAU, WI 54401-8003
 PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____
 ORDER #: _____
 CONN. DIAGRAM: EE7300
 OUTLINE: SS312942-100
 WINDING: HA31808008 NONE 1
 SPEED: _____

CUSTOMER P.O. #: _____
 REFERENCE MODEL #: 284THFCD19102
 CAT #: W543A
 CUSTOMER PART #: _____
 MOUNTING: F1/F2 CAPABLE
 FAN: 504205B

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
10	7.5	900	880	284T	TEFC	TFC	H	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	460	13.8	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	89.5	3/4 LD EFF	89.9	1/2 LD EFF	88.9	GTD EFF	ELECT. TYPE
F.L. PF	75.0	3/4 LD PF	70.2	1/2 LD PF	58.8	88.5	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
60.0 LB-FT	86.0	85.0 LB-FT 142%	135 LB-FT 225%	45

SOUND PRESSURE	SOUND	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR
63 dBA	72 dBA	6.2 LB-FT ²	273 LB-FT ²	35 SEC.	2	430	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	YES	NONE	BLUE - RAL 5003 (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)	FLOAT
0.553	0.482	2.578	2.601	36.584	0.080	ODE

* N O T E S *	INVERTER TORQUE: CONSTANT 10:1/VARIABLE 10:1 INV. HP SPEED RANGE: NONE					
	ENCODER: NONE					
	NONE					
	NONE PPR					

PREPARED BY: _____	BRAKE: NONE
DATE: 8/5/2022	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:
	UL: NO LETTER - ME, WUXI TEFC BLUEWHALE CLASS 1 DIV. 2 UL LISTED

FORM: 3531 REV. 4 2/27/06

Data Sheet

284THFCD19102

Date: 7/27/2022
 Customer: _____
 Attention: _____
 Submitted by: _____



Submittal

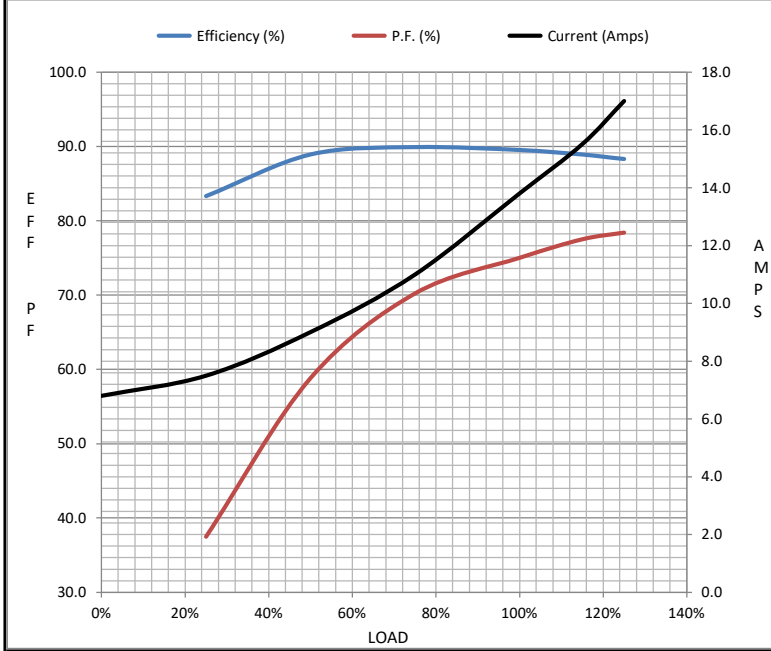
Data @ **460** V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	6.8	7.5	9.0	11.0	13.8	15.5	17.0	86.0
Torque (ft-lb)	0.00	14.7	29.6	44.6	60.0	69.0	75.4	85.0
RPM	900	895	890	885	880	875	875	0
Efficiency (%)		83.3	88.9	89.9	89.5	88.9	88.3	
P.F. (%)	6.2	37.5	58.8	70.2	75.0	77.5	78.4	32.0

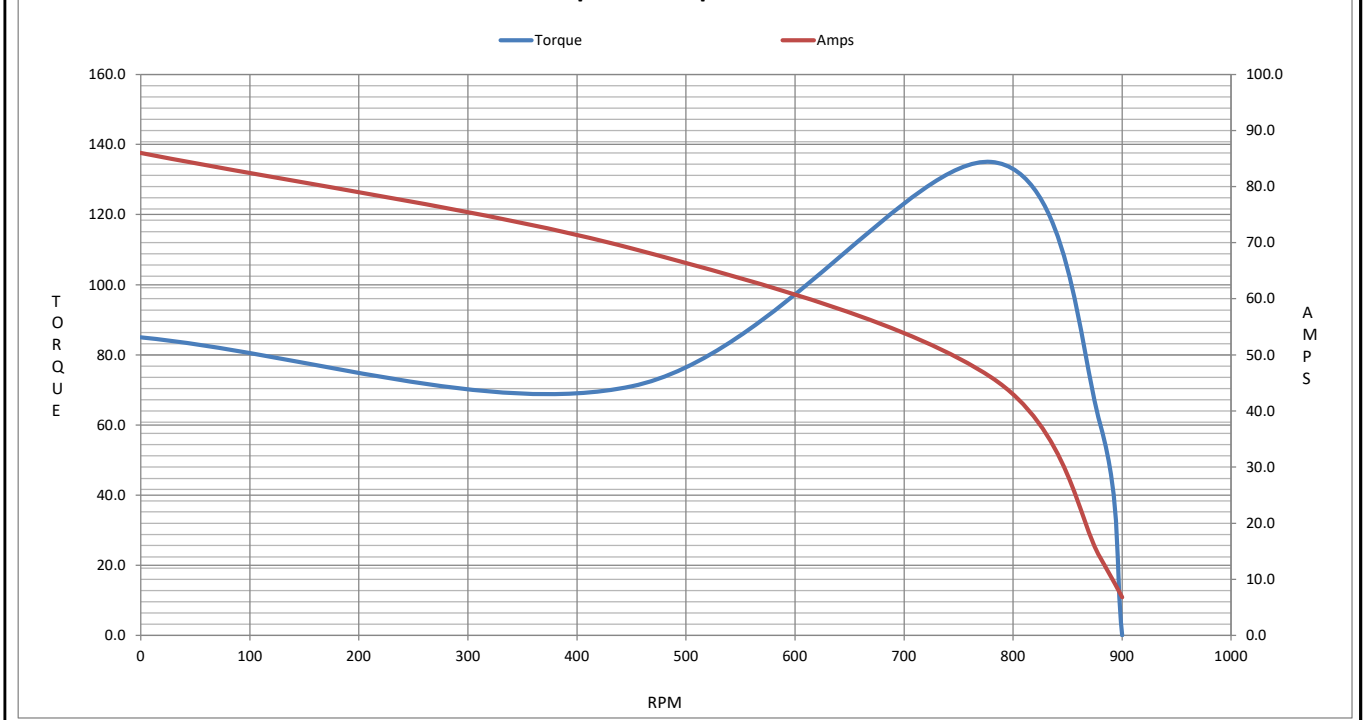
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block	
Speed (RPM)	0	450	780	880	900	HP	10.0
Current (Amps)	86.0	69.0	46.0	13.8	6.8	Sync. RPM	900
Torque (ft-lb)	85.0	71.0	135	60.0	0.00	Frame	284



Enclosure	TEFC			
Construction	TFC			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	45 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	6.2 Lb-Ft ²			
Ref Wdg	HA31808008 NONE			
Sound Pressure @ 1M	63 dBA			
VFD Rating	CONSTANT 10:1/VARIABLE 10:1			
Outline Dwg				
Conn. Diag	EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.5530	0.4820	2.5780	2.6010	36.5840

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 : 284THFCD19102

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

Catalog No : W543A

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