

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 284TTDBD4027

Catalog No: U552

Fire Pump Motor, 25 & 20 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM, 284T Frame, DP



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RegalRexnord

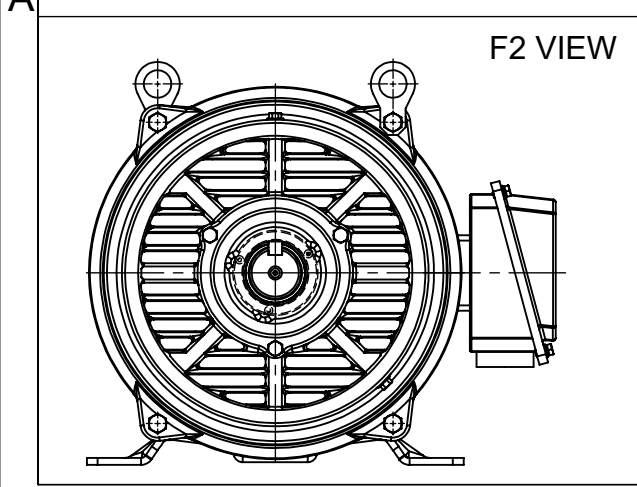
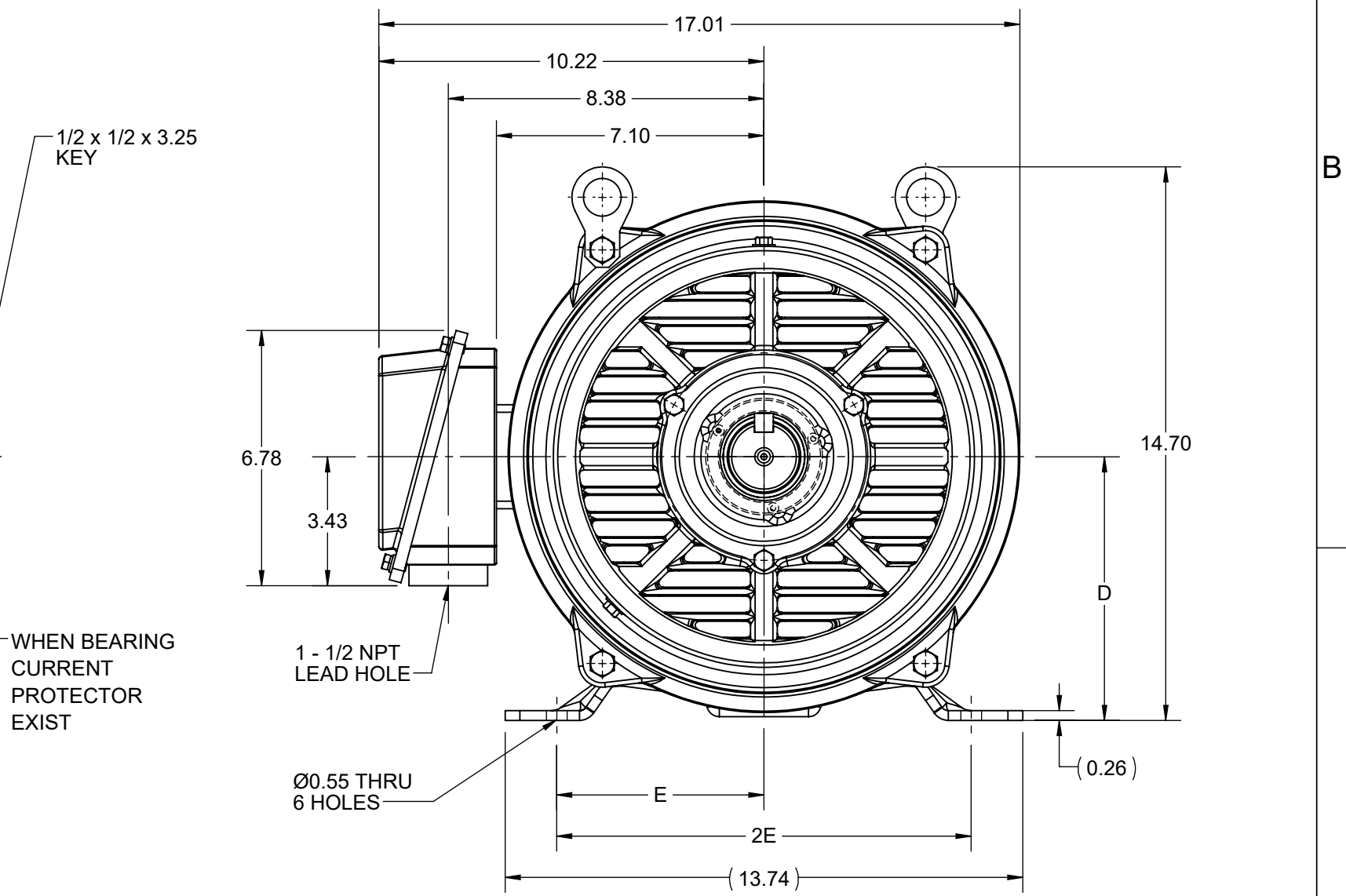
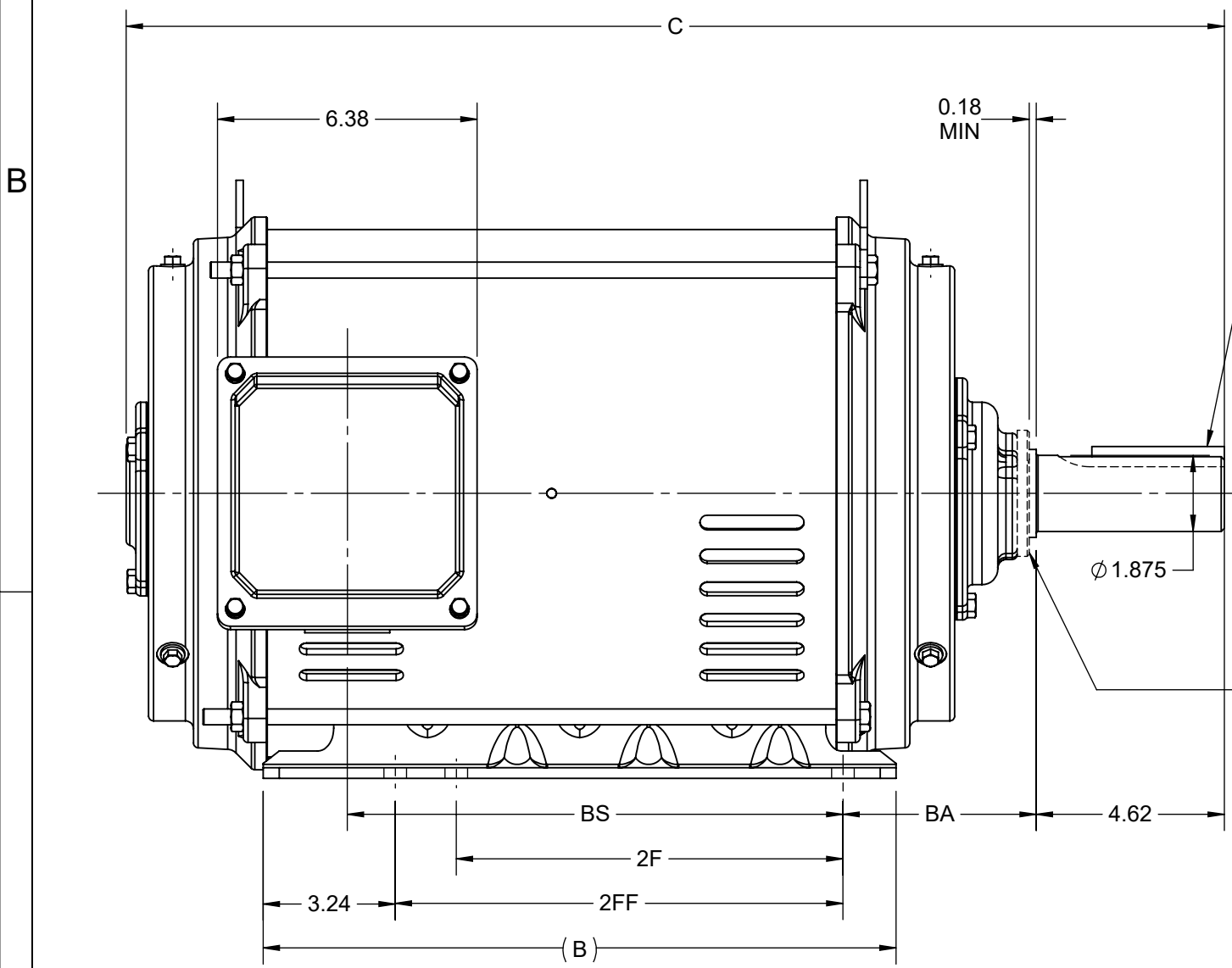
### Nameplate Specifications

Phase	3	Output HP	25 & 20 Hp
Output KW	18.7 & 14.9 kW	Voltage	230/460 & 190/380 V
Speed	1772 & 1472 rpm	Service Factor	1.15 & 1.15
Frame	284T	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	91.7 & 90.2 %
Ambient Temperature	50 °C	Frequency	60 & 50 Hz
Current	61/30.5 & 60/30 A	Power Factor	83
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	Listed	CSA	Y
CE	Y	IP Code	23
Number of Speeds	1		

### Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Part Wdg Start Low Volt Only & Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.585 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	25.71 in
Frame Length	12.59 in	Shaft Diameter	1.875 in
Shaft Extension	4.62 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	SS620687-284T	Connection Drawing	EE7308AA

4				3				2		1	
DASH NO.	B	C	D	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	15.55	25.60	7.00	5.50	11.00	9.50	11.00	4.75	10.80	F1 OR F2	284T
200		26.98							12.18		286T



DRAWING REVISION E	REVISION BY GOPI J	REV DATE/© DATE 01/02/2022
REQUEST NUMBER CR-0006669	APPROVED BY SBD	DATE 01/02/2022
REQUEST NUMBER DESCRIPTION VIEWS UPDATED AS PER 3D		
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ARE FOR REFERENCE ONLY

DRAWN BY XZ	<b>Regal Rexnord</b> Regal Beloit America, Inc.	
DATE 17/04/2017	DESCRIPTION <b>OUTLINE</b> 284/286T FR NEMA ODP RS	
APPROVED BY	MATERIAL	PROCESS/FINISH
DATE	SIZE B	DRAWING NUMBER SS620687
REFERENCE	THIRD ANGLE PROJECTION	SHEET 1 OF 1



### LOW VOLTAGE



### HIGH VOLTAGE



DRAWING REVISION <b>K</b>	REVISION BY <b>AJW</b>	DATE <b>07-17-2015</b>
ECO <b>ECO-0081632</b>	APPROVED BY <b>T. VUE</b>	DATE <b>07-17-2015</b>
ECO DESCRIPTION <b>REV'D IEC MARKINGS PER IEC 60034-8</b>		
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DRAWN BY <b>LZ</b>	<b>Regal Beloit America, Inc.</b>	
DATE <b>01-12-1994</b>		
APPROVED BY <b>GK</b>	DESCRIPTION <b>CONN DIAGRAM-EXTERNAL</b> <b>3Ø-2/1 DELTA-12 LEADS</b>	
DATE <b>01-14-1994</b>		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE <b>A</b>	DRAWING NUMBER <b>EE7308AA</b>
		SHEET <b>1 OF 1</b>



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

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CUSTOMER: \_\_\_\_\_ CUSTOMER P.O. #: \_\_\_\_\_  
 ORDER #: \_\_\_\_\_ REFERENCE MODEL #: 284TTDBD4027  
 CONN. DIAGRAM: EE7308AA CAT #: U598  
 OUTLINE: SS620687 CUSTOMER PART #: \_\_\_\_\_  
 WINDING: IE3L1804110 NONE 2 MOUNTING: F1/F2 CAPABLE  
 SPEED: \_\_\_\_\_

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
25	18.7	1800	1772	284T	DP	TDC	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	61/30.5&60/30	WS(LV ONLY) & YDRU	CONT	F	1.15	50	3300

F.L. EFF	91.7	3/4 LD EFF	91.7	1/2 LD EFF	91.0	GTD EFF	ELECT. TYPE
F.L. PF	83.0	3/4 LD PF	79.0	1/2 LD PF	69.0	90.2	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
74.0 LB-FT	175	120 LB-FT 162%	170 LB-FT 230%	40

@ 3 FT.	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
999 dBA	1008 dBA	0.00 LB-FT <sup>2</sup>	0 LB-FT <sup>2</sup>	20 SEC.	2	0 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	NO	NONE	NO	NONE	RED (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL
BALL	BALL						
6311	6210						

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
0.352	0.147	0.873	1.066	21.943	0.150	ODE

* N O T E S *	INVERTER TORQUE: NONE					
	INV. HP SPEED RANGE: NONE					
	ENCODER: NONE					
	NONE					
	NONE					

PREPARED BY: FAREEDA DUDEKULA	BRAKE: NONE
DATE: 8/29/2018	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:
	UL: NONE

FORM: 3531 REV\_4 2/27/06

Data Sheet

Date: 12/13/2018  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



284TTDBD4027

Submittal

Data @ 460 V

Motor Load Data

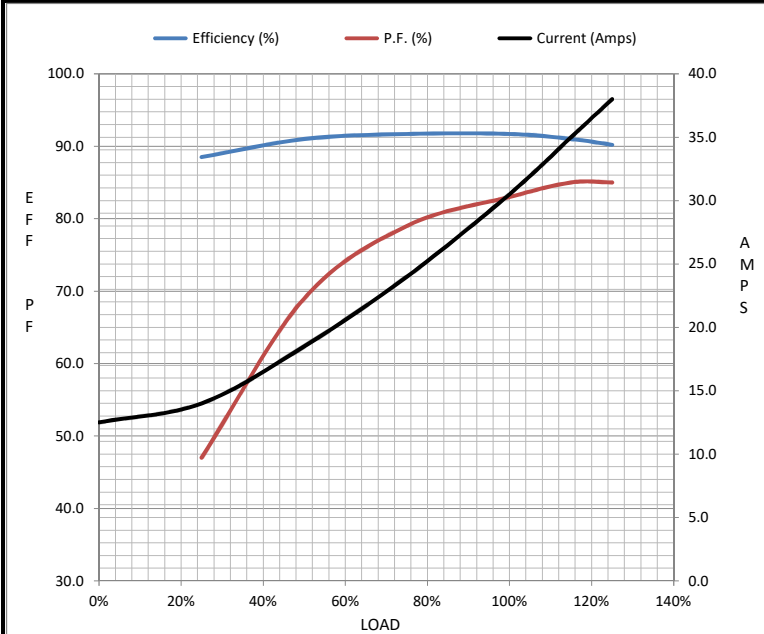
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	12.5	14.0	18.5	24.0	30.5	35.0	38.0	175
Torque (ft-lb)	0.00	18.5	37.0	55.5	74.0	85.5	93.0	120
RPM	1800	1792	1786	1780	1772	1,768	1762	0
Efficiency (%)		88.5	91.0	91.7	91.7	91.0	90.2	
P.F. (%)	5.0	47.0	69.0	79.0	83.0	85.0	85.0	44.0

Motor Speed Data

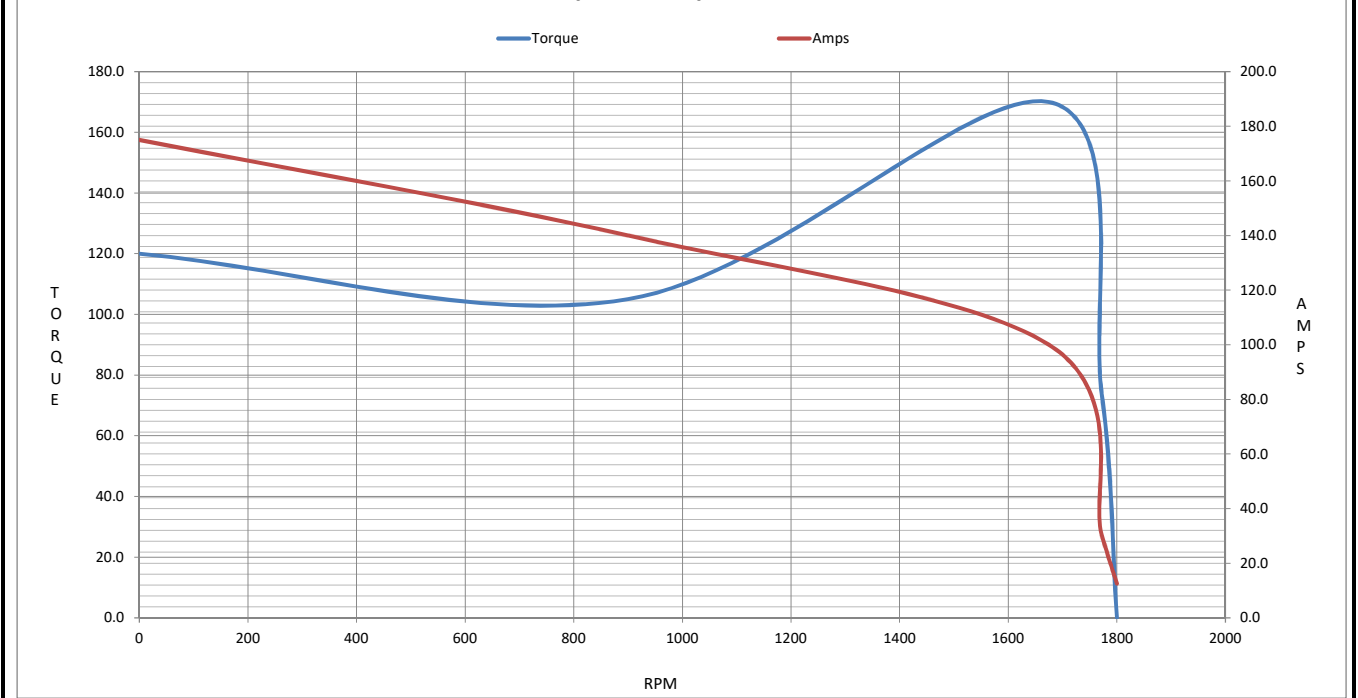
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1675	1772	1800
Current (Amps)	175	140	100	30.5	12.5
Torque (ft-lb)	120	105	170	74.0	0.00

Information Block

HP	25.0			
Sync. RPM	1800			
Frame	284			
Enclosure	DP			
Construction	TDB			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	40 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.00 Lb-Ft <sup>2</sup>			
Ref Wdg	IE3L1804110 NONE			
Sound Pressure @ 1M	999 dBA			
VFD Rating	NONE			
Outline Dwg	SS620687			
Conn. Diag	EE7308AA			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3520	0.1470	0.8730	1.0660	21.9430



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 : 284TTDBD4027

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

Catalog No : U552

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**