

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 286TTFC6028

Catalog No: GT1231A

Globetrotter® General Purpose Motor, 30 & 25 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,  
1800 & 1500 RPM, 286TC Frame, TEFC



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RegalRexnord

### Nameplate Specifications

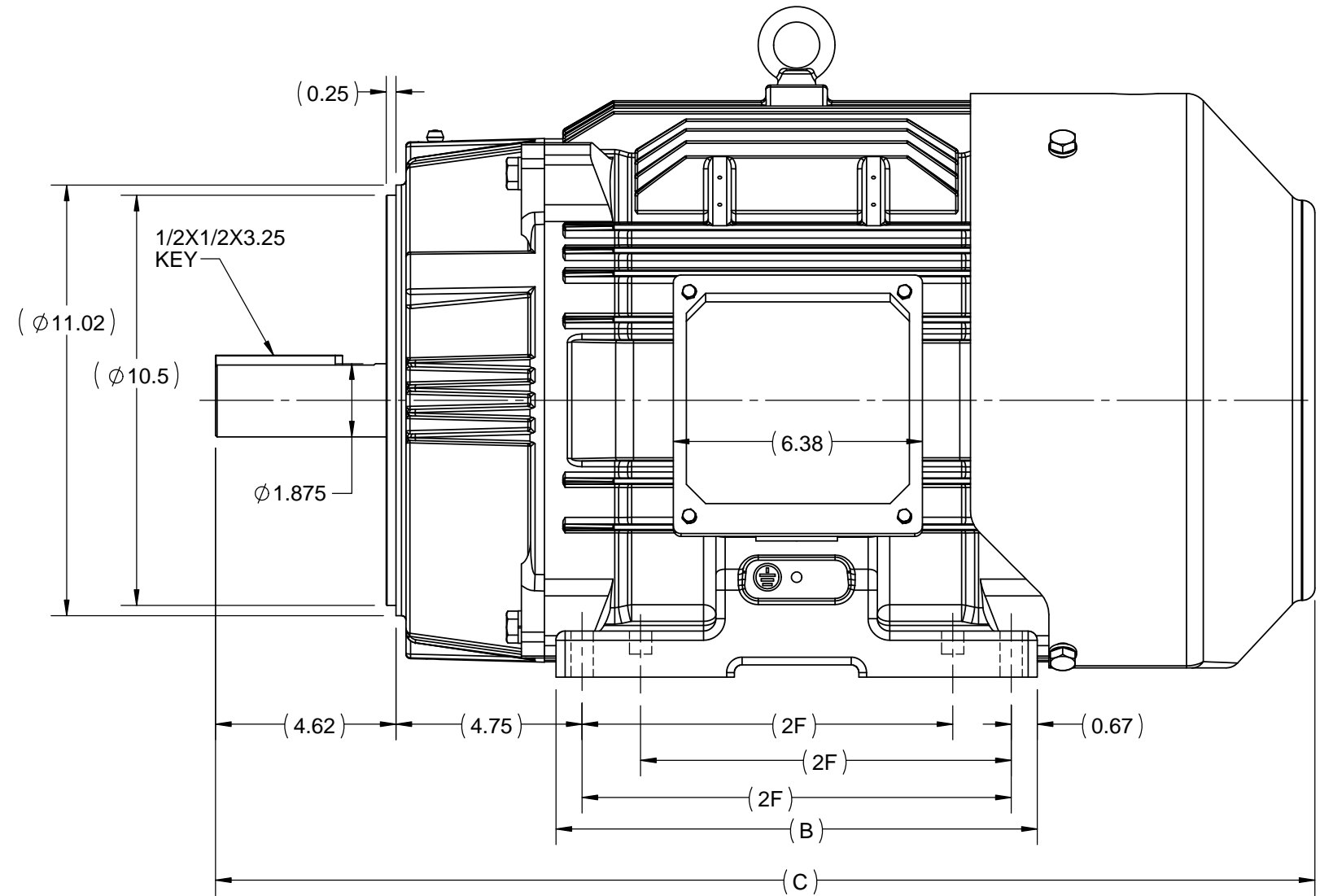
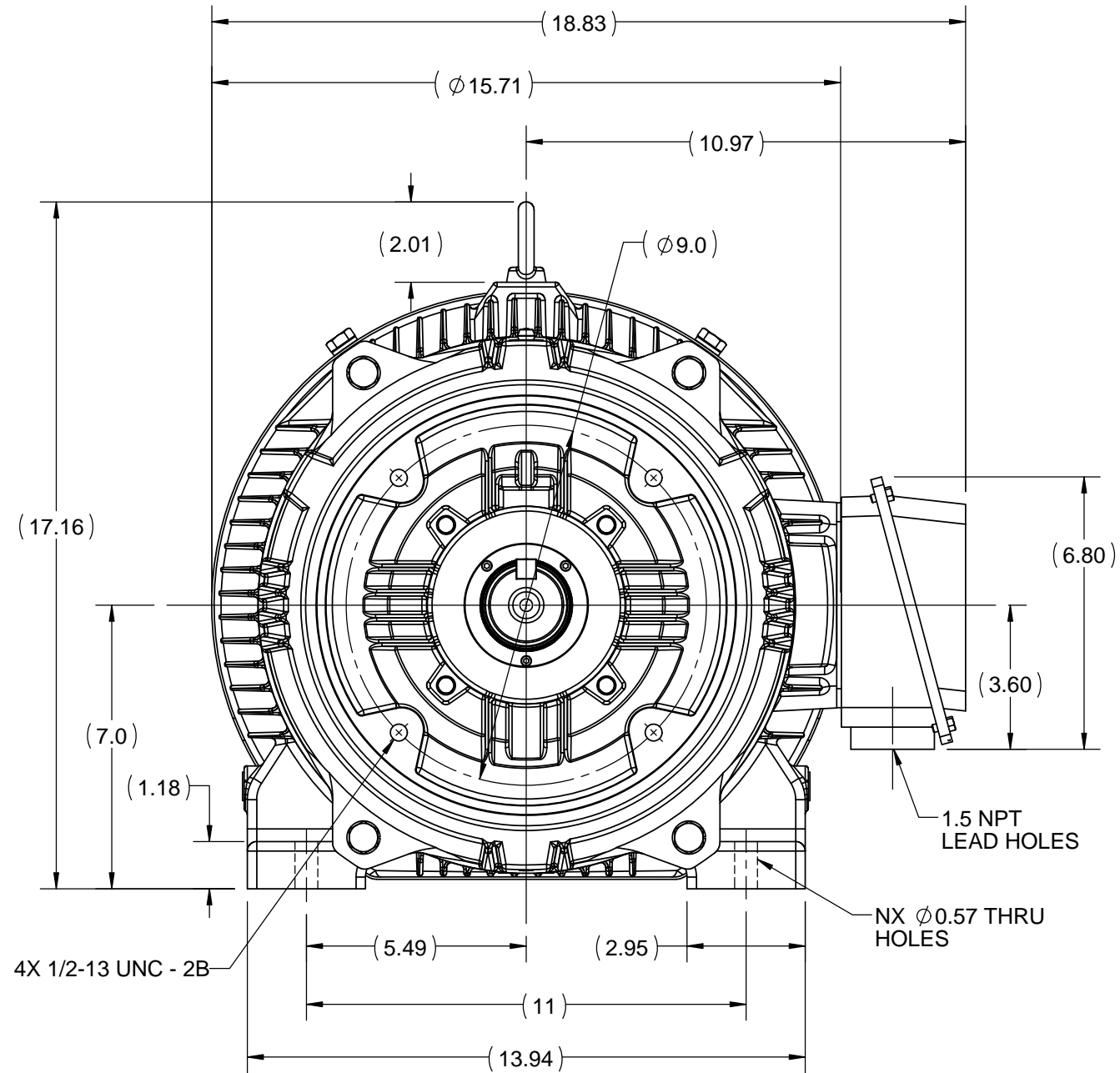
Phase	<b>3</b>	Output HP	<b>30 &amp; 25 Hp</b>
Output KW	<b>22.4 &amp; 18.7 kW</b>	Voltage	<b>230/460 &amp; 190/380 V</b>
Speed	<b>1770 &amp; 1470 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>286TC</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>93.6 &amp; 92.8 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>71/35.5 &amp; 71/35.5 A</b>	Power Factor	<b>84</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</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>55</b>
Number of Speeds	<b>1</b>	Hazardous Location	<b>DIVISION 2 T2B</b>

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Part Wdg Start Low Volt Only &amp; Wye Start Delta Run Or Inverter</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.27 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>T</b>	Overall Length	<b>28.14 in</b>
Frame Length	<b>12.91 in</b>	Shaft Diameter	<b>1.875 in</b>
Shaft Extension	<b>4.62 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>CONSTANT 10:1/VARIABLE 10:1</b>		
Outline Drawing	<b>SS620701-200</b>	Connection Drawing	<b>EE7308AA</b>

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# OUTLINE



DRAWING REVISION A	REVISION BY	DATE
ECO ECO-0116959	APPROVED BY	DATE
ECO DESCRIPTION <b>NEW OUTLINE RELEASE</b>		
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DRAWN BY SN	Regal Beloit America, Inc.
DATE 16/01/2017	
APPROVED BY SBD	DESCRIPTION <b>OUTLINE</b>
DATE 16/01/2017	284/286TC FR-TEFC-CAST IRON
REFERENCE	MATERIAL PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE DRAWING NUMBER <b>SS620701F</b>
	SHEET 1 OF 1

286	12.32	28.14	11	8
284	10.82	26.65	9.5	4
FRAME	B	C	2F	N



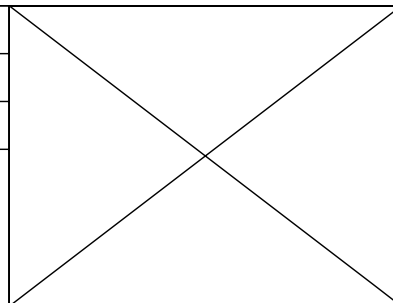
### LOW VOLTAGE



### 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>	MATERIAL	PROCESS/FINISH
REFERENCE	SIZE <b>A</b>	DRAWING NUMBER <b>EE7308AA</b>
THIRD ANGLE PROJECTION	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 #:** 286TTFCD6028  
**CONN. DIAGRAM:** A-EE7308AA **CAT #:** GT1231A  
**OUTLINE:** B-SS620706 **CUSTOMER PART #:** \_\_\_\_\_  
**WINDING:** HE31804006 NONE 2 **MOUNTING:** F1/F2 CAPABLE  
**SPEED:** \_\_\_\_\_

**TYPICAL MOTOR PERFORMANCE DATA**

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

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	72.5/36.5&73/36.5	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	93.6	3/4 LD EFF	93.6	1/2 LD EFF	93.0	GTD EFF	93.0	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 @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
89.0 LB-FT	217	178 LB-FT 200%	227 LB-FT 255%	65

@ 3 FT.	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
68 dBA	77 dBA	5.7 LB-FT <sup>2</sup>	225 LB-FT <sup>2</sup>	20 SEC.	2	600 LB.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	BLUE (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)	CAST IRON
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
0.168	0.111	0.617	0.851	16.727	0.150	ODE

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

<b>PREPARED BY:</b> FAREEDA DUDEKULA <b>DATE:</b> 5/3/2018	BRAKE: NONE NONE NONE					
	FT-LB: NA VOLTAGE: NONE HZ:					
	UL: V-INS, CONST UL REC					

FORM: 3531 REV\_4 2/27/06

Data Sheet

Date: 5/3/2018  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



286TTFC6028

Submittal

Data @ 460 V

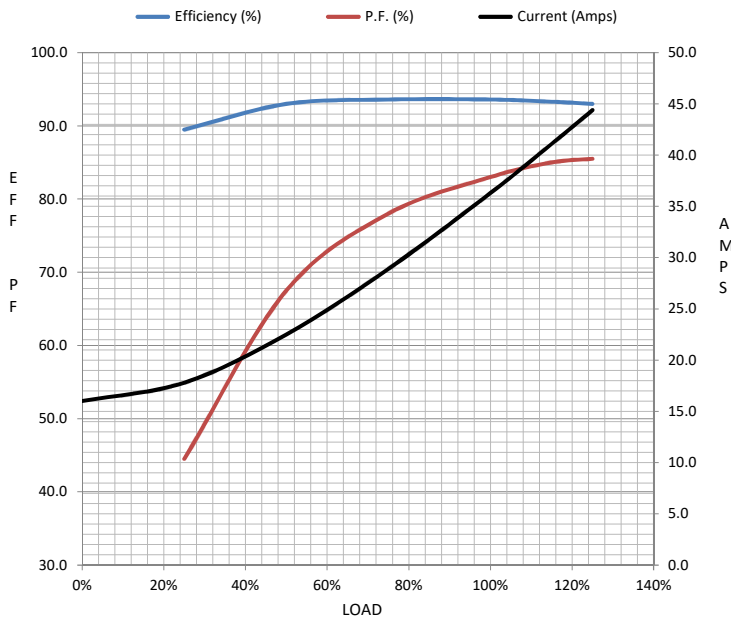
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	16.0	17.8	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

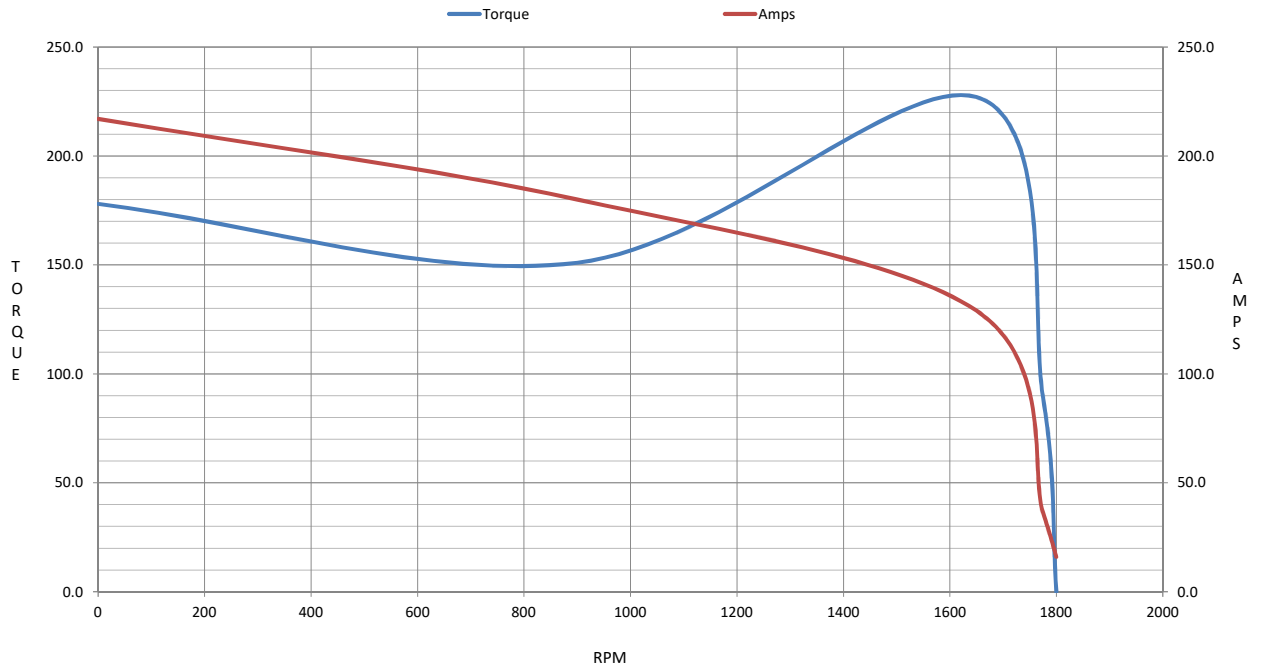
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1650	1775	1800
Current (Amps)	217	180	129	36.3	16.0
Torque (ft-lb)	178	151	227	89.0	0.00

Information Block				
HP	30.0			
Sync. RPM	1800			
Frame	286182TTFC6080			
Enclosure	TEFC			
Construction	TFC			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	65 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	5.7 Lb-Ft <sup>2</sup>			
Ref Wdg	HE31804006 NONE			
Sound Pressure @ 1M	68 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS620706			
Conn. Diag	A-EE7308AA			
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 : 286TTFCD6028

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

Catalog No : GT1231A

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**