

PRODUCT INFORMATION PACKET

Model No: 286TTFCD6028

Catalog No: GT1231A

General Purpose Motor, 30 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 286TC Frame, TEFC



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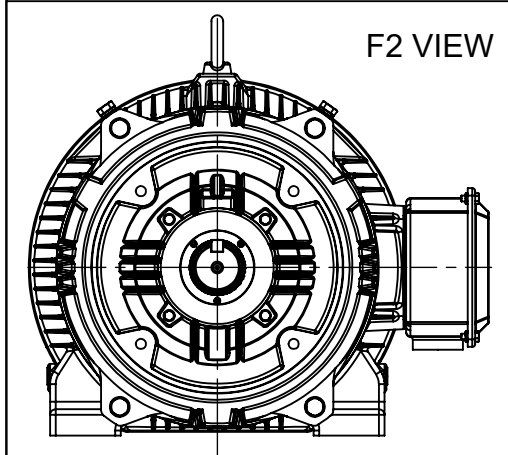
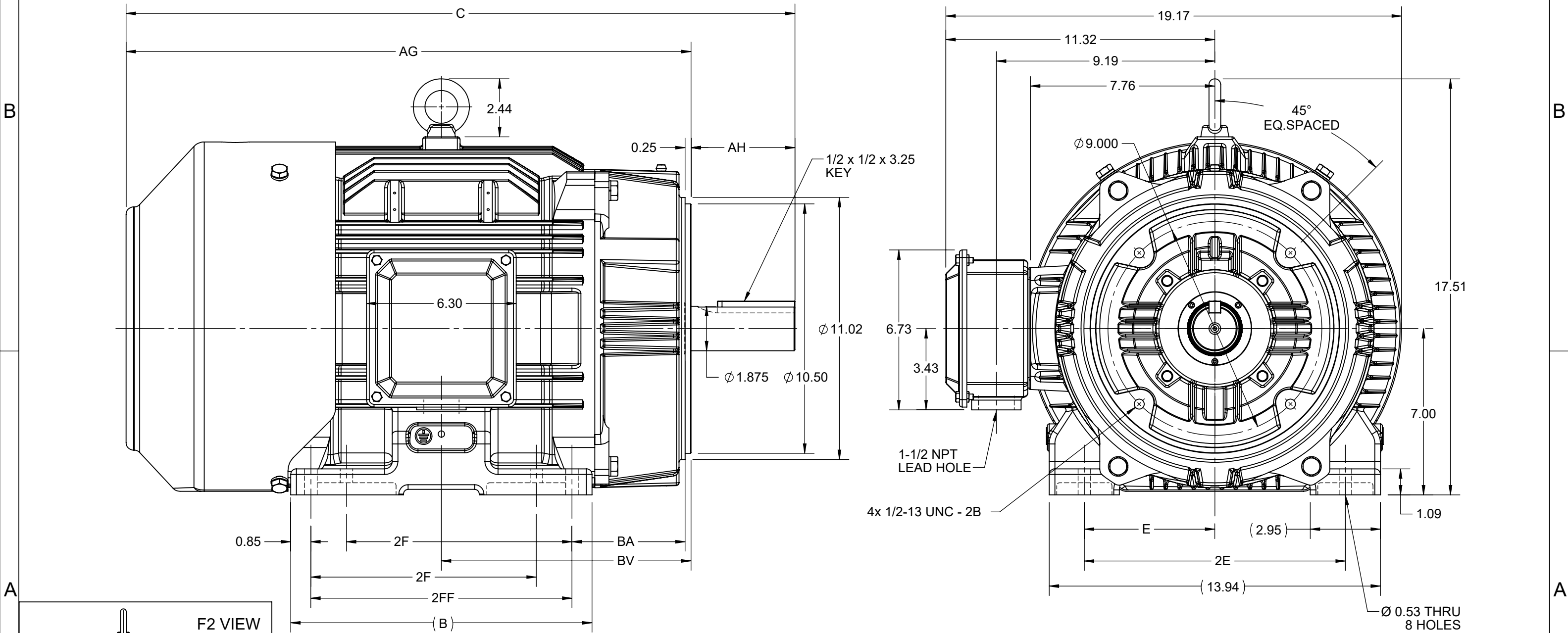
Nameplate Specifications

Output HP	30 Hp	Output KW	22.4 kW
Frequency	60 Hz	Voltage	230/460 V
Current	71.0/35.5 A	Speed	1770 rpm
Service Factor	1.15	Phase	3
Efficiency	93.6 %	Power Factor	84
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	286TC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6211
UL	Listed	CSA	Y
CE	Y	IP Code	55
Hazardous Location	DIVISION 2 T2B	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Part Wdg Start Low Volt Only & Wye Start Delta Run 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	Overall Length	28.14 in
Frame Length	12.91 in	Shaft Diameter	1.875 in
Shaft Extension	4.62 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 10:1/VARIABLE 10:1		
Outline Drawing	SS620701-200	Connection Drawing	EE7308AA

DASH NO.	4		3				2		1			
	B	C	E	2E	2F	2FF	AG	AH	BA	BV	MOUNTING	FRAME
100	10.83	26.64	5.50	11.00	---	9.50	22.27	4.38	4.75	9.76	F1 OR F2	284TC
200	12.68	28.14			9.50	11.00	23.77			10.50		284/286TC



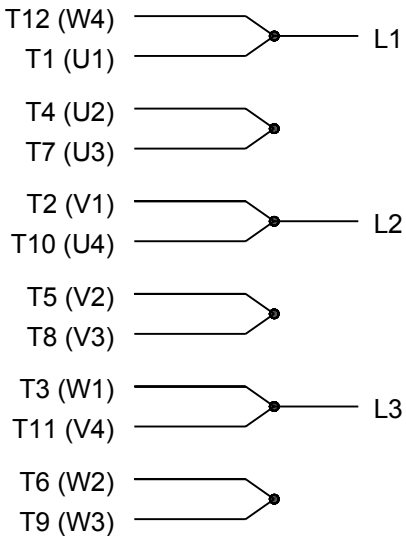
DRAWING REVISION C	REVISION BY VS	REV DATE/© DATE 27-10-2020
ECO CR-0000305	APPROVED BY GNK	DATE 27-10-2020
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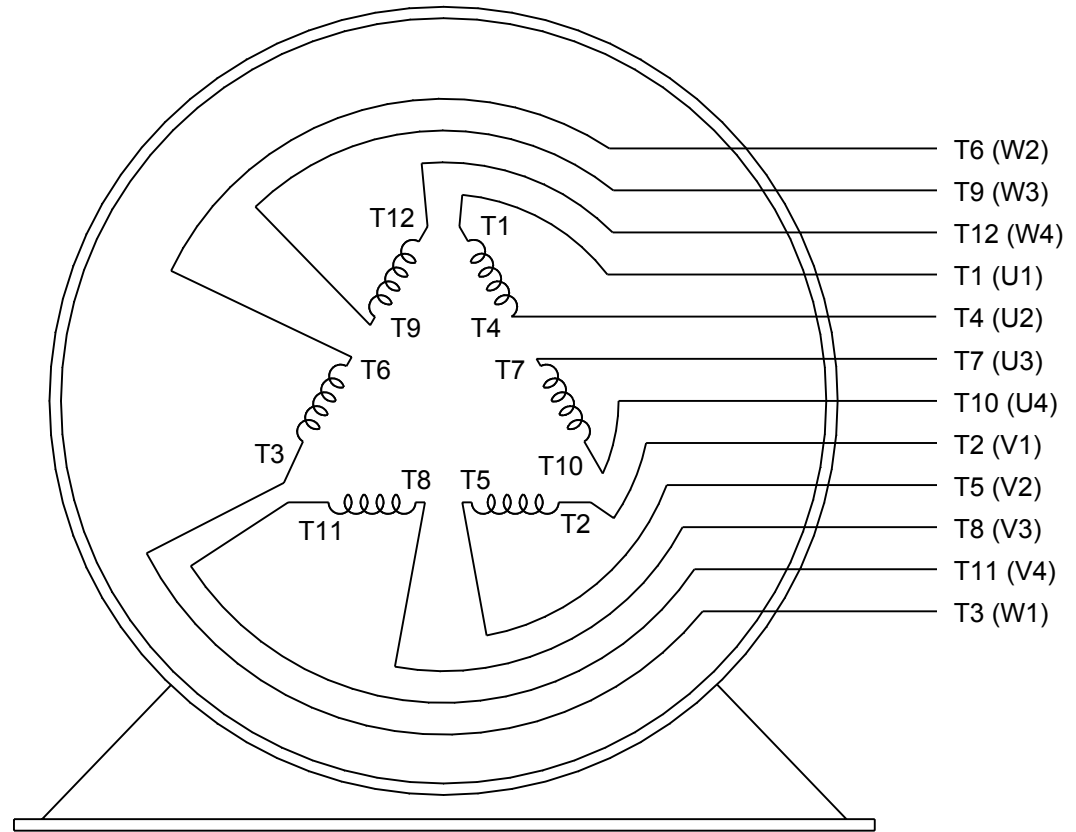
DRAWN BY SMAR	REGAL ® Regal Beloit America, Inc.
DATE 06/07/2015	
APPROVED BY SBD	DESCRIPTION OUTLINE 284/286TC FR-TEFC-CAST IRON
DATE 06/07/2015	MATERIAL PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
DRAWING NUMBER SS620701	SHEET 1 OF 1



LOW VOLTAGE

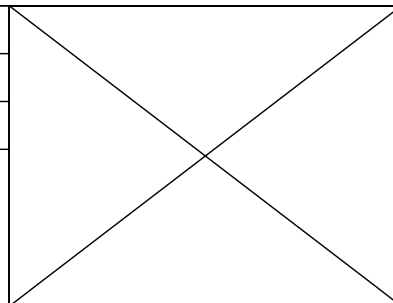


HIGH VOLTAGE



VIEW OF TERMINAL END

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



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	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 ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
68 dBA	77 dBA	5.7 LB-FT ²	225 LB-FT ²	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					

PREPARED BY: FAREEDA DUDEKULA DATE: 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

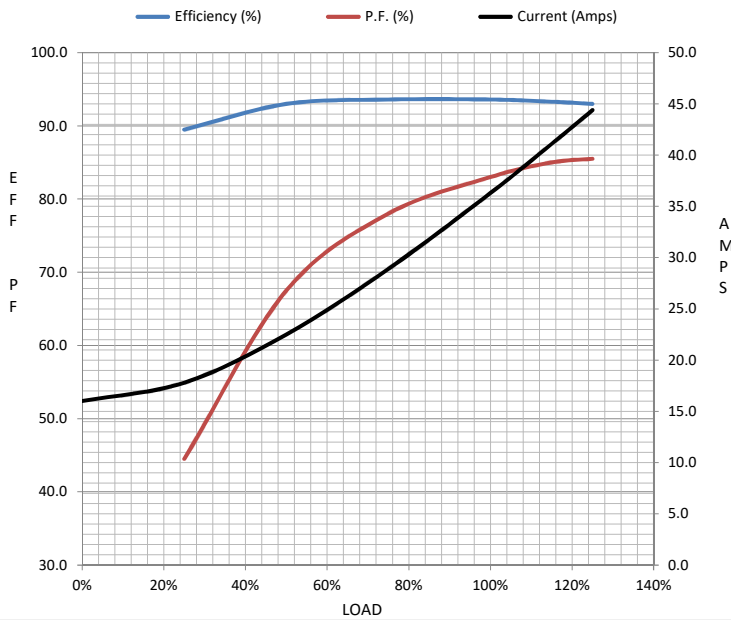
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	16.0	17.8	22.5	28.9	36.3	41.1	44.4	217
Torque (ft-lb)	0.00	22.0	44.0	66.5	89.0	102	111	178
RPM	1800	1795	1788	1782	1775	1,770	1768	0
Efficiency (%)		89.5	93.0	93.6	93.6	93.3	93.0	
P.F. (%)	5.0	44.5	67.5	78.0	83.0	85.0	85.5	36.0

Motor Speed Data

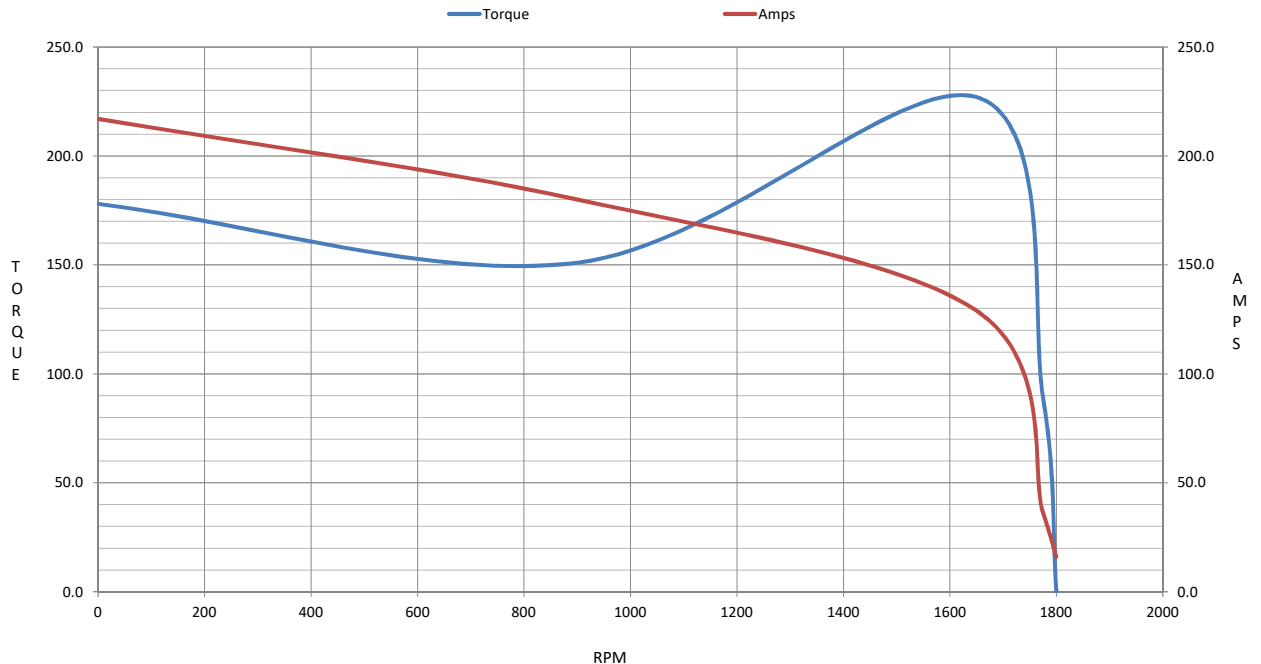
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1650	1775	1800
Current (Amps)	217	180	129	36.3	16.0
Torque (ft-lb)	178	151	227	89.0	0.00

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 ²	5.7 Lb-Ft ²			
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