

PRODUCT INFORMATION PACKET

Model No: 286THTCD7026

Catalog No: Y393A

Black Max® Inverter Duty Encoder Motor, 30 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 286TC Frame, TENV



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E



Nameplate Specifications

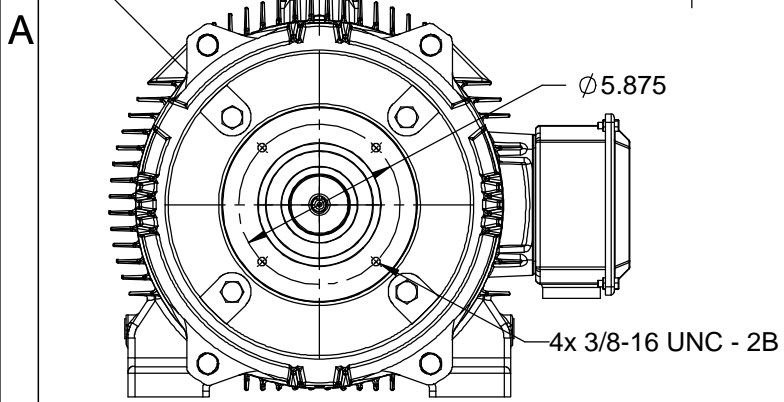
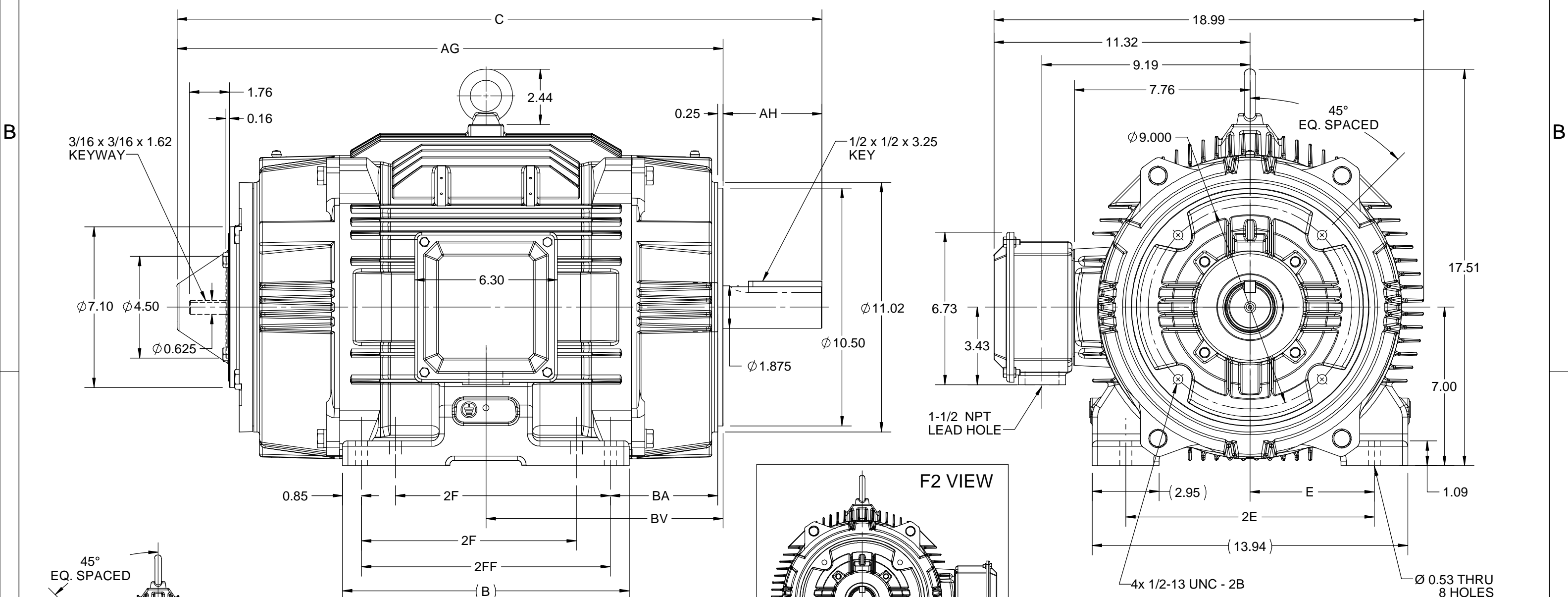
Output HP	30 Hp	Output KW	22.4 kW
Frequency	60 Hz	Voltage	230/460 V
Current	74.0/37.0 A	Speed	1780 rpm
Service Factor	1	Phase	3
Efficiency	93.8 %	Power Factor	80.5
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	K
Frame	286TC	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6311
UL	Recognized	CSA	Y
CE	Y	IP Code	55
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	.193 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 1000:1
Outline Drawing	SS313097-200	Connection Drawing	EE7308T

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:04/11/2023

DASH NO.	4				3				2			1
	B	C	E	2E	2F	2FF	AG	AH	BA	BV	MOUNTING	
100	10.83	27.00	5.50	11.00	---	9.50	22.63	4.38	4.75	9.76	F1 OR F2	284TC
200	12.68	28.50			9.50	11.00	24.13			10.48		284/286TC

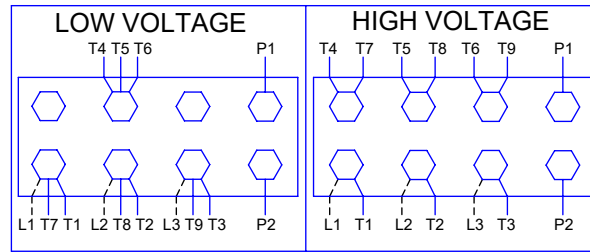
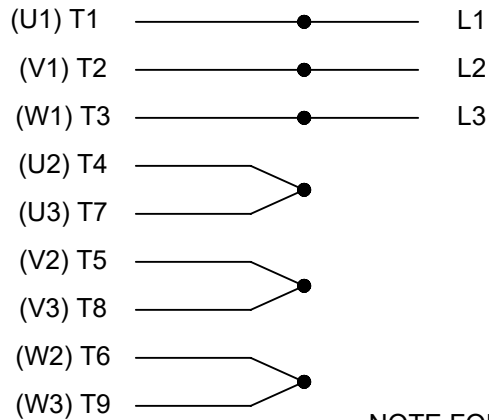


DRAWING REVISION D	REVISION BY VS	REV DATE/© DATE 27-10-2020
ECO ECO-0193836	APPROVED BY GNK	DATE 27-10-2020
ECO DESCRIPTION DRAWING UPDATED COPYRIGHT (PER REVISION DATE) REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.		

PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

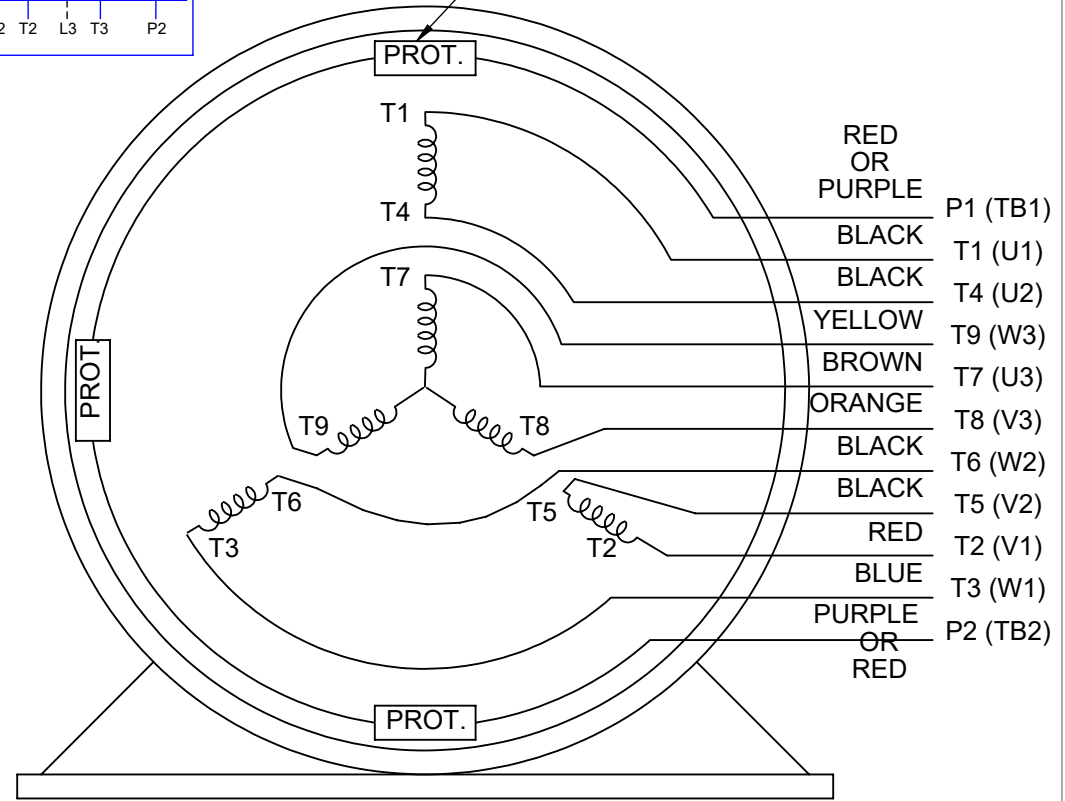
DRAWN BY VS	REGAL ® Regal Beloit America, Inc.
DATE 04-06-2020	
APPROVED BY SBD	DESCRIPTION OUTLINE 284/286TC FR-NEMA-TENV-ODE 4.5AK
DATE 04-06-2020	MATERIAL PROCESS/FINISH
REFERENCE	SIZE B
THIRD ANGLE PROJECTION	DRAWING NUMBER SS313097
	SHEET 1 OF 1

HIGH VOLTAGE



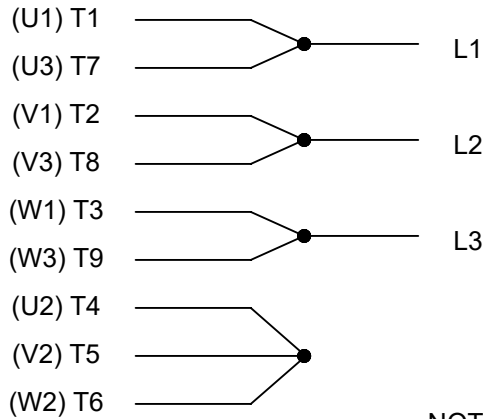
**THREE PHASE
DUAL VOLTAGE MOTOR**

THERMO-PROTECTORS
CONNECTED IN SERIES



NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE



VIEW OF TERMINAL END

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019		DRAWN BY SMC	Regal Beloit America, Inc.
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019		DATE 05-13-1992	
ECO DESCRIPTION ADDED TERMINAL CONNECTION DIAGRAM				APPROVED BY TB	DESCRIPTION CONN DIAGRAM-INTERNAL 3 PHASE - DUAL VOLTAGE MOTOR
<small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>				DATE 05-13-1992	MATERIAL
			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T



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 #:** 286THTCD7026
CONN. DIAGRAM: EE7308T **CAT #:** Y393A
OUTLINE: SS313097-200 **CUSTOMER PART #:** _____
WINDING: HA31804024 NONE 2 **MOUNTING:** F1/F2 CAPABLE
SPEED: _____ **FAN:** 504205B

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
30	22.4	1800	1780	286TC	TENV	TTC	K	INF

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	74/37	INVERTER ONLY	CONT	H	1.15	40	3300

F.L. EFF	93.8	3/4 LD EFF	93.7	1/2 LD EFF	92.5	GTD EFF	ELECT. TYPE
F.L. PF	80.5	3/4 LD PF	73.5	1/2 LD PF	60.5	93.5	SQ CAGE INV DUTY

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
88.5 LB-FT	384	194 LB-FT 219%	409 LB-FT 462%	105

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
62 dBA	71 dBA	5.3 LB-FT²	40 LB-FT²	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
C-FACE	BRAKE OR ENCODER	RIGID	HORIZONTAL	NO	NONE	NO	NONE	BLACK (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	6311						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (N/C)	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
0.121	0.088	0.545	0.515	13.538	0.080	ODE

* N O T E S *	INVERTER TORQUE: CONSTANT 1000:1 INV. HP SPEED RANGE: 2.0 X BASE SPEED					
	ENCODER: NONE					
	NONE					
	NONE PPR					

PREPARED BY: _____ DATE: 11/28/2022	BRAKE: NONE					
	NONE NONE					
	FT-LB: NA					
	VOLTAGE: NONE HZ:					

FORM: 3531 REV_4 2/27/06

Data Sheet

Date: 11/28/2022
 Customer: _____
 Attention: _____
 Submitted by: _____



286THTCD7026

NONE FAN

Submittal

Data @ **460** V

Motor Load Data

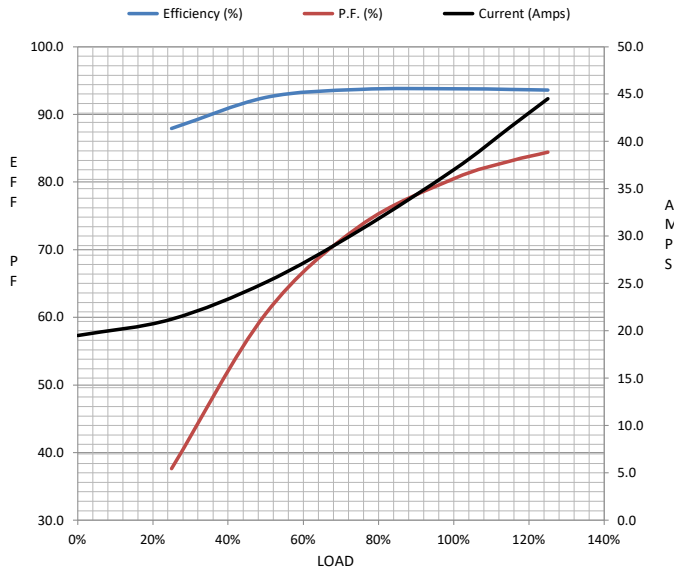
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	19.5	21.2	25.1	30.6	37.0	41.5	44.5	384
Torque (ft-lb)	0.00	22.0	44.0	66.2	88.5	102	111	194
RPM	1800	1795	1790	1785	1780	1,777	1775	0
Efficiency (%)		87.9	92.5	93.7	93.8	93.7	93.6	
P.F. (%)	4.6	37.6	60.5	73.5	80.5	83.1	84.4	33.3

Motor Speed Data

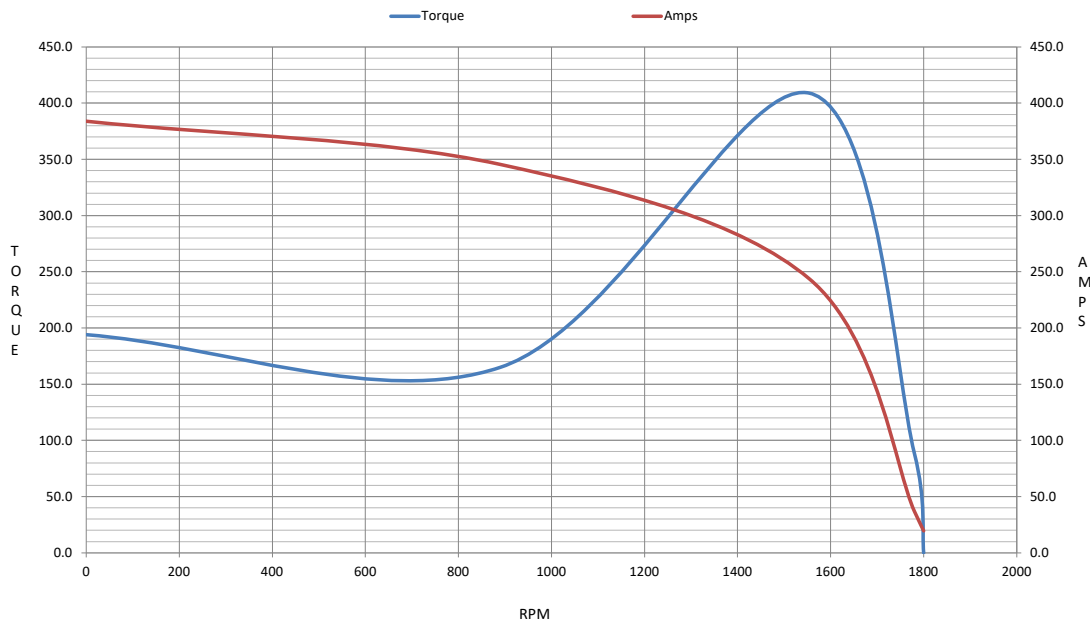
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	890	1554	1780	1800
Current (Amps)	384	346	244	37.0	19.5
Torque (ft-lb)	194	165	409	88.5	0.00

Information Block

HP	30.0			
Sync. RPM	1800			
Frame	286			
Enclosure	TENV			
Construction	TTC			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	K			
Service Factor	1			
Temp Rise @ FL	105 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	5.3 Lb-Ft ²			
Ref Wdg	HA31804024 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 1000:1			
Outline Dwg	SS313097-200			
Conn. Diag	EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1210	0.0880	0.5450	0.5150	13.5380



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 : 286THTCD7026

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

Catalog No : Y393A

Rework No : N/A

Directives :

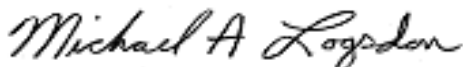
Low Voltage Directive 2014/35/EU

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 09/06/2022

CE 22