

PRODUCT INFORMATION PACKET

Model No: 286TSTFCD6804

Catalog No: E490A

XRI®-SD Severe Duty Motor, 30 HP, 3 Ph, 60 Hz, 230/460 V, 3600 RPM, 286TS Frame, TEFC



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Nameplate Specifications

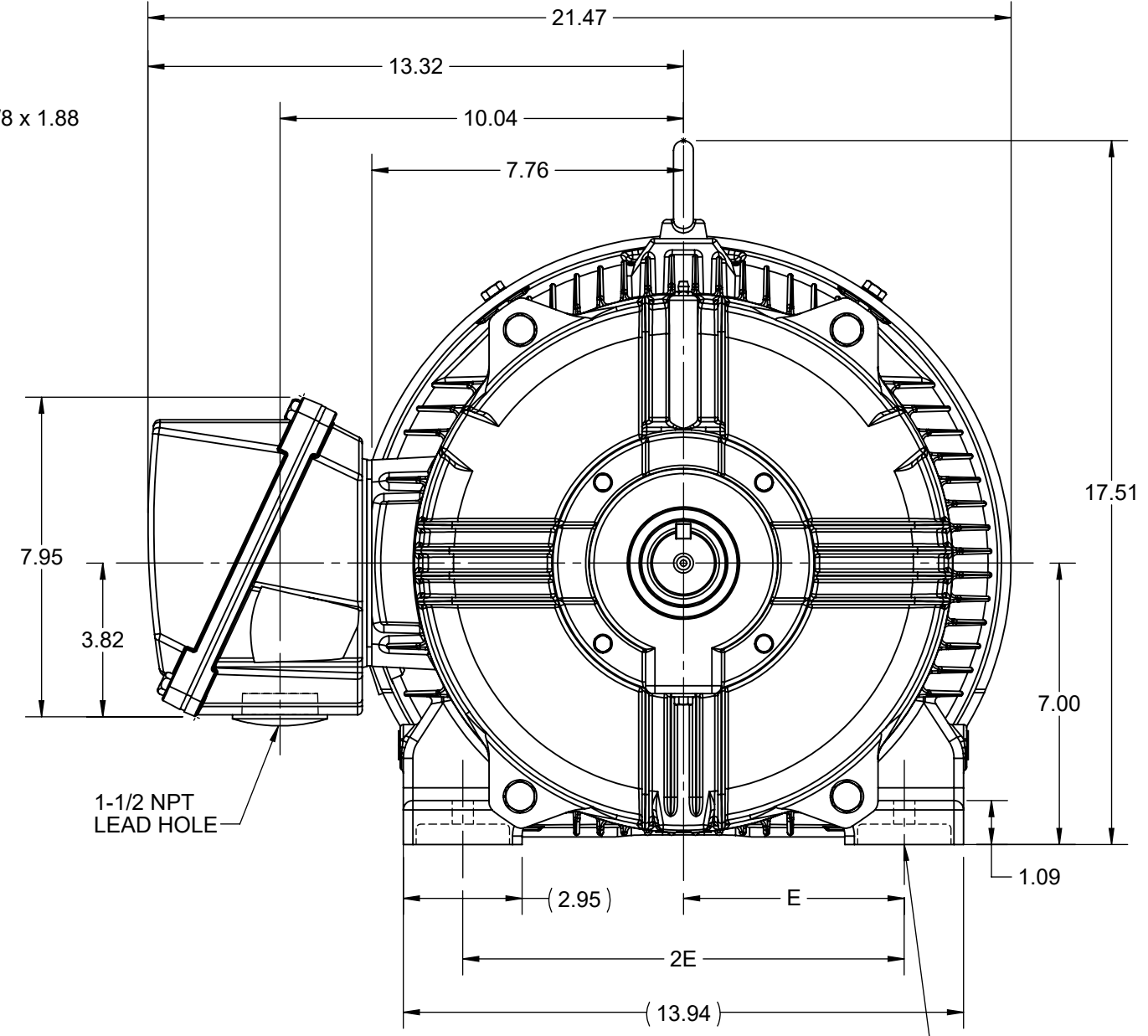
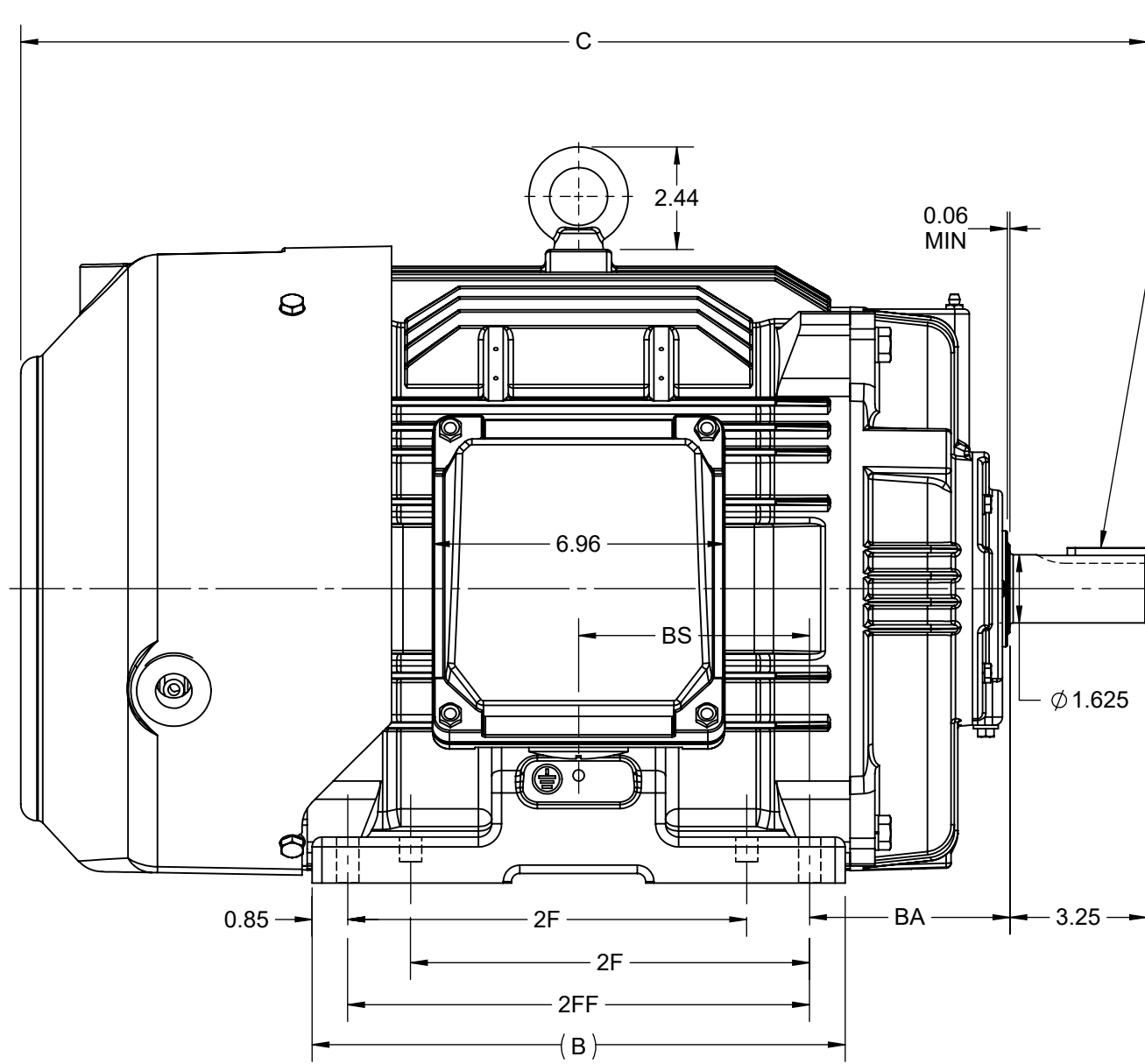
Output HP	30 Hp	Output KW	22.4 kW
Frequency	60 Hz	Voltage	230/460 V
Current	71.0/35.5 A	Speed	3550 rpm
Service Factor	1.15	Phase	3
Efficiency	91.7 %	Power Factor	86.5
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Frame	286TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	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	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.338 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Shaft Diameter	1.625 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 2:1/VARIABLE 10:1
Outline Drawing	SS312943-200	Connection Drawing	EE7308K

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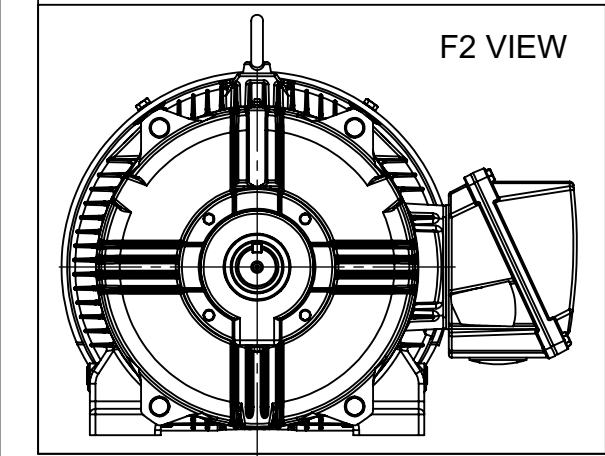
DASH NO.	4				3				MOUNTING	FRAME
	B	C	E	2E	2F	2FF	BA	BS		
100	10.83	25.27	5.50	11.00	---	9.50	4.75	4.75	284TS	
200	12.68	26.77			9.50	11.00		5.50		284/286TS



3/8 x 3/8 x 1.88 KEY

1-1/2 NPT LEAD HOLE

Ø 0.53 THRU 8 HOLES (284 WILL HAVE ONLY 4 HOLES)



DRAWING REVISION D	REVISION BY VS	REV DATE/© DATE 13-10-2020
ECO CR-0000305	APPROVED BY SBD	DATE 13-10-2020
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DRAWN BY BISWA	Regal Beloit America, Inc.
DATE 24/12/2018	
APPROVED BY SBD	DESCRIPTION OUTLINE 284/286TS FR-NEMA-SD & IEEE841
DATE 24/12/2018	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER SS312943
	SHEET 1 OF 1


LOW VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED		 REGAL - BELOIT CORPORATION	DRAWN PGK 06-04-1997			
NO.	REVISION	BY & DATE	CHK	ANG	±		UNIT	CHK	ML 06-05-1997	
E	CORRECTED IEC MARKINGS ECD-0111208	WGJ 01-23-2017	EMH	DEC.		INCHES				
D	RE-DRAWN WITH REGAL LOGO ECD-0110493	WGJ 09-30-2016	EMH	.X	±.1			APPD GK 06-15-1997		
8	ADDED IEC DESIGNATIONS MU95020	TJW 4/30/2010	MJS	.XX	±.02		TITLE	SCALE		
7	REVISED HIGH VOLTAGE L2 WAS L3 CN52600-354	MRB 09-21-1998		.XXX	±.005		CONNECTION DIAGRAM	REF		
6	REDRAWN ON CADD	PGK 06-05-1997		.XXXX	±.0005		DELTA CON. - 3Ø - 9 LEADS	FMF		
					±7'30"		MAT'L.	PREV		
							FINISH			
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT						RFP	CAD FILE EE7308K	SIZE	DRAWING NO. PAGE OF	REV.
						DIST		A	EE7308K	E



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7308K
 OUTLINE: SS312943-286TS
 WINDING: HE31802003 NONE 2

MODEL #: 286TSTFCD6804
 CAT #: E490A

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
30	22.4	3600	3550	286TS	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV.(Ft)
3	60	230/460	71/35.5	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	91.7	3/4 LD EFF	91.7	1/2 LD EFF	91.4	GTD EFF	ELECT. TYPE
F.L. PF	86.5	3/4 LD PF	83.5	1/2 LD PF	75.5	91.0	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
44.4 LB-FT	210	77.0 LB-FT 173%	107 LB-FT 241%	65

SOUND PRESSURE @	SOUND	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX. MOTOR
75 dBA	84 dBA	3.3 LB-FT ²	35 LB-FT ²	20 SEC.	2	450 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	NO	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	TS	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)
0.229	0.106	0.706	0.785	22.136	0.080

If Inverter equals NONE, contact factory for further information

* N O T E S *	INVERTER TORQUE: CONSTANT 20:1 INV. HP SPEED RANGE: NONE				
	ENCODER: NONE NONE NONE PPR				
	BRAKE: NONE NONE NONE FT-LB: NA VOLTAGE: NONE HZ:				
	PREPARED BY: ANUSHA M DATE: 3/10/2020				

FORM: 3531 REV_4 2/27/06

** Subject to change without notice.

Data Sheet

286TSTFCD6804

Date: 3/10/2020
 Customer: _____
 Attention: _____
 Submitted by: ANUSHA M



Submittal

Data @ 460 V

Motor Load Data

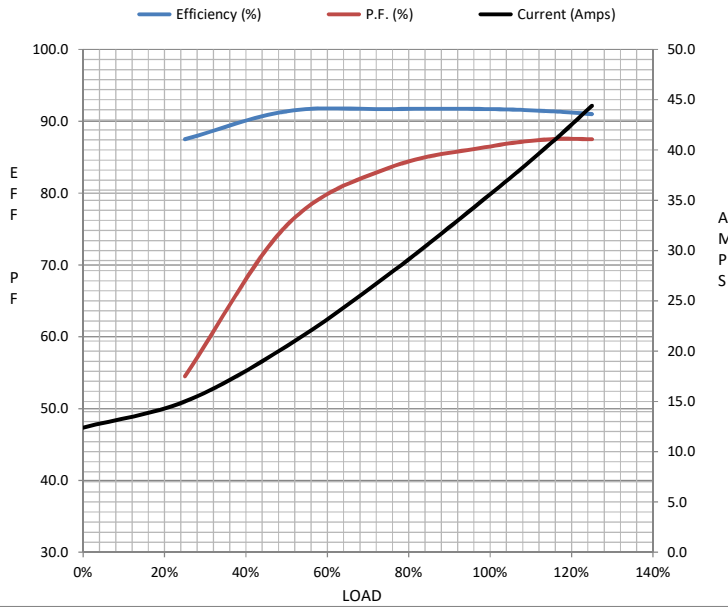
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	12.4	15.0	20.5	27.6	35.6	40.7	44.4	210
Torque (ft-lb)	0.00	11.0	22.0	33.0	44.4	51.0	55.5	77.0
RPM	3600	3588	3575	3565	3550	3,542	3536	0
Efficiency (%)		87.5	91.4	91.7	91.7	91.4	91.0	
P.F. (%)	8.0	54.5	75.5	83.5	86.5	87.5	87.5	35.0

Motor Speed Data

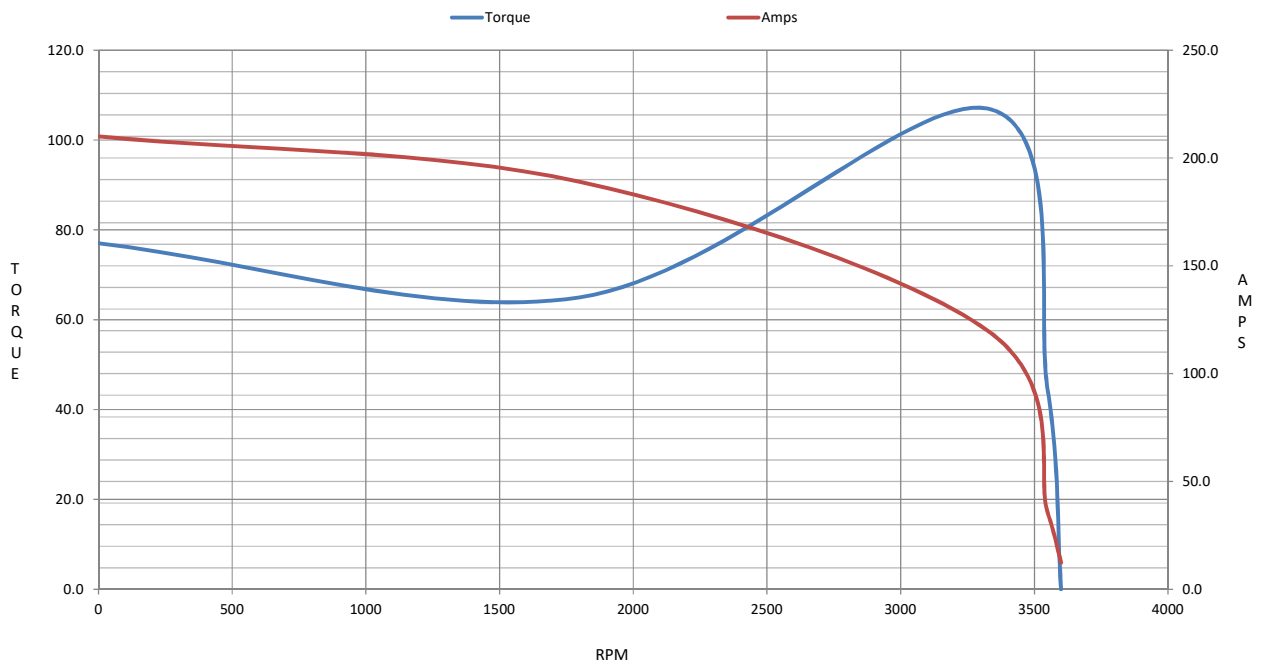
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3325	3550	3600
Current (Amps)	210	189	120	35.6	12.4
Torque (ft-lb)	77.0	65.0	107	44.4	0.00

Information Block

HP	30.0			
Sync. RPM	3600			
Frame	286			
Enclosure	TEFC			
Construction	TFC			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	65 °C			
Duty	CONT			
Ambient	50 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	3.3 Lb-Ft ²			
Ref Wdg	HE31802003 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	SS312943-286TS			
Conn. Diag	EE7308K			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.2290	0.1060	0.7060	0.7850	22.1360



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 : 286TSTFCD6804

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

Catalog No : E490A

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