

# PRODUCT INFORMATION PACKET

Model No: 284TSTFCD6502

Catalog No: E660A

XRI®-SD Severe Duty Motor, 25 HP, 3 Ph, 60 Hz, 575 V, 3600 RPM, 284TS Frame, TEFC



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### Nameplate Specifications

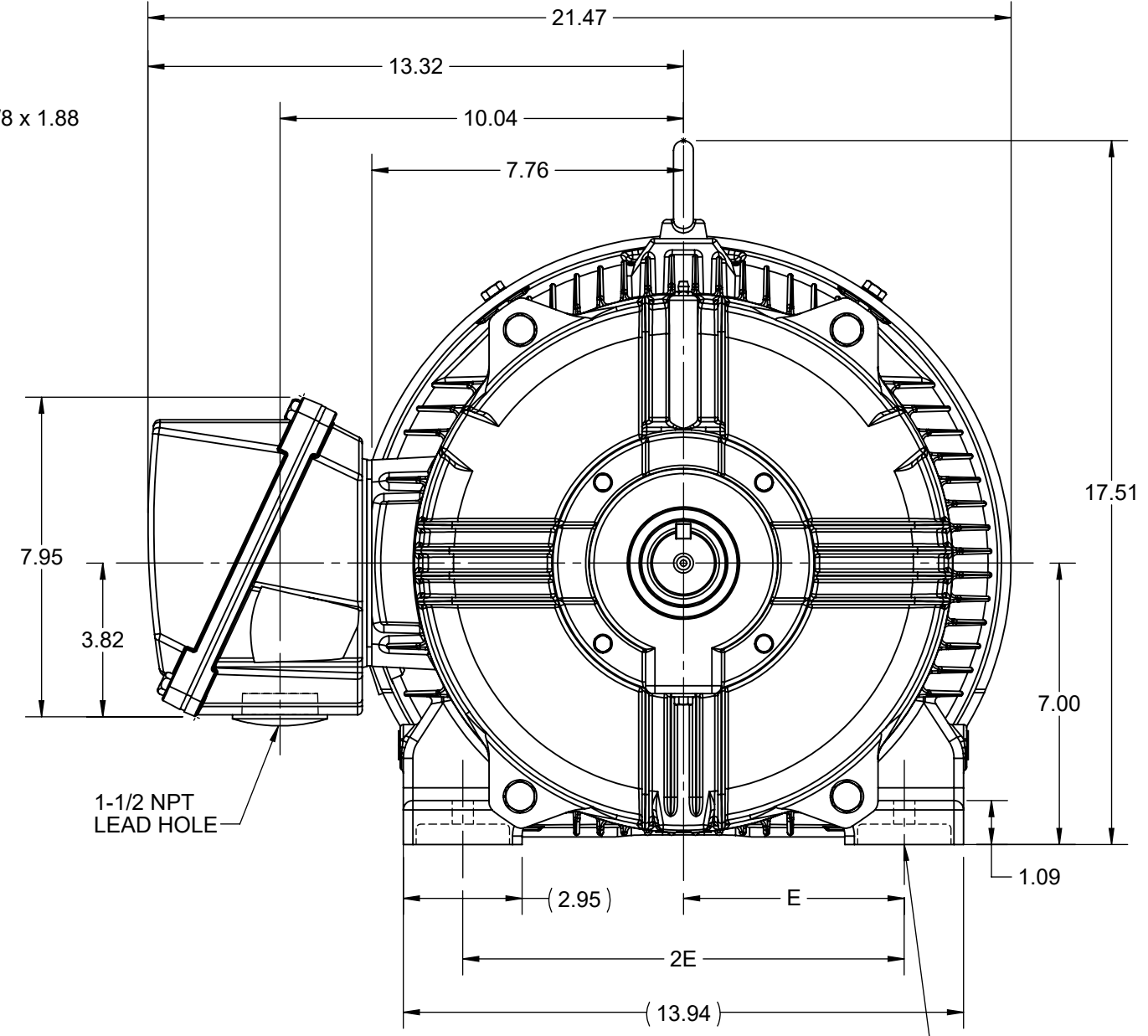
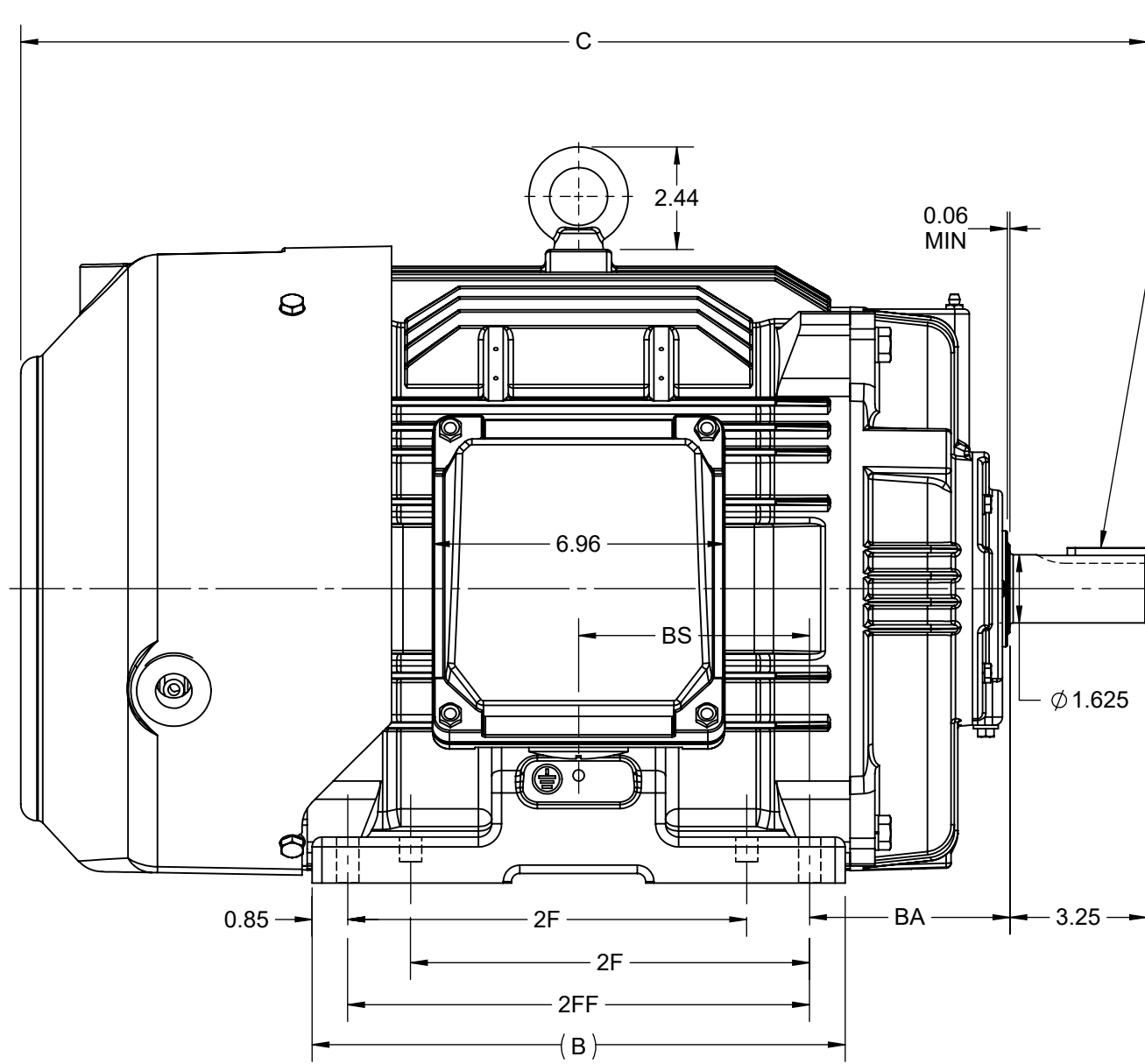
Output HP	<b>25 Hp</b>	Output KW	<b>18.7 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>575 V</b>
Current	<b>24.0 A</b>	Speed	<b>3555 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>91.7 %</b>	Power Factor	<b>86</b>
Duty	<b>Continuous</b>	Insulation Class	<b>H</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>284TS</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Ambient Temperature	<b>40 °C</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>
Hazardous Location	<b>DIVISION 2 T2B</b>	Number of Speeds	<b>1</b>

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>2</b>	Rotation	<b>Selective Clockwise</b>
Resistance Main	<b>.395 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>TS</b>	Shaft Diameter	<b>1.625 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>	Inverter Load	<b>CONSTANT 2:1/VARIABLE 10:1</b>
Outline Drawing	<b>SS312943-100</b>	Connection Drawing	<b>EE7300</b>

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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

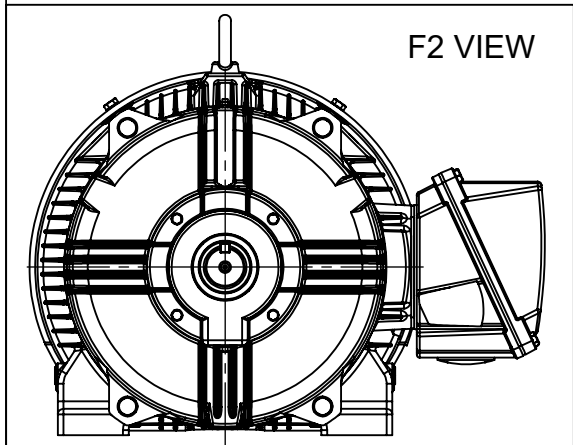


B

B

A

A



F2 VIEW

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	
DATE 24/12/2018	
REFERENCE	DESCRIPTION 284/286TS FR-NEMA-SD & IEEE841
THIRD ANGLE PROJECTION	MATERIAL
SIZE B	DRAWING NUMBER SS312943
	SHEET 1 OF 1

DESCRIPTION	PROCESS/FINISH
SIZE	DRAWING NUMBER
	SHEET

4

3

2

1

THREE PHASE - SINGLE VOLTAGE  
MOTOR - CONDUIT BOX @ 'A'

TERMINAL BLOCK WHEN SPECIFIED

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO LINE  
LEAD CONNECTIONS



VIEW OF TERMINAL END

**OPTIONAL CORD CONNECTION**

L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION AC	REVISION BY BS	REV DATE/© DATE 26/07/2022
REQUEST NUMBER CR-0010402	APPROVED BY SN	DATE 26/07/2022
REQUEST NUMBER DESCRIPTION DRAWING UPDATED		
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DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION

		Regal Beloit America, Inc.	
DESCRIPTION <b>CONNECTION DIAGRAM</b> EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR			
MATERIAL		PROCESS/FINISH	
SIZE <b>A</b>	DRAWING NUMBER <b>EE7300</b>		SHEET 1 OF 1



DATA VOLTS: 575

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300  
 OUTLINE: SS312943-284TS  
 WINDING: HE31802004 NONE 3

REFERENCE MODEL #: 284TSTFCD6502  
 CAT #: E660A  
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
25	18.7	3600	3555	284TS	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	575	24	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	91.7	3/4 LD EFF	91.7	1/2 LD EFF	91.0	GTD EFF	ELECT. TYPE
F.L. PF	86.0	3/4 LD PF	82.0	1/2 LD PF	73.5	91.0	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
37.0 LB-FT	145	65.0 LB-FT 176%	94.0 LB-FT 254%	55

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
75 dBA	84 dBA	2.90 LB-FT²	30 LB-FT²	20 SEC.	2	424 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)	FLOAT
0.6375	0.2765625	2.015625	2.109375	59.5234375	0.080	ODE

* N O T E S *	If Inverter equals NONE, contact factory for further information						
	INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1						
	INV. HP SPEED RANGE: NONE						
	ENCODER: NONE						
NONE							
NONE PPR							

PREPARED BY: _____	BRAKE: NONE
DATE: 5/13/2020	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:

FORM: 3531 REV\_4 2/27/06  
 \*\* Subject to change without notice.

Data Sheet

Date: 5/6/2020  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: \_\_\_\_\_



284TSTFCD6502

Submittal

Data @ 575 V

Motor Load Data

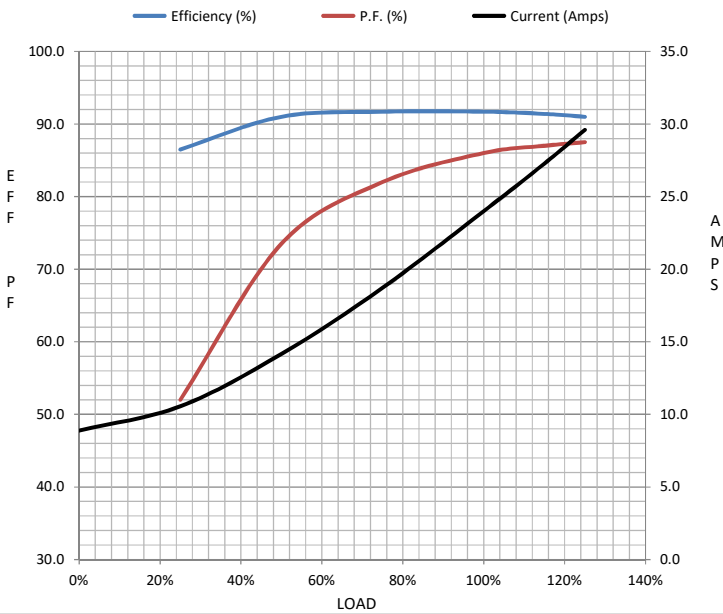
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	8.9	10.6	14.2	18.7	24.0	27.3	29.6	145
Torque (ft-lb)	0.00	9.2	18.5	27.5	37.0	42.5	46.3	65.0
RPM	3600	3588	3578	3565	3555	3,546	3540	0
Efficiency (%)		86.5	91.0	91.7	91.7	91.4	91.0	
P.F. (%)	8.0	52.0	73.5	82.0	86.0	87.0	87.5	35.0

Motor Speed Data

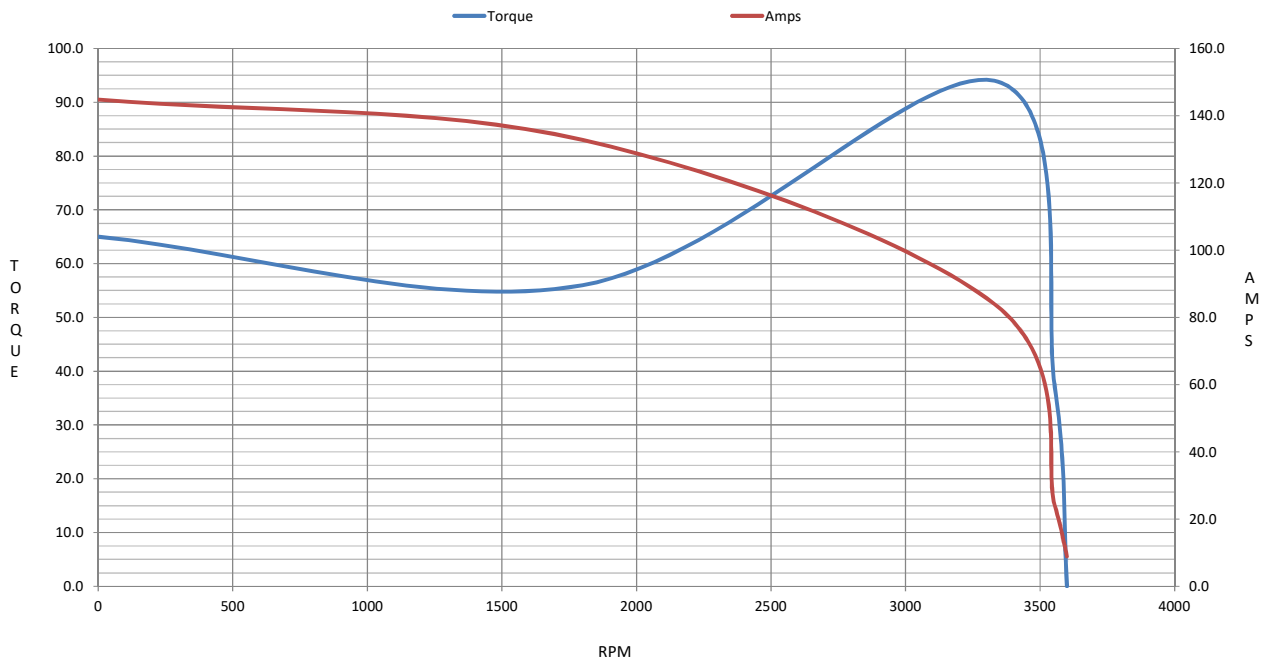
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3330	3555	3600
Current (Amps)	145	133	84.0	24.0	8.9
Torque (ft-lb)	65.0	56.0	94.0	37.0	0.00

Information Block

HP	25.0			
Sync. RPM	3600			
Frame	284			
Enclosure	TEFC			
Construction	TFC			
Voltage	575 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	55 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk <sup>2</sup>	2.90 Lb-Ft <sup>2</sup>			
Ref Wdg	HE31802004 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 2:1/VARIABLE 10:1			
Outline Dwg	SS312943-284TS			
Conn. Diag	EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.4080	0.1770	1.2900	1.3500	38.0950



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 : 284TSTFCD6502

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

Catalog No : E660A

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**